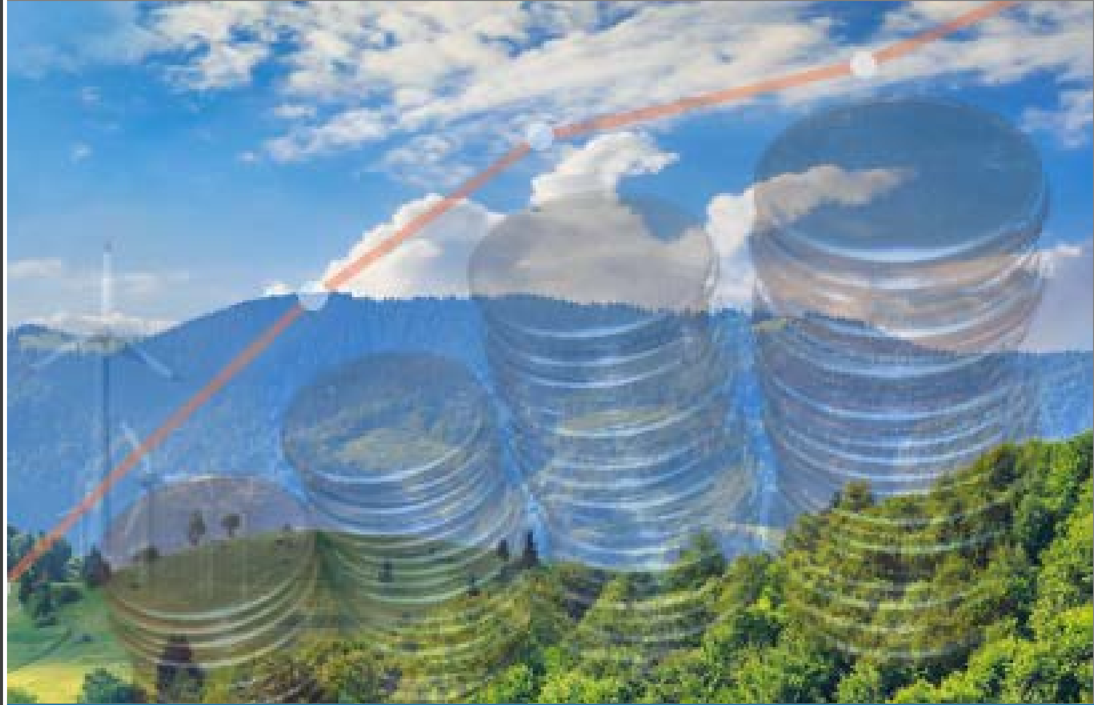


Environmental, Social, and Governance (ESG) Investment Tools: A Review of the Current Field

December 2017

PREPARED FOR:

The Chief Evaluation Office, US Department of Labor

Contract No. DOLQ129633250

PREPARED BY:

Ogechukwu Ezeokoli
China Layne, PhD
Mier Statman, PhD
Oswaldo Urdapilleta, PhD
Summit Consulting, LLC
601 New Jersey Ave NW
Suite 400
Washington, DC 20001
www.summitllc.us

complexity simplified.

DISCLAIMER

This report was prepared for the U.S. Department of Labor (DOL), Chief Evaluation Office, under Contract Number DOLQ129633250. The views expressed are those of the authors and should not be attributed to DOL, nor does mention of trade names, commercial products, or organizations imply endorsement of same by the U.S. Government.

ACKNOWLEDGEMENTS

We would like to thank Sonal Mahida, and Dr. David Wood for providing technical input regarding the content of the literature review and design of the environmental scan. We would also like to thank the staff at the U.S. Department of Labor's Employee Benefits Security Administration (EBSA) and the Chief Evaluation Office who provided feedback and guidance in this study. Special thanks are due to our Contracting Officer Representatives, Janet Javar and Dr. Kuangchi Chang of the Chief Evaluation Office, who provided valuable feedback. We are also grateful for the detailed review provided by EBSA's Lynn Johnson.

TABLE OF CONTENTS

EXECUTIVE SUMMARY I
INTRODUCTION 1
ESG Investing and ESG Investment Tools 1
Importance of ESG Investing to Retirement Security 3
REVIEW OF LITERATURE ON ESG INVESTING AND RETIREMENT SAVINGS 6
Research Questions and Methodology 6
Who Are the Key Investors in Both the ESG Investing and Retirement Savings Sectors? 6
How Do Key Investors Assess ESG Investments for General and Retirement Investment Portfolios? 8
What Are the Common Challenges and Critiques of the Methods for Assessing ESG Investments? 11
ESG Investing and Retirement Savings: Present State and Future Possibilities 17
ENVIRONMENTAL SCAN OF ESG INVESTMENT TOOLS 18
Research Questions and Methodology 18
Assessment of ESG Investment Tools by Key Features 21
Comparing ESG Investment Tools by Their Utility 25
ESG Investment Tools Matrices by Tool Category 26
CONCLUSION 39
REFERENCES 41
GLOSSARY BY TOPIC 45
APPENDIX A – LIST OF ESG INVESTMENT TOOLS A-1
APPENDIX B – COMPLETE PROFILES OF ESG INVESTMENT TOOLS (INCLUDED IN MATRICES) B-1
APPENDIX C – SUMMARIES OF ESG RATING METHODOLOGIES C-1

LIST OF FIGURES

Figure 1: ESG Investing Landscape 7
Figure 2: Process for Conducting Environmental Scan of ESG Investment Tools 19
Figure 3: Investments Covered by the ESG Investment Tools 22
Figure 4: Financial Information Provided by ESG Investment Tools 24
Figure 5: Fees for ESG Investment Tools 25
Figure 6: Comparison of ESG Investment Tools for Mutual Fund and ETFs 27
Figure 7: Comparison of ESG Investment Tools for Companies 30
Figure 8: Comparison of ESG Indices 35
Figure 9: Other Types of ESG Investment Tools 38

LIST OF TABLES

Table 1: General Investment Strategies for ESG Investments 8
Table 2: Issues with ESG Investment Strategies 12
Table 3: Issues with ESG Investment Strategies 20
Table 4: ESG Investment Tool Utility Criteria 21
Table 5: ESG Investment Tool Categories 21
Table 6: In-Scope ESG Investment Tools (28) 22

[This Page Is Intentionally Left Blank]

EXECUTIVE SUMMARY

As investors increasingly consider environmental, social, and governance (ESG) factors when selecting and managing investments, questions about ESG's relevance to retirement investing have grown commensurately. With this growth comes greater interest to understand if and to what extent ESG investing might affect American workers' retirement prospects. This study seeks to understand the current state of ESG investing, specifically how it relates to retirement savings of American workers and the tools that individual investors, financial advisors, investment managers, and retirement plan administrators use to identify, assess, and select ESG investments.

> ***ESG*** *refers to environmental, social, and governance issues in business practices including but not limited to clean energy, employee diversity, and shareholder rights.*
>
> ***ESG investing*** *incorporates environmental, social, and governance issues into the selection and management of investments.*
>
> ***ESG tools*** *include online applications, websites, databases, and documents that help investors identify, assess, or select ESG investments.*

This study, for which the Department of Labor (DOL) Chief Evaluation Office (CEO) and Employee Benefits Security Administration (EBSA) contracted Summit Consulting, LLC (Summit), addresses this need by providing:

- A review of the academic and industry literature regarding ESG investing and retirement savings
- An environmental scan of ESG investment tools available to investors

The literature review summarizes the state of the ESG investing field and how four key investor groups—(1) financial advisors and money managers, (2) individual investors, (3) private-sector retirement plans, and (4) public pension plans—incorporate ESG investments into their portfolios. Across the investing sector, researchers have little consensus on the most effective ESG investment strategies (e.g. positive or negative screening versus ESG integration). Additionally, the literature does not provide much insight into how investors and advisors incorporate ESG investments into retirement savings, especially in private-sector retirement plans.

The environmental scan considers 28 ESG investment tools. ESG investment tools are online resources (specifically documents, applications, websites, or databases) that provide information on ESG aspects of investments and/or assist users in selecting and managing ESG investments. While not intended to be exhaustive of all available ESG investing resources, these 28 tools are representative of a segment of the ESG investing field, specifically the ESG research and products produced by third-party information providers for investors, as of May 2017. Summit grouped the 28 tools into four categories based on the types of investments they cover:

- Mutual funds and exchange-traded funds (4 tools)

- Individual companies (16 tools)
- Market segments (6 tools)
- Other entities, e.g. investment manager strategies and retirement plans (2 tools)

This research highlighted the following themes across the ESG tools on their key features and capabilities:

- Most tools (20 of 28) provide a rating that describes a particular aspect of ESG performance for the unit of investment (i.e. mutual fund) and could be compared to the ESG performance of its peers (e.g. those in the same category or sector).[1]
- More than half of the tools (16) did not provide financial information about the investments, such as historical financial performance, which demonstrates the need for these tools to be used alongside tools or resources that provide traditional investment information. At least one tool in every category provided financial information about the investments or index constituents. However, most tools in the individual company category did not provide any financial information.
- All tools are available online, but many (23) have user costs that limit their accessibility to some users.[2] Most of the ESG tools that cover mutual funds, exchange-traded funds, or market segments provide some ESG information at no cost, while most tools for individual companies have user fees.

Beyond familiarizing investors, advisors, and regulators with the current state of ESG investing, this study serves as a digest of the ESG investing sector upon which DOL can expand in future years as the ESG investing landscape continues to grow and mature.

Features of ESG Tools

- *Most ESG tools are performance ratings or provide performance ratings.*
- *ESG information needs to be used alongside traditional financial metrics of investments.*
- *Many tools have user fees and may not be accessible for all investor groups.*

[1] Twenty tools provide ESG ratings and six tools use pre-determined ESG ratings (all tools use ESG ratings to determine the constituents of ESG-focused indices).
[2] Some of the fee-based tools covered in this report may cost anywhere from $450 to $200,000. The providers of some fee-based tools declined to provide cost information due to the sensitivity of such information.

INTRODUCTION

ESG INVESTING AND ESG INVESTMENT TOOLS

In addition to strong financial returns, investors may want to know that the companies receiving their dollars are promoting socially conscious policies, activities, and relationships. Environmental, social, and governance (ESG) investing provides criteria that allow investors and advisors to select investments that align with their values as well as their financial goals.[3]

Examples of issues that investors consider include:

- **Environmental**—climate change, carbon emissions, air and water pollution
- **Social**—gender and diversity policies, human rights, labor standards, employee engagement
- **Governance**—executive compensation, board composition, bribery and corruption policies[4]

Other types of investing terms that are often used synonymously with ESG investing include[5]:

ESG Investing *incorporates environmental, social, and governance issues into the selection and management of investments.*

ESG Investing is often used synonymously with other investing terms such as:

- *Sustainable Investing (SI)*
- *Responsible Investing (RI)*
- *Socially Responsible Investing (SRI)*

- **Sustainable Investing (SI)**—the full integration of ESG factors into financial analysis and decision-making (Keefe, 2007)[6,7]
- **Responsible Investing (RI)**—an approach that aims to incorporate ESG factors into investment decisions to better manage risk and generate sustainable, long-term returns[8]
- **Socially responsible investing (SRI)**—an investment approach that aims to simultaneously achieve environmental and social goals, as well as financial goals[9]

---

[3] DB Climate Change Advisors, "Sustainable Investing: Establishing Long-Term Value and Performance," 2012, https://institutional.deutscheam.com/content/_media/Sustainable_Investing_2012.pdf.
[4] Morningstar's 7 Myths and Facts about Sustainable Investing
[5] The related idea of corporate social responsibility (CSR) refers to the act of businesses considering and managing the economic, environmental, social, and governance impacts of their operations. Mercer, "The language of responsible investment: An industry guide to key terms and organisations", 2007, http://www.belsif.be/user_docs/MercerInvestmentConsultingSRI.pdf.
[6] Mercer "The language of responsible investment: An industry guide to key terms and organisations," 2007, http://www.belsif.be/user_docs/MercerInvestmentConsultingSRI.pdf.
[7] According to DB Climate Change Advisors, best-in-class approach is an investment approach that focuses on companies that perform better than their peers in a particular industry or category do.
[8] https://www.unpri.org/about/what-is-responsible-investment.

While ESG, SI, RI, and SRI investing are each unique terms, they refer to the same idea of including non-financial factors alongside financial factors when choosing and managing investments. This report uses these terms under the umbrella term ESG, following the convention of academic and professional literature.

Interest and participation in ESG investing has increased notably in recent years. Bloomberg reported that the number of terminal clients who access ESG data for their analysis grew from 3,010 in 2010 to 12,242 in 2016.[10] Clients accessing ESG data for analysis represented about 3.7% of the 325,000 global subscribers.[11] In addition, total U.S.-domiciled assets under management (AUM) invested in ESG options grew from $6.57 trillion in 2014 to $8.72 trillion in 2016, a 33% increase (or an 18% increase after accounting for general market growth).[12,13] This growth is driven by investor demand for ESG investments. Because of this growth, ESG investments now form a significant share of total U.S.-domiciled AUM (22%).[14]

The growth in ESG investing has strengthened the investing environment, and companies are increasingly reporting their ESG practices. In 2015, 81% of S&P 500 companies issued reports on their corporate social responsibility, a significant increase from 20% of S&P 500 companies in 2011.[15] In addition, aggregating data sources, such as indices designed for researching ESG investments, are growing significantly. Leading industry firms, such as MSCI and Thomson Reuters (Snider, 2016), have released ESG indices, as well as the Dow Jones Sustainability Indices (Tool 24) and FTSE4Good Indices (Tool 23) (Billiteri, 2008).

With the growth of ESG investing, the financial services industry has developed a slate of tools to guide and educate investors. These tools help users identify, assess, or select ESG investments when building investment portfolios, as well as manage existing ESG portfolios. By design, the tools accommodate a variety of users, including individual and institutional investors, money managers, and financial advisors. Primarily offered as online products (websites, documents, databases, interactive applications), these tools are accessible to a broad community.

***ESG tools** include online applications, websites, databases, and documents that help investors and advisors identify, assess, or select ESG investments.*

Using these tools, investors can explore various investment options such as individual company stocks, mutual funds, and exchange-traded funds to identify those that align with the investor's preferred ESG factors (i.e. environmental, social, or governance). The output of these ESG tools is an evaluation of the ESG orientation of specific investments, either conventional or ESG-identified investments, or the ESG orientation of a broad investment market segment, such as the domestic large-cap equities market. The

[9] Ibid.

[10] Bloomberg, "Customers Using ESG Data," https://www.bloomberg.com/bcause/product/.

[11] https://www.bloomberg.com/company/

[12] "Assets under management" is defined by US SIF to include investment assets managed by institutional investors, money managers, and community investment institutions.

[13] US SIF, "Report on US Sustainable, Responsible, and Impact Investing Trends," 2016, http://www.ussif.org/files/SIF_Trends_16_Executive_Summary.pdf.

[14] Ibid.

[15] Governance and Accountability Institute, Inc., Flash Report: http://www.ga-institute.com/press-releases/article/flash-report-eighty-one-percent-81-of-the-sp-500-index-companies-published-corporate-sustainabi.html.

ESG information produced by these tools can be used to select investments, manage portfolios, create investment products (such as mutual funds that track ESG indices), and benchmark performance.

As discussed in the methodology section, our report categorizes ESG tools in four groups based on the types of invested entities or investment vehicles they cover: (1) mutual funds and exchange-traded funds, (2) companies, (3) market segments, and (4) other entities.

As noted by SustainAbility (2010) and Novethic (2013) in their review of ESG rating agencies, the sector continues to undergo rapid evolution. Both reports discuss the substantial changes in the field since 2000, including an increase in tools and services, a broadening of the scope of ESG tools, and a consolidation of the field of tool providers. SustainAbility observed that ESG tool providers frequently use ESG ratings and tools to develop additional products and services.[16] These ESG tools often beget additional ratings and tools from other ESG tool providers. Novethic discussed the increased scope of ESG tools to focus on international markets and rate other types of investments (beyond company stocks and mutual funds), such as government debt. Finally, both reports document the continued consolidation of the field, with some ESG tool providers going out of business or being acquired by other providers.

IMPORTANCE OF ESG INVESTING TO RETIREMENT SECURITY

ESG investing is a growing segment of America's retirement investing landscape. Public pension funds and private retirement plans (7% of corporate defined benefit plans and 24% of corporate defined contribution plans) now include ESG investments in their portfolios.[17] Key groups in the retirement investing field (e.g. individual investors, financial advisors, investment managers, and retirement plan administrators) use ESG investment tools.

The rapid change in the ESG sector and its potential to affect the retirement prospects of American workers raises the need for greater insight into the ESG investing sector. In order to safeguard workers' retirement security, DOL and other policymakers need comprehensive information on the tools used in making ESG investment decisions and a better understanding of the relevance of ESG investing to retirement savings. In June 2016, DOL's Chief Evaluation Office (CEO), in conjunction with the Employee Benefits Security Administration (EBSA), contracted with Summit Consulting, LLC (Summit) to conduct a study that covers two topics:

- The academic and industry literature related to how investors and advisors integrate ESG investments into retirement savings (literature review)
- Current investment tools that focus on ESG investments (environmental scan)

The primary goal of this study is to inform DOL, investors, and advisors on ESG investing as it relates to retirement savings. The report begins with an overview of the academic and industry literature on the current state of ESG investing, investment strategies for ESG investments, and primary critiques of integrating ESG investments into retirement savings. This review provides a digest of the ESG investing sector that can expand in future years as the ESG investing landscape continues to grow, diversify, and mature. The environmental scan provides an overview of current ESG tools, detailing information on each tool's characteristics and features and an assessment of the relative utility to different user groups.

[16] This is observed in our environmental scan, the second part of the study.

[17] Pensions & Investments, "After a bit of help, ESG ready to make even greater gains," 2016, http://www.pionline.com/article/20160404/PRINT/304049998/after-a-bit-of-help-esg-ready-to-make-even-greater-gains.

The environmental scan does not endorse or recommend any specific tool or tool provider. Additionally, the study focuses on the nature of the ESG investments in public equities (though some tools do provide information on private companies).[18]

[18] This study focused on ESG investment in public equities because private equities are generally not available to individual investors, unless they are high net-worth individual investors.

[This Page Is Intentionally Left Blank]

REVIEW OF LITERATURE ON ESG INVESTING AND RETIREMENT SAVINGS

RESEARCH QUESTIONS AND METHODOLOGY

To review academic and industry literature on ESG investing and retirement savings, Summit focused on literature relevant to the following three research questions:

- Who are the key investors in both the ESG investing and retirement saving sectors?
- How do the key investors assess ESG investments for general and retirement investment portfolios?
- What are the common challenges and critiques of the current methods of assessing ESG investments?

The study included peer-reviewed journal articles, working papers, research briefs, and technical research reports, as well as industry articles, research reports, marketing content, and regulatory guidance. The literature review focused on publications specific to the U.S. investing sector from the last 15 years. We generally used the most recent published findings on a topic but also referenced older foundational research, e.g. studies cited numerous times up through the last year. Initially, the team searched the literature with known sources of information and academic researchers on the following topics:

- ESG investing and public pensions/retirement investing/fiduciary standard
- ESG investing and investment strategies
- ESG investing and performance

Using references, citations, and related articles from these initial sources, the team expanded the literature search to uncover the most prominent and relevant information sources.

WHO ARE THE KEY INVESTORS IN BOTH THE ESG INVESTING AND RETIREMENT SAVINGS SECTORS?

As shown in Figure 1, key ESG investors[19] in the retirement savings sector include money managers and financial advisors, individual investors, private-sector retirement plans,[20] and public pension plans. ESG investing has expanded to include all key investors in the sector. The following sections describe the key investors and show ESG investing growth in each group.

1. Money Managers and Financial Advisors

[19] We defined key investors according to the scope of this study.
[20] private-sector retirement plans include defined benefit and defined contribution plans sponsored by private-sector companies. This group also includes multiemployer or “Taft-Hartley” plans.

Money managers and financial advisors include businesses or banks responsible for managing the securities portfolios of individual or institutional investors. The number of investment funds run by money managers that incorporate ESG factors grew by 12% (from 894 to 1,002 funds) from 2014 to 2016 (US SIF, 2016). In the same period, the total amount of ESG investment assets managed by money managers and community investment institutions grew 69% (from $4.80 billion to $8.1 billion) (US SIF, 2016).

Figure 1: ESG Investing Landscape

2. Individual Investors

Individual investors buy and sell securities for their personal accounts, not for another entity or organization. In 2012, 66% of 401(k) investors said they would like to see their employer offer ESG options.[21] Additionally, in 2016, 11% of high net-worth investors owned ESG investments.[22,23]

ESG investing has grown not only in the general investing sector, but also in the *retirement savings sector*. As outlined in a recent US SIF report, ESG investments held by institutional investors (including public pension, labor union pension, and corporate retirement funds) grew 17% from 2014 to 2016.[24] Next, we discuss two key investor groups relative to ESG investing and retirement savings.

3. Private-Sector Retirement Plans

Private-sector retirement plans are tax-preferred financial arrangements designed to replace employment income upon retirement. In 2011, a survey of defined contribution plans showed that 14% of these plans included ESG investments.[25] In 2015, 7% of corporate defined benefit plans and 24% of corporate defined contribution plans included ESG investments.[26] By 2016, 30% of all corporate plans (defined benefit and contribution) included ESG investments.[27] This demonstrates the growing

---

[21] Pensions & Investments, "After a bit of help, ESG ready to make even greater gains", 2016, http://www.pionline.com/article/20160404/PRINT/304049998/after-a-bit-of-help-esg-ready-to-make-even-greater-gains.
[22] In this study, high-net-worth and ultra-high-net-worth individuals were those who had at least $3 million in investable assets.
[23] US Trust, "2016 US Trust Insights on Wealth and Worth Survey," 2016, http://www.ustrust.com/publish/content/application/pdf/GWMOL/USTp_AR9R6RKS_2016-05.pdf.
[24] US SIF, "Report on US Sustainable, Responsible, and Impact Investing Trends," 2016, http://www.ussif.org/files/SIF_Trends_16_Executive_Summary.pdf.
[25] This survey included private-sector (for-profit and non-profit) and public sector defined contribution plans, however 60% of the surveys were to for-profit, private-sector plans. Mercer and US SIF, "Opportunities for Sustainable and Responsible Investing in US Defined Contribution Plans", 2011: http://www.ussif.org/blog_home.asp?display=18.
[26] Pensions & Investments, "After a bit of help, ESG ready to make even greater gains," 2016, http://www.pionline.com/article/20160404/PRINT/304049998/after-a-bit-of-help-esg-ready-to-make-even-greater-gains.
[27] Callan Institute, "2016 ESG Interest and Implementation Survey", 2016, https://www.callan.com/wp-content/uploads/2017/02/CallanESGSurvey2016.pdf.

importance of ESG investments in private retirement plans. Additionally, in 2014, corporate institutional investors, including private retirement plans, held $758 billion in ESG investments.[28]

4. Public Pension Plans

Public pension plans, retirement plans offered through government employers, calculate employee retirement benefits based on factors such as length of employment and salary history. Public pension funds own or manage $2.74 of $4.72 trillion of ESG assets managed by institutional investors (US SIF, 2016). Additionally, in 2014, 70 of the world's largest pension funds, including those in New York and California, engaged directly with companies to address climate change issues (Farmer, 2014).

HOW DO KEY INVESTORS ASSESS ESG INVESTMENTS FOR GENERAL AND RETIREMENT INVESTMENT PORTFOLIOS?

Table 1 describes seven methods for assessing ESG investments for inclusion in an investment portfolio. This section discusses commonly used investment strategies, by both general and retirement investors, as well as how investors employ ESG tools in their investment strategies.

Table 1: General Investment Strategies for ESG Investments[29]

Type of Investment	Description of Strategy/Method	Examples
1. Positive screening/ best-in-class	Select investments for positive performance on ESG factors relative to industry peers (also involves avoiding investments that do not meet the ESG performance thresholds)	Social(k) Faith Based mutual fund
2. Negative/exclusionary screening	Exclude investments connected to activities or industries deemed controversial or unacceptable	Social(k) Fossil Free mutual fund
3. ESG integration	Include ESG risks and opportunities in financial analysis of potential investments	Pax Global Environmental Markets Fund
4. Impact investing	Select investments to generate positive social and environmental impact along with financial returns, regardless of whether the returns are below market	W.K. Kellogg Foundation's Mission Driven Investment (MDI)
5. Sustainability thematic	Select assets related to sustainability	Morgan Stanley's Inclusive Growth Opportunities Index
6. Index based	Construct a portfolio of investments to match established indices of environmentally and socially responsible companies, such as the Dow Jones Sustainability Index (Richardson, 2007)	Calvert U.S. Large Cap Core Responsible Index Fund
7. Direct corporate engagement and activism	Work directly with corporations to promote adoption of ESG practices (may be used in combination with other ESG investment strategies [Richardson, 2007])	Stock divestiture in state pension funds

[28] Pensions & Investments, "After a bit of help, ESG ready to make even greater gains", 2016, http://www.pionline.com/article/20160404/PRINT/304049998/after-a-bit-of-help-esg-ready-to-make-even-greater-gains.
[29] US SIF, "Report on US Sustainable, Responsible, and Impact Investing Trends, 2016," http://www.ussif.org/files/SIF_Trends_16_Executive_Summary(1).pdf.

1. Money Managers and Financial Advisors

Money managers and financial advisors often follow two ESG investment selection strategies that rely on either positive or negative screening or index-based methods. In the positive/negative screening strategies, financial advisors assess the ESG orientation of existing mutual funds and exchange-traded funds (ETFs), screening in funds that meet their ESG requirements.[30] Previously, advisors may have only chosen mutual funds or ETFs defined as ESG funds or ESG-identified indexed mutual funds. Now that ESG ratings are available for all mutual funds and ETFs, ESG-conscious advisors may choose based on ratings of all funds instead of focusing on self-identified ESG funds.

The index-based method involves creating indices or mutual funds that incorporate ESG factors in the investment selection process. For indices, financial services firms create SRI (or ESG) indices using a benchmark of the general investment market as a foundation and adjust the included companies' weights in the index based on specific ESG or SRI criteria (Berry, 2013). Similarly, for mutual funds, money managers create mutual funds of individual company stocks using positive and negative screening criteria that are easy to identify (Berry, 2013).

Both investment strategies often incorporate the use of ESG tools. Advisors can use ESG tools—such as the Morningstar Sustainability Rating (Tool 1) or MSCI ESG Fund Metrics (Tool 4)—to identify appropriate mutual funds for their investors. Likewise, as money managers create ESG-oriented mutual funds or ETFs, they may employ ESG tools to more easily identify appropriate stocks. ESG rating tools for companies, such as Sustainalytics Company ESG Reports (Tool 6) or MSCI ESG Company Rating Reports (Tool 12), allow money managers to better identify specific company stocks. Finally, managers can use ESG investment indices, such as the Dow Jones Sustainability Indices (Tool 24) and the FTSE4Good Index Series (Tool 23), to create passive ESG funds.

2. Individual Investors

The academic and industry literature on individual investors' methods for assessing or selecting ESG investments is scant. Most of the academic literature focuses on individual investors' motivations for, and attitudes toward, engaging in ESG investing (Pasewark and Riley, 2010; Nilsson, 2008; Jansson et al., 2011; Williams, 2007). With respect to investment strategies, individual investors often use ESG integration methods, taking a more holistic approach to assessing ESG investments. They focus on a company's overall profile and pro-social responsibility actions (Berry 2013). Similarly, Nilsson et al. (2010) found that ESG investors search more for ESG-related information about companies and funds, (e.g. corporate behavior strategies and charitable donations) than for traditional investment information (e.g. financial performance and risk).

Many ESG tools are designed specifically to help individual investors identify appropriate ESG investments (companies or funds) using these more holistic assessment approaches focusing on a company's overall profile and pro-social responsibility actions. Most tools that are reviewed in the environmental scan identify ESG-oriented companies and investments by incorporating multiple components across each of the three ESG factors, thus showing a complete picture of the company's practices in all areas of ESG orientation. For instance, Morningstar's Sustainability Rating (Tool 1) is based on Sustainalytics' assessments of companies' environmental, social, and governance practices. Environmental variables include carbon emissions, climate change effects, and renewable energy. Social

[30] Information on this strategy was obtained through conversation between Summit and Dr. Meir Statman.

variables include supply chain management, company discrimination lawsuits, and community relations. Governance variables include executive compensation, shareholder rights, and independent directors.

Unlike with key investors in the general investing sector, there are fewer clear preferences in investment strategies among the key investors in the retirement savings sector.

3. Private-Sector Retirement Plans

There do not seem to be ESG investment strategies specific to private retirement investing portfolios. The literature on ESG investing and retirement savings focuses on the suitability of ESG investments for public pension funds and the permissibility of including ESG investments in private-sector plans. A few companies, including general investment firms (Vanguard and TIAA) and more specialized investment firms (Calvert and Social(k)), offer ESG investments for private-sector plans. Rather than use specific investment strategies for private retirement plans, these companies use standard ESG investment strategies, such as positive or negative screening methods, to select retirement plan investments.[31]

4. Public Pension Plans

Public pension plans may have more latitude in incorporating ESG factors into their investments than private-sector retirement plans, because public plans are not regulated by the requirements of the Employee Retirement Income Security Act (ERISA). In earlier years, legislative and political action typically determined whether the plans considered ESG factors, emphasized ESG investments, or followed specific investment strategies in choosing investments (Entine, 2005).[32]

Previously, state and other public pension plans focused on the divestiture of companies and funds from their portfolios (i.e. selling securities) (Billiteri, 2008). For example, California's public pension plans (CalSTRS and CalPERS) divested their portfolios of tobacco stocks and securities tied to Iran and Sudan (Billiteri, 2008). Recently though, public pension plans have focused more on using ESG integration methods to incorporate ESG factors into their financial analysis to better identify risk and improve quality management (Billiteri, 2008).

INDUSTRY PERSPECTIVES ON ESG INVESTMENT STRATEGIES

Currently, different segments of the investing landscape employ different ESG investment strategies. There is a lack of consensus about investment strategies, which both reflects *and* compounds questions surrounding the methods for selecting appropriate ESG investments and their ability to accurately balance ESG factors with investment performance.

Prompted by the diversity of ESG investment strategies and the lack of consensus about the "best strategies," a few organizations have developed standards for incorporating ESG factors in the investment process. In 2006, the United Nations (UN) released the "Principles for Responsible Investment (PRI)" to help institutional and other investors integrate ESG factors into their investment

[31] Social(k) provides a list of pre-screened ESG mutual funds for inclusion in retirement plans and four ESG screened portfolios developed by Social(k): http://socialk.com/responsible/investments/. Calvert (https://www.calvert.com/mutual-funds.php), Vanguard (https://personal.vanguard.com/us/funds/snapshot?FundId=0213&FundIntExt=INT), and TIAA (https://www.tiaa.org/public/offer/products/mutual-funds/responsible-investing) follow a similar strategy.
[32] National Conference of State Legislatures, "Pension and Retirement State Legislation Database," http://www.ncsl.org/research/fiscal-policy/pension-legislation-database.aspx.

decisions and ownership practices.[33] One of the outlined principles was to fully integrate ESG issues into general investment analysis and decision-making. As part of this effort, the Investment Practices Team of UN PRI produces guides, webinars, and other information to help investors implement the principles of responsible investing within their investment practices. As of 2016, nearly 300 organizations were signatories to the PRI in the United States, 76% of which are investment managers. Likewise, the Sustainability Accounting Standards Board (SASB) is developing and disseminating industry-specific standards for disclosing ESG factors, specifically corporate sustainability practices. SASB helps ensure these disclosures are useful to investors and advisors in evaluating ESG investments.[34]

WHAT ARE THE COMMON CHALLENGES AND CRITIQUES OF THE METHODS FOR ASSESSING ESG INVESTMENTS?

During the industry and academic literature review, researchers identified four main critiques of the current methods of assessing and incorporating ESG investments:

- General ESG Investment Strategy Critiques
  1. Identifying and appropriately weighing ESG factors in investment selection
  2. Potential trade-off between ESG factor preferences and investment performance
- Specific Retirement Savings Critiques
  3. Suitability of ESG investments for public pension plans
  4. Appropriateness of ESG investments for private retirement plans

The following sections discuss these general and specific critiques.

GENERAL CRITIQUES OF ESG INVESTMENT STRATEGIES

1. Identifying and Appropriately Weighing ESG Factors

One of the most common critiques of ESG investing is the difficulty for investors to correctly identify, and appropriately weigh, ESG factors in investment selection. Vogel (2005) lays out concerns about the precision, validity, and reliability of ESG investment strategies (as shown in Table 2).

Over the years, other researchers have consistently raised three of the concerns about ESG investment strategies summarized by Vogel.

General Critiques of ESG Investment Strategies

It can be difficult to correctly identify—and weigh—ESG factors when selecting investments.

Four major topics of critique:

- *Too inclusive*
- *Dubious criteria*
- *Quality of information*
- *Strong emphasis on short-term returns*

[33] United Nations Principles for Responsible Investment, www.unpri.org.
[34] Sustainability and Accounting Standards Board, http://www.sasb.org/.

Table 2: Issues with ESG Investment Strategies

General Issue	
Too Inclusive	ESG mutual funds and ETFs often hold investments in companies that are acknowledged as "bad actors" in one or more of the ESG spaces. Nearly all the economy's largest companies, regardless of ESG orientation, may be included in one or more ESG funds.
Dubious Criteria	The criteria used for selecting ESG factors are too subjective and can reflect narrow or conflicting ideological or political viewpoints.
Quality of Information	The information used for selecting ESG factors comes from the companies themselves, which complicates the ability to verify, compare, and standardize this information.
Strong Emphasis on Short-Term Returns	Some financial advisors screen investments first for performance and only after that for ESG factors. This initial emphasis on performance can exclude companies with high ESG practices that focus on longer-term performance.

Source: "The Market for Virtue," David Vogel, 2005.

Too Inclusive

Hawken (2004) raises the issue of overly inclusive selection criteria. In a review of ESG-oriented mutual funds, Hawken found the investment strategies used by most funds allowed nearly any publicly held company to be included in an ESG fund. This practice resulted in little difference between the portfolios of many ESG and conventional funds. Likewise, Billiteri (2008) points out that many ESG-oriented funds and portfolios still included stock of companies with controversial ESG practices in particular areas, such as McDonald's, Coca-Cola, and the now defunct Enron.[35] Finally, Delmas and Doctori Blass (2010) show that a focus on positive screening or best-in-class methods in one ESG factor can result in including companies that are poor performers in other dimensions of ESG.

Dubious Criteria

Several researchers raise the dubious criteria critique (Dunfee, 2003; Stanley and Herb, 2007; Richardson, 2009; Sandberg et al., 2009; Chatterji, 2014; and Munnell and Chen, 2016). Sandberg et al. (2009) discuss the lack of consensus about basic aspects of ESG investing, observing considerable heterogeneity in how investors, advisors, and money managers approach ESG investing in terms of terminology, strategy, and practice. Dunfee (2003) notes the potential contradictions of ESG investment strategies such as different investments being screened out of the Islamic Amana Fund vs. the Ave Maria Catholic Values Fund, both of which use religious values as a preference. Finally, Chatterji (2014) reviewed ratings from six of the leading ESG ratings firms and found low agreement across the firms on how they measured ESG factors.

Quality of Information

Similarly, many researchers raise the quality of information critique (Dunfee, 2003; Hummels and Timmer, 2004; Billiteri, 2008; Richardson, 2009; SustainAbility, 2010; Dhaliwal, 2011; Nilsson et al., 2012). Hummels and Timmer (2004) discuss the difficulty in obtaining sufficient information to determine whether a company's operations conform to the investor's values. A 2010 report from SustainAbility confirms this finding, noting that the ESG sector's increasing reliance on voluntarily disclosed information and the insufficient context and content of this information can hamper an investor's assessment of companies' ESG performance. In addition, Dhaliwal (2011) found that

[35] Controversial ESG practices may include: sourcing materials from rainforests (environmental), poor labor practices (social), and lack of gender representation on company board (governance).

companies with high ESG practices were more likely to report their ESG performance, possibly making the pool of available ESG information biased.

Responses to Critiques of Appropriately Weighing ESG Factors

In response to these critiques, some researchers have promoted different ESG rating approaches to quantify and verify the selection process (Dillenburg et al., 2003; Ballestero et al., 2012; Wimmer, 2013; von Wallis and Klein, 2015). Wimmer (2013) describes a simplified, general two-step process: (1) a company is scored on how well it behaves with respect to factors in the environmental, social, and governance arenas and (2) these individual scores are averaged together for each company. For ESG-identified mutual funds, the average scores of the companies are weighted by each company's proportion in the fund. As described, the researchers' proposed ratings approaches are like the ESG ratings developed by tool providers. However, the academic approaches are geared toward verifying the validity of a rating system and reliably differentiating the "ESG-ness" of ESG-identified and conventional investments to make the rating system more effective in later research, such as with comparative performance (von Wallis and Klein, 2015).

2. Potential Trade-off between ESG Factors and Investment Performance

The second general critique of ESG investing relates to the potential trade-off between ESG factors and investment performance. Individual investors appear to believe they sacrifice returns for exercising their ESG values in investing. Several examinations (Mackenzie and Lewis, 1999; Williams, 2005; Renneboog et al., 2008; Nilsson, 2008; Paetzold and Busch, 2014; Riedl and Smeets, 2014) of individual investors' motivations, beliefs, and attitudes about ESG investing found that many investors believe there is some performance trade-off for pursuing ESG preferences. For instance, Riedl and Smeets (2014) conclude from their experiments, "Social preferences rather than return expectations or risk perceptions are the main driver of investments in socially responsible (SRI) mutual funds (which are discussed interchangeably with ESG funds). In fact, most investors who hold SRI funds expect to earn lower financial returns on these funds than on other funds." Beyond investors' *beliefs* about the trade-off between ESG and performance, there has been substantial research to attempt to answer the question. This is by far the most researched topic on ESG investing (Capelle-Blancard and Monjon, 2012).

> ***Investors*** *perceive a trade-off between ESG factors and investment performance: individual investors believe ESG investments perform worse than conventional investments.*
>
> *However,* ***empirical research*** *suggests that ESG investments perform at least as well as conventional investments.*

Qualitative Research

Researchers disagree as to whether ESG investments perform as well as non-ESG investments. In a review of the research literature on ESG investment performance, Statman (2007), considered three hypotheses about how the actual returns (i.e. performance) of ESG investments compare with the returns of non-ESG investments: (1) "no effect" or same performance, (2) "doing good but not doing well" or poorer performance, and (3) "doing well while doing good" or better performance. He applied these hypotheses to several common types of ESG investment strategies. His overview of the literature found that on balance some types of ESG investments (e.g. those that avoid gambling, alcohol, or tobacco stocks) conformed to the "doing good, but not well" hypothesis. On the other hand, Statman's

review of the literature found that ESG investment stocks focused on environmental and governance factors on balance conformed to either the “no effect” or “doing good while doing well” hypotheses.

Empirical Studies

The academic literature provides several empirical studies that address this topic. Relying on analysis of individual ESG funds, indices, portfolios, or company stocks, several studies (Statman, 2006; Humphrey and Tan, 2013; Eccles et al., 2014; Melas et al., 2016; Khan, 2016) found that incorporating ESG factors into investments generally produced investment performances on par with or better than non-ESG investments. For instance, Eccles et al. (2014), in a comparison of companies that adopted high and low sustainability practices, found that high sustainability companies significantly outperformed in the stock market over the long term.

Meta-Analyses

Other studies, relying on meta-analyses of ESG and non-ESG investment performance, found that ESG factors do not have a negative effect on investment performance compared with non-ESG investments (UN Environmental Program and Mercer, 2007; Revelli and Viviani, 2015). In fact, several meta-analyses found that ESG factors were positively correlated with better investment performance (Mercer, 2009; Deutsche Bank Climate Change Advisors, 2012; Friede et al., 2015; von Wallis and Klein, 2015; Lu and Taylor, 2016). Moreover, a few of these meta-analyses (Revelli and Viviani, 2015; Friede et al., 2015) highlight how the diversity of ESG investment strategies, investment time horizon considered, and data comparison methods used have contributed to the varying findings among research studies examining the relative performance of ESG investing.

Overall, many individual and institutional investors continue to believe ESG investing entails accepting lower investment performance (Nilsson, 2008; Renneboog et al., 2008; Paetzold and Busch, 2014; Riedl and Smeets, 2014). However, the academic literature indicates that, when appropriately compared (e.g. ESG strategies, investment time horizon, performance measures), ESG investments provide performance at least comparable to that of non-ESG investments. The following literature demonstrates these findings: Eccles et al. (2014); Humphrey and Tan (2015); Melas et al. (2016); and the meta-analyses of Deutsche Bank Climate Change Advisors (2012); Revelli and Viviani (2015); Friede et al. (2015); von Wallis and Klein (2015); and Lu and Taylor (2016).

ESG INVESTING CONCERNS SPECIFIC TO RETIREMENT SAVINGS

A second set of critiques on ESG investing investment strategy focuses on retirement savings.

1. Suitability of ESG Investments for Public Pension Plans

One long-standing point of contention in the academic literature is the suitability of ESG investments for public pension plans. Some researchers argue that ESG investments are suitable for public pension plans (Sethi, 2005; Richardson, 2007; Hess, 2007; Marlowe, 2014; Rose, 2016). Richardson (2007) asserts that ESG investing may be an ideal strategy for public pension plans for the following reasons:

- Providers of ESG investments (e.g. corporations) do not compete with (or have ties to) the underlying public pension funders (e.g. state and local governments).
- Public pension plans focus on long-term investment horizons.
- Public pensions cater to ordinary workers.

In addition, Marlowe (2014) found public pension plans were active in ESG investing, and the performance of these ESG investments was indistinguishable from conventional public pension investments.

Some researchers express concerns about the suitability of ESG investments for public pension plans and how ESG investing could be appropriately incorporated into them (Entine, 2005; Munnell, 2005; Barber, 2007; Wang et al., 2015; Munnell, 2016). For instance, Entine (2005), in response to public pension plans' reliance on negative and exclusionary screening, argues that this is not a good strategy because it does not allow public pension plans to effectively assess ESG factors separately from their investment return prospects. He asserts the pension plans' belief that they can accurately assess ESG corporate intentions may inadvertently promote corporate behaviors that are both socially irresponsible and economically adverse for pension beneficiaries. For instance, Entine (Billiterri, 2008) notes that almost every major financial company involved in the 2008 Financial Crisis was ranked highly by social investors.

ESG Investing Concerns Specific to Retirement Savings

ESG investments may not be suitable for public pension funds for the following reasons:

- *Limited effectiveness of ESG selection methods*
- *Potential for political motivation*
- *Distraction from core purpose of pension plans*

Munnell and Chen (2016) outlined three specific reasons why ESG investments are not suitable for public pension plans:

- The effectiveness of social investing on promoting social responsibility is limited.
- Social investing distracts public pensions from their core purpose, which is providing retirement security for members.
- ESG investing has a principal-agent problem (i.e. pension decision-makers do not bear the risk of any financial losses incurred by ESG preferences).[36]

Wang et al. (2015) discusses the various ways ESG investment decisions of public pension funds (in the form of shareholder activism) are influenced by the political incentives of the funds' board members. These results echo the findings of Brown et al. (2015) and Bradley et al. (2016) that political considerations can bias the general investment decisions of public pension funds, which raises concern about the potential for the management of public pensions (and retirement benefits) to be influenced by political considerations. The debate about the suitability of ESG investing for public pension plans is ongoing.

2. Appropriateness of ESG Investments for Private Retirement Plans

Unlike public pension plans, private-sector retirement plans (including both defined contribution and defined benefit plans) must maintain compliance with ERISA regulations, specifically the fiduciary requirements of the Act, when selecting investment options. For at least the last 33 years, DOL has

[36] This problem is also referenced in other areas of investing.

released guidance on the applicability of the fiduciary standard to ESG investing for private retirement plan administrators.[37]

The guidance has clarified and refined the agency's stance on ESG investing in ERISA-regulated retirement plans and has prompted various reactions from the investment industry. The earliest guidance specified that ESG factors could only be included as a *tiebreaker* among equally suitable investment options. This guidance kept many private retirement plan administrators from including ESG investment options.

The 1998 Calvert Letter clarified that administrators could include ESG factors if they do not negatively affect the fiduciary requirements of diversification, liquidity, and risk and return, among others. Some investment industry practitioners, such as Vanguard, TIAA, Social(k), and Calvert, took the guidance in this letter as permission to offer ESG investments as private retirement plan options.[38] Finally, DOL's 2015 guidance acknowledged that ESG factors might have a direct relationship to the economic value of an investment rather than being simply a *tiebreaker* or *add-on* feature. In these cases, DOL advised that these ESG factors can be formal components when the fiduciary analyzes competing investment options, reminiscent of the ESG integration strategy discussed above.

Throughout the years and multiple rounds of guidance, retirement advisors have grappled with how to square their fiduciary responsibility with investors' growing demand for ESG investments (Richardson, 2007; Martin, 2009; Richardson, 2011; Sandberg, 2011; Woods and Urwin, 2012; Sandberg, 2013; Sanders, 2014). Richardson (2007) provides a perspective for affirmatively squaring investors' ESG interests with fiduciary responsibility by focusing on the type of ESG selection method used. He suggests meeting the fiduciary responsibility by using positive screening or best in class as per the 2006 UN Principles. These investment strategies steer away from excluding specific types of investments in favor of focusing on best practice standards for environmental assessment, shareholder activism, public reporting, and other accountability measures.[39]

Private-Sector Retirement Plans' Concerns Regarding ESG Investing

- *ESG investments may not be permissible for private-sector retirement plans under ERISA.*
- *DOL guidance has shifted from ESG as a tiebreaker, to an add-on, to full integration.*
- *Advisors have grappled with how to interpret DOL's guidance.*

On the other hand, Sandberg (2013) and Sanders (2014) argue that ESG investing is, in most cases, legally incompatible with the fiduciary responsibility of financial advisors that oversee private-sector retirement plans. For instance, Sanders (2014) argues that retirement plan trustees are prohibited from investing in ESG due to the "exclusive-benefit" rule of ERISA, which requires trustees to invest for the exclusive benefit of the plan's beneficiaries rather than for larger considerations such as social value.

[37] 2015 DOL guidance on including ESG investing in retirement plans: https://webapps.dol.gov/FederalRegister/PdfDisplay.aspx?DocId=28547.
[38] Social(k): www.socialk.com.
[39] United Nations, "Principles for Responsible Investment," www.unpri.org. (Signatories include the Canada Pension Plan, British Telecom Pension Scheme, New Zealand Superannuation Fund, and the UK Universities Superannuation Scheme. See further signatories listed online: www.unpri.org/signatories.)

ESG INVESTING AND RETIREMENT SAVINGS: PRESENT STATE AND FUTURE POSSIBILITIES

Despite critiques, the continued and increasing growth in ESG investing makes this sector an important part of the future retirement investing landscape. Several issues illustrate the need for additional development and refinement in ESG investing sector research, including the following:

- Continued concerns about the effectiveness of ESG investment strategies, particularly those applied to retirement savings
- Debate over the potential performance disadvantage of ESG investments
- Questions about the suitability of ESG investments for public pension plans
- Concerns about the permissibility of ESG investments for private-sector retirement plans

Another area of ESG literature that needs further development is research on the proliferation of indices, information sources, and assessment tools for ESG factors. Except for a few reports, such as SustainAbility's "Rate the Raters" series (2010) and Novethic's "Overview of ESG Rating Agencies" report (2013), there has been little research conducted to systematically assess and understand ESG tools.[40] Our report helps to fill in this gap in the literature. Our environmental scan of ESG tools provides a digest of ESG tools, a comparison of their key features and capabilities, and description of their relative utility for different user groups.

[40] Novethic, "Overview of ESG Rating Agencies," 2013, https://www.scribd.com/document/270989929/2013-Overview-of-ESG-Rating-Agencies.

ENVIRONMENTAL SCAN OF ESG INVESTMENT TOOLS

The second part of our study provides an environmental scan of available online ESG investment tools. Our environmental scan involved a systematic search of the ESG investing landscape for available ESG tools using a well-defined scope and methodical categorization and collection of information on the tools. We defined ESG tools to include online documents, applications, websites, or databases that perform at least one of the following activities:

- Provide information on ESG aspects of investments
- Assist users with selecting ESG investments
- Assist users with creating or managing a portfolio of ESG investments

The ESG tools are designed to assist a variety of users to sort through various investment options to identify those that align with their ESG preferences. The output of the tools is information on the ESG orientation of specific investments or market segments, such as the U.S. large-cap equities market. The ESG tools serve as an important source of information as investors and advisors use the tools to include ESG factors in their investment selection and management processes.

The scan provides a broad comparison of the tools based on specific features and describes their relative utility to different users, without endorsing or recommending any specific tools. There are numerous sources of ESG information (online and otherwise) besides the tools highlighted in this report. However, some of these sources fall outside of our definition of ESG investment tools and the scope of the environmental scan.

RESEARCH QUESTIONS AND METHODOLOGY

The following three research questions guided this environmental scan:

1. Which ESG tools are available and relevant to investors (individual and institutional investors, and money managers) and advisors?
2. How are these tools different and similar with respect to their features and capabilities?
3. What is the relative utility of these tools for different investors?

The following section describes the five-step analysis used to conduct the environmental scan of available ESG tools. Figure 2 illustrates these steps and their sequence.

1. Defining the scope of the environmental scan. To answer the first research question, *which ESG tools are available*, we first needed to define the scope of the search. Our analysis restricted the scope of ESG tools to reflect the needs of DOL and other policymakers seeking to orient themselves to the field of ESG investing. We limited our environmental scan to ESG tools with all the following attributes:

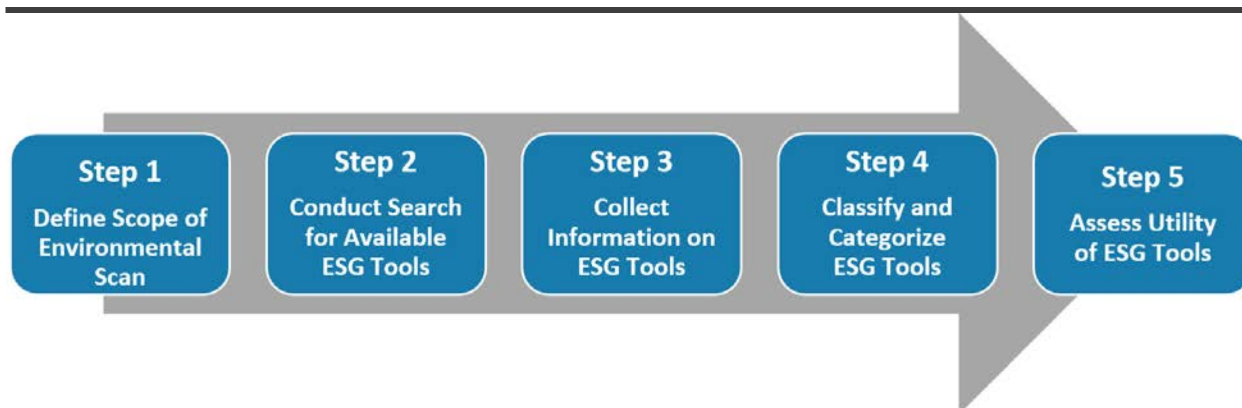


Figure 2: Process for Conducting Environmental Scan of ESG Investment Tools

- Cover investments, e.g. company stocks or securities, mutual funds, and market segments
- Assess U.S.-based investments[41]
- Oriented to individual and institutional investors and advisors
- Are standalone products that are widely available (in contrast to some firms that offer customized ESG analyses or their ESG services that are only available to their existing clients)
- Cover multiple issues across one or more pillars

ESG investing is a diverse subject encompassing many topics and players. However, this report's intended audience is investors (individual investors, institutional investors, and money managers), advisors, plan administrators, and policymakers, so the tools discussed are those deemed relevant to this audience. The tools in this study may also be used by those outside of the intended audience such as nonprofit organizations, consultants, governments, and publicly and privately owned firms.

The tools reviewed in the environmental scan represent a specific segment of the available resources on ESG investing. These tools produce and utilize external ESG research and are developed by third-party organizations. Other types of ESG-related resources were not included in this study, as they did not fit within our definition of ESG investment tools and scope of the environmental scan. Those excluded resources include but are not limited to the following:

- ESG education and training resources (e.g. courses, research studies, issue briefs)
- Codes of conduct (e.g. UN Principles of Responsible Investment, UN Principles on Business and Human Rights, UN Global Compact)
- Limited tools (tools that covered one sector [e.g. human capital management] or a specific ESG-related issue [e.g. Carbon Tracker, Barclays Women in Leadership Index])
- Impact investing tools[42]
- Bespoke consulting services or ESG advisory services—many organizations (First Affirmative Financial Network, Trillium Asset Management, Boston Common Asset Management, Wells Fargo

[41] While we refined the scope of this review to focus on U.S.-based ESG investments, international ESG investments are not drastically different.

[42] Impact investing is related to ESG investing, but the two are not necessarily synonymous or interchangeable, though some practitioners disagree.

Private Bank, Morgan Stanley, and Merrill Lynch, to name a few) provide advice and assistance to those interested in ESG investing

2. Conducting a search for available ESG investment tools. This search began with known sources of information on ESG tools, such as US SIF, Social Funds, and Morningstar, as well as the articles of academic researchers. References, citations, and links from these sources helped expand the search to ensure the inclusion of all ESG tools within scope.

3. Collecting information on ESG investment tools. Once we gathered a list of ESG tools that fit within the study's scope, we systematically collected information on the tools. We started by reviewing the ESG tool provider's website and any materials available from the company related to the tool. Next, we conducted an internet search for additional materials specific to each tool. We also reached out to the ESG tool providers directly to acquire any missing information. We contacted individuals (in sales, business development, or customer service) at each provider, by phone or email, following up regularly until we acquired the needed information. Using the tool classification system described in Step 4 and the utility criteria described in Step 5, our team standardized the type, amount, and format of information collected.

Table 3: Issues with ESG Investment Strategies

General Issue	Explanation
Too Inclusive	ESG mutual funds and ETFs often hold investments in companies that are acknowledged as "bad actors" in one or more of the ESG spaces. Nearly all the economy's largest companies, regardless of ESG orientation, may be included in one or more ESG funds.
Dubious Criteria	The criteria used for selecting ESG factors are too subjective and can reflect narrow or conflicting ideological or political viewpoints.
Quality of Information	The information used for selecting ESG factors comes from the companies themselves, which complicates the ability to verify, compare, and standardize this information.
Strong Emphasis on Short-Term Returns	Some financial advisors screen investments first for performance and only after that for ESG factors. This initial emphasis on performance can exclude companies with high ESG practices that focus on longer-term performance.

Source: "The Market for Virtue," David Vogel, 2005.

4. Creating a classification system for categorizing the available ESG investment tools. To answer the second research question, *how are the tools similar and different with respect to their features and capabilities*, we developed a classification system for categorizing the ESG tools. This classification system provides a comprehensive and standardized set of tool features and capabilities, making it easier for investors and advisors to identify tools that fulfill their needs and preferences. Table 4 lists and describes the tool characteristics in our classification system.

5. Assess the utility of available ESG investment tools. To answer the third research question, *what is the relative utility of these tools for investors and advisors,* we developed a set of criteria to describe the utility of the identified ESG tools. Table 4 lists and describes the five criteria of ESG tool utility.

Table 4: ESG Investment Tool Utility Criteria

Utility Criterion	Description
Coverage of investment options	Extent of inclusion of mutual funds, companies, or other entities
Provision of investment information	Information such as providing expense ratios, performance data, and assessment of risk
Focus of ESG analysis	Whether the tool provides information on ESG specializations such as environmental or governance
Information used for assessing ESG investments	Information such as using independently verifiable data versus data provided by companies
Ease of use/accessibility	Ease or difficulty that users encounter when using the tools

These criteria, applied to each ESG tool, allowed us to develop narratives that compare the utility of ESG tools within a similar group (e.g. ESG tools for mutual funds and ETFs). These descriptive assessments, while not recommending specific tools or offering investment advice, help investors and advisors determine which ESG tool best fits their needs.

ASSESSMENT OF ESG INVESTMENT TOOLS BY KEY FEATURES

This environmental scan uncovered 37 ESG tools, 28 of which were in scope as defined by our study. Appendix A lists the 37 ESG tools and the four categories into which each tool falls. Once we identified the characteristics and developed the utility criteria, we assessed the 28 ESG tools within these established frameworks. First, we assessed the tools across the eight characteristics.

INVESTMENTS COVERED

Our team determined that the ESG tools, in this study, correspond to one of four focus areas, described in Table 5.

Tool Category	Description
Mutual funds and exchange-traded funds (ETFs)[43]	ESG information, ratings, or both on mutual funds and ETFs
Companies	ESG information, ratings, or both on the securities of individual companies (Most tools in this category largely or exclusively focus on public companies.)
Indices	ESG information on market segments (e.g. U.S. domestic large-cap companies)
Other entities (e.g. investment strategies, retirement plans)	ESG information and ratings on entities other than mutual funds, ETFs, individual companies, and indices

Table 5: ESG Investment Tool Categories

As Figure 3 shows, 16 ESG tools focus on company

[43]Exchange-traded funds (ETFs) are funds that track indices like the NASDAQ-100 Index, S&P 500, and Dow Jones. See http://www.nasdaq.com/etfs/what-are-ETFs.aspx.

stock or securities investments. Two tools fall into the "other entities" category, covering investments that do not fall into any of the other three categories and instead provide information on subjects such as investment strategies and retirement plans. Of the remaining 10 tools, six focus on ESG indices, and four provide information on mutual funds or ETFs.

Table 6 identifies the 28 ESG tools used to answer the project's research questions. Appendix B provides individual profiles of the 28 tools discussed in this report.

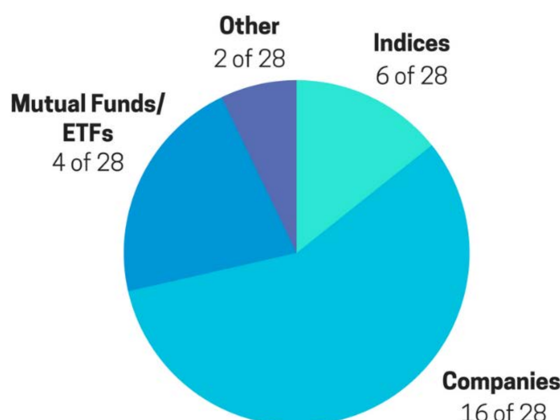


Figure 3: Investments Covered by the ESG Investment Tools

SERVICES PROVIDED AND ESG RATING

Most ESG tools included in this study provide information and ratings to help investors and advisors identify investments that align with ESG factors. More than half of the tools provide a numerical rating or ranking of investments. These ratings, alongside financial information, may assist

Table 6: In-Scope ESG Investment Tools (28)

ESG Investment Tools			
Mutual Funds & ETFs	**Companies**	**Indices**	**Other Entities**
1) Morningstar Sustainability Rating 2) SocialFunds.com 3) US SIF Sustainable & Responsible Mutual Fund Chart 4) MSCI ESG Fund Metrics	5) Bloomberg ESG Disclosure Score 6) Sustainalytics Company ESG Reports 7) Oekom Corporate Rating Reports 8) ISS QualityScore 9) Covalence EthicalQuote Ethical Snapshots 10) RobecoSAM Corporate Sustainability Assessment 11) RepRisk Company Reports 12) MSCI ESG Company Rating Reports 13) FTSE ESG Ratings 14) HIP Investor Ratings 15) Thomson Reuters Corp. Responsibility Rating 16) Vigeo Eiris Rating 17) Solaron emRatings 18) Inrate Sustainability Rating 19) CDP Open Data Portal 20) ISS-IW Financial Score	21) Thomson Reuters Corp. Responsibility Indices 22) Calvert Responsible Index Series 23) FTSE4Good Index Series 24) Dow Jones Sustainability Indices 25) MSCI ESG Indexes 26) Morningstar Global Sustainability Index	27) Mercer ESG Ratings 28) Social(k)

Note: The tools are numbered in order of how they appear in the report. Their numbering does not indicate an ordinal ranking or endorsement of any tools.

investors in creating and managing their portfolios. Two tools, US SIF's Sustainable and Responsible Mutual Fund Chart (Tool 3) and Social(k) (Tool 28), provide information on ESG-oriented investments without assessing the ESG performance of the underlying holdings.

RATING SOURCE

Most tool providers use their own unique methodology to create their ratings, thus the ratings are not easily comparable across different tools. Appendix C details the underlying methodologies for each rating. Additionally, the ratings identify various aspects of ESG performance that prevent them from being compared to each other. For example, the Covalence EthicalQuote ESG Rating measures a company's reputation on ESG factors, whereas the Oekom Corporate Rating assesses the environmental and social performance of individual companies.

Some tool providers use data from other organizations, which creates some interdependency in their ESG assessments. For example, the Morningstar Sustainability Rating (Tool 1) for funds relies on Sustainalytics' Company ESG Reports (Tool 6) for individual companies. Likewise, the ESG-oriented mutual funds that Social(k) (Tool 28) offers to retirement plans are the same set of funds listed in US SIF's Sustainable and Responsible Mutual Fund Chart (Tool 3). The Heart Rating, available through SocialFunds.com (Tool 2), is produced by Natural Investments.

FINANCIAL INFORMATION

As Figure 4 shows, several tools give financial information on the covered investments. Most of the tools in the mutual funds and ETFs and indices categories give financial information on the investments. Investors who use ESG tools without financial information would require additional sources of information to make complete investment decisions.

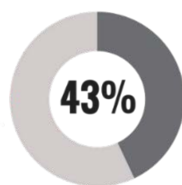


Figure 4: Financial Information Provided by ESG Investment Tools

ESG FACTORS COVERED

Given the scope of the environmental scan, most tools provide information on all three ESG factors (e.g. Environmental, Social, and Governance). A few tools focused on investors and advisors with more focused ESG interests. The Oekom Corporate Rating Report (Tool 7) and Morningstar Global Sustainability Index Family (Tool 26) focus on the environmental and social aspects of ESG. In addition, the ISS QualityScore (Tool 8) and CDP Open Data Portal (Tool 19) focus on governance and environmental factors, respectively. In the wide array of ESG investing tools and resources (many of which were outside the scope of this study), the scope applied to ESG varies from encompassing one specific issue (e.g. clean energy) that falls under one aspect of ESG (such as environmental) to several issues that encompass all three aspects of ESG.

COST OF TOOLS

A majority of the tools require a fee to access the information, as shown in Figure 5. Half of the ESG tools that cover mutual funds and ETFs or indices (five of ten) provide their information at no cost. However, all tools that cover company-level investments charge a fee for access to their ratings or underlying data. Given that many of these tools are geared toward advisors and institutional investors, the fees can be steep. For instance, an annual subscription to the data for the companies rated under the Covalence Ethical Quote (Tool 9) costs $7,900 and for the ISS QualityScore (Tool 8) costs $20,000 for up to five users.[44]

Most tools (23 of 28, or 82%) require users to pay an access fee.

Figure 5: Fees for ESG Investment Tools

COMPARING ESG INVESTMENT TOOLS BY THEIR UTILITY

After describing the characteristics of the 28 ESG tools, the team compared the relative utility of the tools within each investment type group (e.g. companies, mutual funds, and ETFs) using the ESG tool utility criteria we developed (see Table 4).The following sections discuss general patterns found across all the ESG tools for each utility criterion.

COVERAGE OF INVESTMENT OPTIONS

The completeness of coverage varies substantially across ESG tools, with some tools assessing a defined sub-sample of the underlying universe and other tools attempting a larger set. The main delineator of inclusion across ESG tools is size. For tools that cover companies, mutual funds, and EFTs, many will only assess the largest investments per some cut-off (e.g. largest 200, 500, 1,000, or 3,000 companies). For tools that cover indices, most will cover at least the major respective conventional investment indices (e.g. large-, mid-, and small-cap U.S. stock, total U.S. stock). In addition, ESG tools that cover companies focus on publicly traded companies more than private firms.

[44] These tool fees were provided to Summit through direct consultations with the tool providers.

PROVISION OF INVESTMENT INFORMATION

Most ESG tools that cover companies, mutual funds, or ETFs often do not provide financial information alongside their ESG analyses of the investments. ESG tools that cover investment indices are the only set of tools that regularly provide financial information on the covered investments (generally historical performance). A lack of investment information within an ESG tool does not necessarily reduce its usefulness. Financial data about public companies, mutual funds, and ETFs are usually readily available through other sources, so they need not necessarily be available in the ESG tools themselves.

FOCUS OF ESG ANALYSIS

Most of the ESG tools do not provide information on ESG specializations, opting instead for an assessment of all three ESG factors, which is most appropriate for investors with broad ESG interests. The ratings in the five tools with a broad ESG focus can be disaggregated into separate scores for each aspect of ESG. These tools, in addition to the tools that specialize in one or two of the ESG factors would be useful to investors with more specific ESG interests.

INFORMATION USED FOR ASSESSING ESG INVESTMENTS

The sources of information used to assess ESG investments vary across the ESG tools. ESG tools that cover companies or investment indices are much more likely to collect information directly from the companies through surveys, direct communication with companies, and from company documents (e.g. annual reports). For some tools that cover market segments, the providers use information collected from individual companies to create their own company ESG ratings that are specifically used in determining the index constituents and weights. Across all tool categories, other information sources include news articles and third-party reports (e.g. nonprofits or nongovernmental organizations).

ACCESS TO ESG TOOLS

The ESG tools vary considerably with respect to their accessibility. Most of the ESG tools that cover mutual funds and ETFs or market segments provide partial or complete information online and at no charge to the public. In addition, a few of the tools that cover market segments allow users to customize their use of information by creating customized indices. ESG tools that cover companies are much less accessible to individual investors and smaller-scale advisors. A fee is generally required to access the information from these tools.

ESG INVESTMENT TOOLS MATRICES BY TOOL CATEGORY

After analyzing the set of 28 ESG tools, we then assessed them within their investment categories. The following matrices provide side-by-side comparisons of the ESG investment tools in each category in Figures 6, 7, and 8. Following each figure is a discussion of the utility of each tool within its tool category.

Figure 6: Comparison of ESG Investment Tools for Mutual Fund and ETFs

Features	ESG Investment Tools			
	1) Morningstar Sustainability Rating	2) SocialFunds.com	3) US SIF Sustainable & Responsible Mutual Fund Chart	4) MSCI ESG Fund Metrics
Services provided				
Information	✓	✓	✓	✓
Rating	✓	✓	✗	✓
Investments covered				
Mutual funds	20,503	208	214	18,456
Exchange Traded Funds (ETFs)	2,496	0	0	2,397
Other	12,347	0	0	0
ESG rating				
Rating type (Low to High)	1–5	1–5	–	0–10
(Illustration)				
Rating source				
Funds rated by tool provider	✓**	✗	✗	✓
Funds rated by third party	✗	✓ Natural Investments	✗	✗
Financial information				
Information provided	• Historical returns • Minimum investment	• Historical returns • Minimum investment • Investment fees	• Historical returns • Minimum investment • Assets under management • Management fees • Expense ratios	–
ESG factors covered				
Environmental	✓	✓	✓	✓
Social	✓	✓	✓	✓
Governance	✓	✓	✓	✓
Provider of tool				
Financial services firm	✓	✗	✗	✓
Non-financial services firm	✗	✓	✓	✗
Tool cost* **				
Free or Fee-based	Free	Free	Free	Fee-based: Undisclosed

Information for items marked – is not available.

NOTES: **Morningstar uses company-level information from Sustainalytics to develop its fund ratings.

*** Notes on tool fees: MSCI ESG does not disclose its products' fees. Fees are customized based several factors including total and types of assets under management, how data and products will be used, what products the client wants and geographic coverage of what information the client wants.

UTILITY OF ESG INVESTMENT TOOLS FOR MUTUAL FUNDS AND ETFS

Coverage of investment options. Tools in the mutual fund and ETF category cover between 208 and over 20,000 mutual funds and ETFs. The Morningstar and MSCI tools (Tools 1 and 4) provide the largest coverage in this category. They each include over 18,000 mutual funds and more than 2,000 ETFs.[45] SocialFunds (Tool 2) covers a smaller, more restricted set of socially responsible or religion-based funds. Similarly, US SIF's tool (Tool 3) includes a set of mutual funds designated as sustainable and responsible funds.

Provision of investment information. The Morningstar and SocialFunds tools (Tools 1 and 2) offer financial information on funds such as minimum investment amounts and historical returns. This helps investors and advisors to simultaneously consider funds' financial and ESG performance. US SIF (Tool 3) includes financial information on the mutual funds that it covers but does not provide any assessment of the mutual funds' ESG orientation. The MSCI tool (Tool 4) does not provide any financial performance information on mutual funds and ETFs. Users would need to supplement their analysis of funds with financial performance information from other source.

Focus of ESG analysis. All four tools incorporate the three pillars of ESG: environmental, social, and governance. These tools could be useful for investors with a broad interest in ESG investing. In contrast, investors who want to compare individual pillars across mutual funds and ETFs would likely find Morningstar and MSCI tools (Tools 1 and 4) most useful, since their ESG scores can be disaggregated into comparable E, S, and G scores.

Information used to assess ESG investments. SocialFunds (Tool 2) relies on an ESG rating produced by a third-party organization. Morningstar (Tool 1) uses company-level information from Sustainalytics to develop its fund ratings. MSCI ESG (Tool 4) independently develops and maintains the research on which its ESG ratings are based. US SIF (Tool 3) does not rate mutual funds' ESG performance. MSCI and Morningstar's tools (Tools 1 and 4), provide more detailed information on their methodologies than SocialFunds (Tool 2).[46]

Ease of use/accessibility. The ease of using and accessing the tools depends on the identity of users, their purpose for using the tool, and cost. Morningstar and MSCI (Tools 1 and 4) develop ESG ratings through sophisticated processes, which may not be easy for some users to understand. Additionally, their ratings cover a large volume (more than 20,000) of mutual funds and ETFs. These tools could be better suited for institutional investors, advisors, or investment managers, though they are available to individual investors as well. The mutual fund listings that are provided by SocialFunds and US SIF (Tools 2 and 3) would likely be the most user-friendly tools for individual investors. They provide less complex information (e.g. a list of mutual funds, the funds' returns, and investment minimums) on mutual funds that have already been designated as sustainable or socially responsible. Finally, all tools are free

[45] Morningstar and MSCI rate 20,000 and nearly 21,000 mutual funds and ETFs, respectively. US SIF and SocialFunds include 208 and 214 mutual funds, respectively.
http://www.sustainalytics.com/morningstar-introduces-industrys-first-sustainability-rating-20000-funds-globally
https://www.msci.com/documents/10199/84bcc5fa-783e-4358-9696-901b5a53db3b
http://charts.ussif.org/mfpc/
[46] The information provided by MSCI might be limited, since its tool is fee-based.

(except MSCI's Fund Metrics, Tool 4) and available online, which makes them easily accessible to all investors.[47]

[47] MSCI ESG does not disclose its products' fees. Fees vary by client because the tools are customized for each client's needs and profile. Customization factors include total and types of assets under management, how data and products will be used, what products the client wants, and geographic coverage of what information the client wants.

Figure 7: Comparison of ESG Investment Tools for Companies

Features	ESG Investment Tools							
	5) Bloomberg ESG Disclosure Score	6) Sustainalytics Company ESG Reports	7) Oekom Corporate Rating Reports	8) ISS QualityScore	9) Covalence EthicalQuote Ethical Snapshots	10) RobecoSAM Corporate Sustainability Assessment	11) RepRisk Company Reports	12) MSCI ESG Company Rating Reports
Services provided								
Information	✓	✓	✓	✓	✓	✓	✓	✓
Rating	✓	✓	✓	✓	✓	✓	✓	✓
Investments covered								
Individual companies	10,000+	6,500	3,800*	5,600+	3,400	4,000	85,524	6,500
ESG rating								
Rating type (Low to High)	0–100	0–100	A+–D-	1–10	0–100	0–100	AAA–D	AAA–CCC
Rating source								
Funds rated by tool provider	✓	✓	✓	✓	✓	✓	✓	✓
Funds rated by third party	✗	✗	✗	✗	✗	✗	✗	✗
Financial information								
Information provided	– **	• Total revenue • Net income • Net earnings before taxes • Market capitalization	–	• Share price • Market capitalization • Annual company revenue	–	–	–	–
ESG factors covered								
Environmental	✓	✓	✓	✗	✓	✓	✓	✓
Social	✓	✓	✓	✗	✓	✓	✓	✓
Governance	✓	✓	✗	✓	✓	✓	✓	✓
Provider of tool								
Financial services firm	✓	✓	✓***	✓	✗	✓	✗	✓
Non-financial services firm	✗	✗	✗	✗	✓	✗	✓	✗
Tool cost								
Free or Fee-based	Fee-based: $24,000–$36,000 per year	Fee-based: Undisclosed	Fee-based: $200,000 per year	Fee-based: $20,000–$25,000 per year	Fee-based: $7,900 per year	Fees based on Bloomberg Terminal fees (see note 6)	Fee-based: $450–$3,500 per Company Report.	Fee-based: Undisclosed

Information for items marked – is not available.

NOTES: * Oekom's research covers 5,600 companies overall, but only provides 3,800 individual ratings. Companies that are subsidiaries receive the same rating as their parent company and are not scored separately.

** The scores do not provide financial information themselves, however the scores are provided alongside companies' financial information in the Bloomberg Terminal.

Figure 7: Comparison of ESG Investment Tools for Companies (continued)

Features	ESG Investment Tools							
	13) FTSE ESG Ratings	14) HIP Investor Ratings	15) Thomson Reuters Corporate Responsibility Ratings	16) Vigeo Eiris Sustainability Rating	17) Solaron emRatings	18) Inrate Sustainability Rating	19) CDP Open Data Portal	20) ISS-IW Financial Score
Services provided								
Information	✓	✓	✓	✓	✓	✓	✓	✓
Rating	✓	✓	✓	✓	✓	✓	✓*	✓
Investments covered								
Individual companies	4,100	5,770+	4,600	3,260	901	2,600	5,600+	3,000
Mutual funds	✗	1,000+**	✗	✗	✗	✗	✗	✗
ETFs	✗	✓	✗	✗	✗	✗	✗	✗
Other	✗	26,800+**	✗	✗	✗	✗	✗	✗
ESG rating								
Rating Type (Low to High)	1–5	0–100	0–100	0–100	0–100	A+ to D-	A–F	1–100
Rating source								
Funds rated by tool provider	✓	✓	✓	✓	✓	✓	✓	✓
Funds rated by third party	✗	✗	✗	✗	✗	✗	✗	✗
Financial information								
Information Provided	–	–	–	–	–	–	–	• Historical returns • Minimum investment • Investment fees • Investment allocation
ESG factors covered								
Environmental	✓	✓	✓	✓	✓	✓	✓	✓
Social	✓	✓	✓	✓	✓	✓	✗	✓
Governance	✓	✓	✓	✓	✓	✓	✗	✓
Provider of tool								
Financial services firm	✓	✗	✗	✗	✗	✗	✗	✗
Non-financial services firm	✗	✓	✓	✓	✓	✓	✓	✓
Tool cost								
Free or Fee-based	Fee-based: Undisclosed	Fee-based: Undisclosed	$600 per year	Fee-based: Undisclosed	Fee-based: Undisclosed	Fee-based: Undisclosed	Fee-based: Carbon dataset- $16,000; Water dataset - $10,000	Fee-based: Undisclosed

Information for items marked – is not available.

NOTES: *CDP provides the CDP Disclosure Score which measures companies how well companies provide their environmental performance data. The score does not measure how well the companies perform on different ESG issues.

**HIP Investor rates over 1,000 mutual funds and ETFs but does not provide a breakdown of the number of mutual funds and ETFs. HIP Investor also rates bonds and real-estate investment trusts.

Additional Fee Information:

1. Bloomberg (Tool 5)—The fee is $2,000–$3,000 per month for a 2-year Bloomberg Terminal subscription. The ESG Disclosure Scores and other ESG data are accessible through a Bloomberg Terminal. After paying the fee for the terminal, there are no other fees for the ESG Disclosure Score or other ESG data.
2. Sustainalytics (Tool 6)—The ratings are accessed through Sustainalytics' Global Access Tool. Sustainalytics does not disclose its fees for the Global Access Tool or other products. However, it did disclose that its fees are customized based on the type and coverage of data access, the amount of assets under management a client has, and how the client uses the data.
3. Oekom (Tool 7)—The Oekom corporate ratings are accessed through Oekom's ORBIT database, which includes other types of ESG data. The fee for complete access (the corporate ratings and other ESG information) to the ORBIT database is $200,000 per year.
4. ISS—On an annual basis, access to the ISS QualityScore tool costs $20,000 for 5 accounts with one client. Ten accounts cost $25,000.
5. Covalence (Tool 9)—Access to Covalence EthicalQuote ESG Snapshots costs $7,900 per year. However, this is not a fixed fee and may be modified for a company (or other client) with different needs. The quoted fee would be for a company that wanted access to the ESG ratings for all 3,400 companies in the coverage universe and did not redistribute the data to its clients.
6. RobecoSAM (Tool 10)—The CSA is an internal tool used by RobecoSAM. It does not have a fee associated with it, because most CSA data are available to the public. Limited information (such as percentile ranks for companies on the various criteria measured in the CSA) from the results of the CSA are available via the Bloomberg Terminal.
7. MSCI ESG (Tool 12)—MSCI ESG does not disclose its products' fees. MSCI customizes its fees based on several factors, including total and types of assets under management, how data and products will be used, what products the client wants and geographic coverage of what information the client wants.

UTILITY OF ESG INVESTMENT TOOLS FOR COMPANIES

Coverage of investment options. The set of companies covered by each tool varies widely. The size of the coverage universe for most tools in this category ranges from 901 to over 80,000 companies, most of which are publicly traded companies.[48] The Bloomberg and RepRisk tools have the largest coverage universes in this category, with respect to the number of companies they assess. However, the types of ESG information provided in each tool differ, thus the comprehensiveness of their coverage universes are not comparable. Here, the most relevant tools for different investors and users would depend on their specific ESG interests *and* the size of the coverage universe of tools that offer that type of information.

Provision of investment information. Most tools in this category do not provide financial information on the companies they rate, except Sustainalytics ESG Company Reports (Tool 6), ISS QualityScore (Tool 8), and ISS-IW Financial Score (Tool 20). Users of these tools need to seek additional information or tools to analyze companies' financial and ESG performance. For example, Bloomberg's ESG Disclosure Score (Tool 5) does not incorporate companies' financial data. However, Bloomberg provides scores alongside the extensive financial data available within the Bloomberg Terminal, making it easy to incorporate both financial and ESG data into an analysis of one or several companies.

> **Information used to assess ESG investments**
>
> *Most ESG tools that cover companies collect some information for the ESG ratings directly from the companies.* ***RepRisk Company Reports*** *is one of the few tools that rely solely on third-party information to rate companies.*

Focus of ESG analysis. Most tools in this category incorporate information on all three aspects of ESG. Three tools focus on one or two aspects of ESG. Tools in this category provide options to investors with both general and specific ESG interests. Additionally, the tools provided by Bloomberg, Sustainalytics, and MSCI ESG (Tools 5, 6, and 12) can provide both comprehensive ESG scores and disaggregated scores for the individual pillars (E, S, and G) of ESG.

Information used to assess ESG investments. The tools in this category use several types of data to develop their ratings. They typically include company information (e.g. annual reports, public filings, sustainability reports, and company websites), news stories, and third-party information such as reports from independent research institutes, non-governmental organizations, and business associations.

Several providers, including Oekom Research, Bloomberg, Sustainalytics, ISS, and RobecoSAM (Tools 7, 5, 6, 8, and 10) directly engage with the companies to obtain feedback or information that informs the rating process. RobecoSAM engages with companies through its annual Corporate Sustainability Assessment (CSA) (Tool 10) that relies on firms to fill out a survey on their sustainability practices. Bloomberg (Tool 5) also provides a survey to companies in its coverage universe. RepRisk (Tool 11) only uses information from media and stakeholder sources in its research and does not engage with companies, directly or indirectly. Users who prefer ratings based on external data, which may be

[48] RobecoSAM's ratings are developed from its annual Corporate Sustainability Assessment, which has data on more than 4,000 companies. Covalence EthicalQuote covers approximately 3,400 firms. Oekom Research's coverage universe contains around 3,800 companies. ISS's QualityScore assess more than 5,600 companies. Sustainalytics covers 6,500 firms. MSCI notes that its ESG ratings cover over 6,000 companies. See http://charts.ussif.org/mfpc/.

considered more objective, may select RepRisk Company Reports (Tool 11), which does not rely on information from the companies being assessed.

Ease of use/accessibility. Some factors to consider with regard to ease of use and accessibility include how information is accessed (i.e. report, list, database, etc.) and how much it costs. The remaining tools provide their ESG ratings and other information through individualized company reports or an online database. Users can only access Bloomberg ESG Disclosure Scores (Tool 5) and CSA (Tool 10) data through the Bloomberg Terminal, limiting access to clients with terminals. The Terminal requires some training to understand how to use it, but there are no additional fees to access ESG data on Bloomberg once a client has access to the Terminal.

On an annual basis, fees for five tools (Thomson Reuters, Bloomberg, Oekom[49], ISS, and Covalence – Tools 15, 5, 7, 8, and 9) range from $600 to $200,000.[50] RepRisk Company Reports' (Tool 11) fees vary from $450 to $3,500 per report. These costs may be prohibitive to individual investors and small advisors, so institutional investors, investment managers, and financial advisors are more likely to use these tools.

[49] Oekom also charges a fee for each of its Corporate Rating Reports, however this fee was not provided to us. The fee estimate given was for accessing their entire database of ratings and other ESG data.
[50] Sustainalytics and MSCI ESG Research did not disclose their product fees. CSA data is accessed through Bloomberg Terminals and do not have a separate user fee associated, outside of the Bloomberg Terminal fees, with their data.

Figure 8: Comparison of ESG Indices

Features	ESG Investment Tools					
	21) Thomson Reuters Corporate Responsibility Indices	22) Calvert Responsible Index Series	23) FTSE4Good Index Series	24) Dow Jones Sustainability Indices	25) MSCI ESG Indexes	26) Morningstar Global Sustainability Index Family
Services provided						
Information	✓	✓	✓	✓	✓	✓
Rating	✗	✗	✗	✗	✗	✗
Investments covered						
Indices	12	7	17	29	180–190	25+
ESG rating*						
Rating type	–	–	–	–	–	–
Rating source						
Funds rated by tool provider	–	–	–	–	–	–
Funds rated by third party	–	–	–	–	–	–
Financial information						
Information provided	• Historical returns • Investment allocation	• Historical returns • Investment allocation**	• Historical returns • Investment allocation	• Historical returns • Market capitalization***	• Historical returns • Investment allocation	–
ESG factors covered						
Environmental	✓	✓	✓	✓	✓	✓
Social	✓	✓	✓	✓	✓	✓
Governance	✓	✓	✓	✓	✓	✗
Provider of tool						
Financial services firm	✓	✓	✓	✓	✓	✓
Non-financial services firm	✗	✗	✗	✗	✗	✗
Tool cost						
Free or Fee-based	Free	Free	Fee-based: $18,000 per year	Fee-based: $20,000 per year	Fee-based: Undisclosed	Fee-based: Undisclosed

Information for items marked – is not available.

NOTES: * The indices do not have ratings themselves. However, ratings are applied to the companies in the indices and tool providers use them to determine the composition of the indices.

** Additional information (minimum investment and investment fees) are provided for mutual funds that track the indices.

*** Market capitalization is only available by country and is not provided for each company in the indices.

Additional Fee Information:

1. Thomson Reuters (Tool 21)—The companies included in the indices are available to the public at no charge. However, a $500 monthly fee per index is associated with specific uses of the indices, such as benchmarking. Other types of usage need additional licensing fees.
2. FTSE Russell (Tool 23)—Limited information such as historical returns, market capitalization by country, and total number of constituents is free to the public. Although the fee varies by client type, a client with less than $20 million in assets under management using the data for fund management research paid $18,000 licensing for access to the underlying data for the entire index series.
3. Dow Jones (Tool 24)—While some information on the indices, such as the historical returns and market capitalization by country, is available for free, a $20,000 per year licensing fee provides access to the component files for standard and customized indices.
4. MSCI ESG (Tool 25)—MSCI ESG does not disclose its indices' usage and licensing fees. Fees are customized based on several factors including total and types of assets under management, use of data and products, and geographic coverage. It does provide limited information to the public such as historical returns and the top 10 index constituents through individualized factsheets for each index.

UTILITY OF ESG INDICES

Coverage of investment options. Each ESG index provider offers a different number of indices, with the Calvert Responsible Index Series offering as few as seven indices, and the MSCI ESG Indexes providing 180–190 indices. The indices are developed around different themes, such as geography (e.g. United States, developed countries, emerging markets, etc.), individual ESG themes (e.g. E, S, or G), and company size (as in separate indices for firms by market capitalization). The number of indices that each tool offers does not necessarily imply that one tool has more complete investment coverage, because each index family and its individual indices have different underlying coverage universes. Thus, investors would need to understand the coverage universe of each index family to determine which tool provides the most comprehensive coverage of the companies and market segments (e.g. U.S. large-cap, U.S. mid-cap) that interest them.

Provision of investment information. All tool providers give publicly available information on historical index performance. Thomson Reuters and Calvert (Tools 21 and 22) also provide, at no charge, complete lists of the companies that comprise their respective indices. The FTSE4Good and MSCI ESG indices (Tools 23 and 25) provide a list of the top 10 constituents of each index free of charge, while the DJSI (Tool 24) does not provide this information at all.

Provision of Investment Information

*The **Calvert Responsible Indices** and **Thomson Reuters Corporate Responsibility Indices** offer complete investment information for ESG-oriented indices at no charge to users. Other indices provide information for a fee.*

Focus of ESG analysis. Most families of indices incorporate the three aspects of ESG in their respective index construction, though some individual indices have specific E, S, or G themes. In addition, the Morningstar Global Sustainability indices (Tool 26) are focused on the environmental and social themes of ESG.

Information used for assessing investments. These indices use company-level ESG ratings in their construction. Thomson Reuters (Tool 21), FTSE Russell (the provider of the FTSE4Good indexes – Tool 23), Calvert (Tool 22), and MSCI ESG (Tool 25) create their own company-level ESG ratings, and then use those ratings to create indices. The Dow Jones index tool (Tool 24) also uses company-level ESG ratings to create its indices, relying on the Total Sustainability Score obtained from RobecoSAM's CSA (Tool 10) (which, to a limited extent, in turn relies on data collected from RepRisk). The Dow Jones and Thomson Reuters indices (Tool 24 and 21) may be of interest to investors who want detailed information on the data and methodology underlying the ratings.

Ease of use/accessibility. The indices can be used to create ESG investment products as well as for other purposes (e.g. research, benchmarking the performance of ESG investments, and monitoring the ESG performance of index constituents). All indices are accessible online; however, these alternative uses require a licensing fee. The licensing fee for the Thomson Reuters indices is $500 per index, for use as a benchmark for investments. The FTSE4Good and Dow Jones indices licensing fees range from $18,000–$20,000[51] per index, to access the data on their index constituents. This usage of the indices, and their associated licensing fees, make institutional investors, investment managers, and financial managers the most likely users of these tools. Another user-friendly feature of the index tools is the capability to

[51] These fees only pertain to Dow Jones and FTSE Russell. MSCI did not disclose any fees for its ESG indices.

create customized indices for specific ESG interests and preferences (e.g. excluding companies from certain industries or investing in companies that perform well in clean energy, employee diversity, or other ESG areas). All index tools, except Calvert (Tool 22), include this capability. [52]

[52] These customized indices are also fee-based.

Figure 9: Other Types of ESG Investment Tools

Features	ESG Investment Tools	
	27) Mercer ESG Rating	**28) Social(k)**
Services provided		
Information	✓	✓
Rating	✓	✗
Investments covered		
Other	Investment manager strategies	Retirement plans*
ESG rating		
Rating type (High to Low)	1–4	–
Rating source		
Funds rated by tool provider	✓	✗
Funds rated by third party	✗	✗
Financial information		
Information provided	✗	• Historical returns • Minimum investment • Assets under management • Management fees • Expense ratios**
ESG factors covered		
Environmental	✓	✓
Social	✓	✓
Governance	✓	✓
Provider of tool		
Financial services firm	✗	✗
Non-financial services firm	✓	✓
Tool cost		
Free or Fee-based	Fee-based: $50,000-$60,000 per year***	Fee-based: Annual fees of $250 per plan and $10 per plan participant

Information for items marked – is not available.
NOTES: *Social(k) offers ESG investments for retirement plans.
**Social(k) uses US SiF's Sustainable and Responsible Mutual Fund Chart.
***Mercer's fees can be customized depending on a client's needs and types of asset classes.

OTHER TYPES OF ESG INVESTMENT TOOLS

The tools listed in this matrix, Figure 9, do not fit into any of the other tool categories. These tools also differ from each other in their focus and services provided. While following the same matrix format as the other tools, these tools are distinct in their purposes and do not warrant comparison. These tools are included because of their relevance to ESG investing and retirement plans.

Mercer's ESG Ratings (Tool 27) evaluate the extent to which investment managers incorporate ESG factors into their investment strategies. Social(k) (Tool 28) specializes in providing ESG mutual funds[53] and portfolios to a variety of retirement plans, including Simple IRA, SEP, 401(k), 403(b), profit share, and cash balance plans which are subject to ERISA. It also collaborates with other organizations to provide recordkeeping, fiduciary oversight, and investment advisory services to retirement plans. Mercer's ESG ratings could be used in selecting investment managers to help manage plan assets and Social(k)'s services directly connect ESG investing and ERISA-compliant retirement plans.

[53] Social(k) uses the list of sustainable and responsible mutual funds from US SIF.

CONCLUSION

In recent decades, the number of tools designed to help investors and advisors identify, select, or manage ESG-oriented investments have proliferated (SustainAbility, 2010). As ESG investing, and the tools that support this sector, grow and multiply, it has become important to better understand the current state of ESG investing and the ESG tools available to investors and advisors. Our study provides this overview of the current field of ESG tools, their features and capabilities, and an assessment of how useful these tools may be for investors and advisors.

28 ESG Tools Reviewed in the Study

- *4 tools cover mutual funds and exchange-traded funds*
- *16 tools cover individual company investments*
- *6 tools cover investment indices*
- *2 tools cover portfolio and investment strategies*

Our scan of the current field of ESG tools uncovered 28 tools. We grouped these 28 ESG tools into four categories based on the types of investments they cover:

- Mutual funds and exchange traded funds
- Company securities
- Investment indices
- Other entities, e.g. portfolio and investment strategies

These tools are available online and are geared specifically toward investors or advisors. The tools help users identify, select, and/or manage ESG investments, and they cover U.S.-based investments, among others.

A detailed description of the characteristics, features, and capabilities of the 28 ESG tools is provided in this report. Using the information collected on the features and capabilities of the 28 ESG tools included in our report, we assessed the relative utility of the tools. Focusing on five specific criteria, we discussed the utility of the tools in helping the intended audiences—institutional and individual investors and advisors—learn about and participate in ESG investing.

The majority of the ESG tools covered in the environmental scan provided information on the ESG orientation of investments and market segments, as well as quantitative or qualitative analysis of their ESG performance evaluations (e.g. how well entities managed their ESG risk or disclosed ESG information). However, the landscape of ESG tools showed more disparity of capabilities and features in the following three areas: (1) providing financial information, (2) requiring a fee for access, and (3) identifying the organization that provides the tool. Most of the selected ESG tools in our environmental scan will be useful for and accessible to investors and advisors who are interested in the E, S, and G factors and can afford the usage fees.

Finally, our literature review found a lack of research that specifically addresses how ESG investing is incorporated into retirement savings. Very little of the academic research studies how the private-sector retirement industry participates in ESG investing. DOL has recently provided additional interpretation of the fiduciary standard in a way that helps advisors and plans understand how to consider ESG investments for their clients.[54]

With the frameworks presented in this study, the research can be used as a benchmark assessment of the field that DOL can update periodically in future years as the ESG investing landscape continues to diversify and mature. A second avenue of possible future research involves taking a longer view of the ESG investing landscape. This study focuses on the current state of, and recent trends in, ESG investing and available tools. As the "Rate the Raters" (SustainAbility, 2010) report argues, the only constant in the ESG investing landscape is change. In our scan of the field of available ESG tools, we have seen this near continuous change and the diversity it produces. However, given the fast and continuous pace of change in the ESG investing sector, it may be helpful to DOL to have a fuller perspective on the development of the sector from its earliest forms through the most likely direction of the sector in the near-term.

This research could explore several questions:

- To what extent do retirement plan administrators and other investors, respectively, currently include, or want to include, ESG investments in their retirement plans?
- What factors (e.g. ESG-orientation, financial performance, cost, etc.) are most important to retirement plan administrators and investors when they consider ESG investments? Does the relative importance of these factors differ when they consider conventional investments?
- Are there significant differences between retirement plan administrators and other investors in how much they prefer and how they evaluate ESG investments for retirement plans?

These three areas of future research can help DOL gain a fuller understanding of the development of the ESG investing sector, develop a knowledge base specific to how retirement investors and advisors incorporate ESG investments, and keep track of future developments in the ESG investing sector.

ESG Investment: Future Research Possibilities

- *Periodically update the environmental scan of available ESG tools.*
- *Review the development of the ESG investing sector and its near-term direction.*
- *Explore the attitudes toward ESG investing and decision-making process among retirement plan administrators and other investors.*

[54] http://webapps.dol.gov/FederalRegister/PdfDisplay.aspx?Docid=28547

REFERENCES

Ballestero, Enrique, Mila Bravo, Blanca Pérez-Gladish, Mar Arenas-Parra, and David Pla-Santamaria. “Socially Responsible Investment: A Multicriteria Approach to Portfolio Selection Combining Ethical and Financial Objectives.” *European Journal of Operational Research* 216, no. 2 (2012): 487–494.

Bank, Deutsche. “Sustainable Investing–Establishing Long-term Value and Performance.” *Deutsche Bank Climate Change Advisors* (2012).

Barber, Brad M. “Monitoring the Monitor: Evaluating CalPERS' Activism.” *The Journal of Investing* 16, no. 4 (2007): 66–80.

Berry, Thomas C., and Joan C. Junkus. “Socially Responsible Investing: An Investor Perspective.” *Journal of Business Ethics* 112, no. 4 (2013): 707–720.

Billitteri, Thomas J. *Socially Responsible Investing*. CQ Press, 2008.

Bradford, Hazel. “After a Bit of Help, ESG Ready to Make Even Greater Gains.” *Pensions & Investments* (2016).

Bradley, Daniel, Christos Pantzalis, and Xiaojing Yuan. "The influence of political bias in state pension funds." *Journal of Financial Economics* 119, no. 1 (2016): 69-91.

Brown, Jeffrey R., Joshua M. Pollet, and Scott J. Weisbenner. *The in-state equity bias of state pension plans*. No. w21020. National Bureau of Economic Research, 2015.

Capelle-Blancard, Gunther, and Stéphanie Monjon. “Trends in the Literature on Socially Responsible Investment: Looking for the Keys under the Lamppost.” *Business Ethics: A European Review* 21, no. 3 (2012): 239–250.

Chatterji, Aaron K., Rodolphe Durand, David I. Levine, and Samuel Touboul. “Do Ratings of Firms Converge? Implications for Managers, Investors and Strategy Researchers.” *Strategic Management Journal* 37, no. 8 (2015): 1597–1614. doi: 10.1002/smj.2407.

Delmas, Magali, and Vered Doctori Blass. "Measuring corporate environmental performance: the trade-offs of sustainability ratings." *Business Strategy and the Environment* 19, no. 4 (2010): 245-260.

Dhaliwal, Dan S., Oliver Zhen Li, Albert Tsang, and Yong George Yang. “Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting.” *The Accounting Review* 86, no. 1 (2011): 59–100.

Dillenburg, Stephen, Timothy Greene, and O. Homer Erekson. “Approaching Socially Responsible Investment with a Comprehensive Ratings Scheme: Total Social Impact.” *Journal of Business Ethics* 43, no. 3 (2003): 167–177.

Dunfee, Thomas W. “Social Investing: Mainstream or Backwater?” *Journal of Business Ethics* 43, no. 3 (2003): 247–252.

Eccles, Robert G., Ioannis Ioannou, and George Serafeim. “The Impact of Corporate Sustainability on Organizational Processes and Performance.” *Management Science* 60, no. 11 (2014): 2835–2857.

Entine, Jon. *Pension Fund Politics*. American Enterprise Institute, 2005.

Farmer, Liz. “Are Pensions Finally Fed Up With Social Divesting?” *Governing* (2014).

Friede, Gunnar, Timo Busch, and Alexander Bassen. “ESG and Financial Performance: Aggregated Evidence from More than 2000 Empirical Studies.” *Journal of Sustainable Finance & Investment* 5, no. 4 (2015): 210–233.

Hawken, Paul. "Socially responsible investing. How the SRI industry has failed to respond to people who want to invest with conscience and what can be done to change it.” Natural Capital Institute, Sausalito (2004).

Hess, David. “Public Pensions and the Promise of Shareholder Activism for the Next Frontier of Corporate Governance: Sustainable Economic Development.” Ross School of Business Paper, no. 1080 (2007). doi: 10.2139/ssrn.988792.

Hoepner, Andreas GF, and Lisa Schopohl. “Red versus Blue: Do Political Dimensions Influence the Investment Preferences of State Pension Funds?” Henley Business School, University of Reading, Discussion Paper ICM-2015-08, (2015).

Hong, Harrison, and Marcin Kacperczyk. “The Price of Sin: The Effects of Social Norms on Markets.” *Journal of Financial Economics* 93, no. 1 (2009): 15–36.

Hummels, Harry, and Diederik Timmer. “Investors in Need of Social, Ethical, and Environmental Information.” *Journal of Business Ethics* 52, no. 1 (2004): 73–84.

Humphrey, Jacquelyn E., and David T. Tan. “Does It Really Hurt to Be Responsible?” *Journal of business ethics* 122, no. 3 (2014): 375–386.

Jansson, Magnus, and Anders Biel. “Motives to Engage in Sustainable Investment: A Comparison between Institutional and Private Investors.” *Sustainable Development* 19, no. 2 (2011): 135–142.

Khan, Mozaffar, George Serafeim, and Aaron Yoon. “Corporate Sustainability: First Evidence on Materiality.” *The Accounting Review* 91, no. 6 (2016): 1697–1724.

Keefe, Joseph F. “From SRI to Sustainable Investing.” *GreenMoney Journal* (2007).

Lu, Wenxiang, and Martin E. Taylor. “Which Factors Moderate the Relationship between Sustainability Performance and Financial Performance? A Meta-Analysis Study.” *Journal of International Accounting Research* 15, no. 1 (2015): 1–15.

Mackenzie, Craig, and Alan Lewis. “Morals and Markets: The Case of Ethical Investing.” *Business Ethics Quarterly* 9, no. 03 (1999): 439–452.

Marlowe, Justin. “Socially Responsible Investing and Public Pension Fund Performance.” *Public Performance & Management Review* 38, no. 2 (2014): 337–358.

Martin, W., 2009. “Socially Responsible Investing: Is Your Fiduciary Duty at Risk?” *Journal of Business Ethics*, *90*(4), 549–560.

Melas, Dimitri, Zoltan Nagy, and Padmakar Kulkarni. “Factor Investing and ESG Integration.” MSCI, White Paper, (2014).

Mercer, L. L. C., G. Carpenter, and O. Wyman. “Shedding Light on Responsible Investment: Approaches, Returns and Impacts.” 2009. Accessed on November 10, 2014.

law.harvard.edu/programs/lwp/pensions/conferences/cm_europe12_09/Shedding_light_on_responsible_investment_free_version.pdf.

Mercer, L.L.C., U. N. E. P., and Finance Initiative. "Demystifying Responsible Investment Performance." (2007).

Munnell, Alicia H., and Annika Sundén. "Social Investing: Pension Plans Should Just Say 'No.'" *Pension Fund Politics: The Dangers of Socially Responsible Investing* (2005): 13–55.

Munnell, Alicia H., and Anqi Chen. "New Developments in Social Investing by Public Pensions." No. 53. 2016. http://crr.bc.edu/briefs/new-developments-in-social-investing-by-public-pensions/.

Nilsson, Jonas. "Investment with a Conscience: Examining the Impact of Pro-Social Attitudes and Perceived Financial Performance on Socially Responsible Investment Behavior." *Journal of Business Ethics* 83, no. 2 (2008): 307-325.

Nilsson, Jonas, Sebastian Siegl, and Fredric Korling. "The Complex Decision Making Environment of Socially Responsible Mutual Fund Investors: Introducing." (2012).

Nilsson, Jonas, Anna-Carin Nordvall, and Sofia Isberg. "The Information Search Process of Socially Responsible Investors." *Journal of Financial Services Marketing* 15, no. 1 (2010): 5–18.

Paetzold, Falko, and Timo Busch. "Cognitive Barriers to Sustainable Investing: Unleashing the Power of Wealthy Private Investors." *Duisenberg School of Finance Policy Papers Series, 41* (2014).

Pasewark, William R., and Mark E. Riley. ""It's a Matter of Principle: The Role of Personal Values in Investment Decisions." *Journal of Business Ethics* 93, no. 2 (2010): 237–253.

Renneboog, Luc, Jenke Ter Horst, and Chendi Zhang. "Socially Responsible Investments: Institutional Aspects, Performance, and Investor Behavior." *Journal of Banking & Finance* 32, no. 9 (2008): 1723–1742.

Revelli, Christophe, and Jean-Laurent Viviani. "Financial Performance of Socially Responsible Investing (SRI): What Have We Learned? A Meta-Analysis." *Business Ethics: A European Review* 24, no. 2 (2015): 158–185.

Richardson, Benjamin J. "From Fiduciary Duties to Fiduciary Relationships for Socially Responsible Investing: Responding to the Will of Beneficiaries." *Journal of Sustainable Finance & Investment*, 1, no.1 (2011): 5–19.

Richardson, Benjamin J. "Keep Ethical Investing Ethical: Regulatory Issues for Investing in Sustainability." *Journal of Business Ethics* 87 (2009): 555.

Richardson, Benjamin J. "Do the Fiduciary Duties of Pension Funds Hinder Socially Responsible Investment?" (2007).

Riedl, Arno, and Paul Smeets. "Social Preferences and Portfolio Choice." (2014).

Rose, Paul. "Reframing Fiduciary Duties in Public Funds." (2016).

Sandberg, Joakim. "(Re-) Interpreting Fiduciary Duty to Justify Socially Responsible Investment for Pension Funds?" *Corporate Governance: An International Review* 21, no. 5 (2013): 436–446.

Sandberg, Joakim. "Socially Responsible Investment and Fiduciary Duty: Putting the Freshfields Report into Perspective." *Journal of Business Ethics* 101, no. 1 (2011): 143–162.

Sandberg, Joakim, Carmen Juravle, Ted Martin Hedesström, and Ian Hamilton. "The Heterogeneity of Socially Responsible Investment." *Journal of Business Ethics* 87, no. 4 (2009): 519–533.

Sanders, William. “Resolving the Conflict between Fiduciary Duties and Socially Responsible Investing.” *Pace L. Rev.* 35 (2014): 535.

Sethi, S. Prakash. “Investing in Socially Responsible Companies Is a Must for Public Pension Funds–Because There Is No Better Alternative.” *Journal of Business Ethics* 56, no. 2 (2005): 99–129. doi: 10.1007/s10551-004-5455-0.

Snider, Anna. *Impact Investing: The Performance Realities*. Merrill Lynch Chief Investment Office, White Paper, 2016.

Stanley, D. J., and C. R. Herb. “The Moral and Financial Conflict of Socially Responsible Investing.” *Graziadio Business Report* 10, no. 1 (2007).

Statman, Meir. “Socially Responsible Investments.” *Journal of Investment Consulting* 8*, no.* 2 (2007): 17–37.

Statman, Meir. “Socially Responsible Indexes.” *Journal of Portfolio Management* 32, no. 3 (2006): 100.

Vogel, David J. “Is There a Market for Virtue? The Business Case for Corporate Social Responsibility.” *California Management Review* 47, no. 4, (2005): 19–45.

Von Wallis, Miriam, and Christian Klein. “Ethical Requirement and Financial Interest: A Literature Review on Socially Responsible Investing.” *Business Research* 8, no. 1 (2015): 61–98.

Wang, Yong, and Connie X. Mao. "Shareholder activism of public pension funds: The political facet." *Journal of Banking & Finance* 60 (2015): 138-152.

Williams, Geoffrey. “Some Determinants of the Socially Responsible Investment Decision: A Cross-Country Study.” *The Journal of Behavioral Finance* 8, no. 1 (2007): 43–57.

Wimmer, Maximilian. “ESG-Persistence in Socially Responsible Mutual Funds.” *Journal of Management and Sustainability* 3, no. 1 (2013): 9–15.

Woods, Claire, and Roger Urwin. “Putting Sustainable Investing into Practice: A Governance Framework for Pension Funds.” In *The Next Generation of Responsible Investing*, 27–48. Springer Netherlands, 2012.

GLOSSARY BY TOPIC

General Investing

Assets Under Management (AUM): AUM includes investment assets managed by institutional investors, money managers, and community investment institutions.[55]

Company Stocks/Securities: A stock is a type of security that signifies ownership in a corporation and represents a claim on part of the corporation's assets and earnings. Company stocks are also known as "shares" or "equity."[56]

Defined Contribution Plans: A defined contribution plan is a retirement plan in which a certain amount or percentage of money is set aside each year by a company for the benefit of each of its employees. The defined contribution plan places restrictions that control when and how each employee can withdraw these funds without penalties.[57]

Defined Benefit Plans/Public Pension Plans: A defined benefit plan is a retirement plan that an employer sponsors, where employee benefits are computed using a formula that considers factors, such as length of employment and salary history. The company administers portfolio management and investment risk for the plan. There are also restrictions on when and by what method an employee can withdraw funds without penalties.[58]

Exchange Traded Funds: An exchange traded fund (ETF) is a marketable security that tracks an index, a commodity, bonds, or a basket of assets like an index fund. Unlike mutual funds, an ETF trades like common stock on a stock exchange.[59]

Financial Advisor: A financial advisor provides financial advice or guidance to customers for compensation. Financial advisors, or advisers, can provide many different services, such as investment management, income tax preparation, and estate planning. "Financial advisor" is a generic term with no precise industry definition. Many different types of financial professionals fall into this general category, including stockbrokers, insurance agents, tax preparers, and financial planners.[60]

Indices: In finance, an index typically refers to a statistical measure of change in a securities market. In the case of financial markets, stock and bond market indices consist of an imaginary portfolio of securities representing a particular market or a portion of it.[61]

---

[55] US SIF, "Report on US Sustainable, Responsible, and Impact Investing Trends," 2016, http://www.ussif.org/files/SIF_Trends_16_Executive_Summary.pdf.
[56] Investopedia: http://www.investopedia.com.
[57] Ibid.
[58] Ibid.
[59] Ibid.
[60] Ibid.
[61] Ibid.

Individual/Retail Investor: A retail or individual investor is an investor who buys and sells securities for their personal account, and not for another company or organization. An individual investor is also known as a "small investor."[62]

Institutional Investor: An institutional investor is a nonbank person or organization that trades securities in large enough share quantities or dollar amounts that it qualifies for preferential treatment and lower commissions. Examples of institutional investors include pension funds and life insurance companies.[63]

Money Managers: A money manager is a business or bank responsible for managing the securities portfolio of an individual or institutional investor. In return for a fee, the money manager has the fiduciary duty to choose and manage investments prudently for his or her clients, including developing an appropriate investment strategy, and buying and selling securities to meet those goals. A money manager is also known as a "portfolio manager" or "investment manager."[64]

Mutual Funds: A mutual fund is an investment vehicle made up of a pool of funds, collected from many investors, used to invest in securities such as stocks, bonds, money market instruments, and similar assets. Mutual funds are operated by money managers, who invest the fund's capital and attempt to produce capital gains and income for the fund's investors.[65]

Other Entities: In this study, we define "other entities" as subjects of ESG tools that are not mutual funds, ETFs, company securities, or indices. Other entities include investment strategies, investment portfolios, and retirement plans.

Investing Sectors

Corporate Social Responsibility (CSR): CSR refers to the act of businesses considering and managing the economic, environmental, social, and governance impacts of their operations.

Environmental, Social, and Governance (ESG) Investing: ESG investing incorporates environmental, social and governance factors into the investment selection and management process.

Responsible Investing (RI): RI includes the process of considering ESG issues in investment management and ownership.

Socially Responsible Investing (SRI): SRI is an investment approach that aims to simultaneously achieve environmental and social goals as well as financial goals.

Sustainable Investing (SI): Sustainable investing is the full integration of ESG factors into financial analysis and decision-making (Keefe, 2007). SI uses a best-in-class approach to ESG investing.

ESG Investing

Direct Corporate Engagement/Activism: Direct corporate engagement/activism involves investors interacting directly with companies to pursue ESG factors in company operations. This method may be used in combination with other ESG investment selection strategies (Richardson, 2007).

---

[62] Investopedia: http://www.investopedia.com.
[63] Ibid.
[64] Ibid.
[65] Ibid.

ESG Integration: Investment managers systematically include ESG risks and opportunities in financial analysis of potential investments.[66]

ESG Investment Strategies: ESG investment strategies are strategies that investors and advisors use to identify, assess, and select specific investments that conform to ESG factors for an investment portfolio.

ESG Rating: Tools aggregate ESG performance of funds (mutual or ETF), companies, indices, or portfolios in different ways. Some tools provide a quantitative ESG rating (e.g. on a scale of 0–5, 0-100, etc.), a qualitative score (e.g. a certain number of hearts from SocialFunds.com), and other tools do not provide a rating or score at all.

ESG Investment Tools: ESG investment tools are online applications, websites, databases, and documents that help individual and institutional investors, advisors, and others accomplish any of the following activities: identify, assess, or select ESG investments for investment portfolios or manage existing ESG investments.

Impact Investing: Investments are selected with the intention to generate social and environmental impacts along with financial returns, regardless of whether the returns are below market.[67]

Index Based: Investors construct a portfolio through established indices of environmentally and socially responsible companies, such as the Dow Jones Sustainability index (Richardson, 2007).

Negative/Exclusionary Screening: Negative/exclusionary screening involves excluding investments connected to activities or industries deemed controversial or unacceptable.[68]

Positive Screening/Best-in-Class: Investments are selected for positive performance on ESG factors relative to industry peers. This method also involves avoiding investments that do not meet the ESG performance thresholds.[69]

Sustainability Themed: Assets in funds are selected specifically related to sustainability.[70]

---

[66] US SIF, "Report on US Sustainable, Responsible, and Impact Investing Trends, 2016," http://www.ussif.org/files/SIF_Trends_16_Executive_Summary(1).pdf.
[67] Ibid.
[68] Ibid.
[69] Ibid.
[70] Ibid.

[This Page Is Intentionally Left Blank]

APPENDIX A – LIST OF ESG INVESTMENT TOOLS

Below is a list of 37 ESG tools, found in this study, categorized into four groups: (1) mutual funds, (2) companies, (3) indices, and (4) other entities. Twenty-eight tools[71] fit within the study's scope[72] and nine tools are out of the study's scope.

ESG Investment Tools			
Mutual Funds & ETFs	**Companies**	**Indices**	**Other Entities**
In-Scope Tools			
1) Morningstar Sustainability Rating 2) SocialFunds.com 3) US SIF Sustainable & Responsible Mutual Fund Chart 4) MSCI ESG Fund Metrics	5) Bloomberg ESG Disclosure Score 6) Sustainalytics Company ESG Reports 7) Oekom Corporate Rating Reports 8) ISS QualityScore 9) Covalence EthicalQuote Ethical Snapshots 10) RobecoSAM Corporate Sustainability Assessment 11) RepRisk Company Reports 12) MSCI ESG Company Rating Reports 13) FTSE ESG Ratings 14) HIP Investor Ratings 15) Thomson Reuters Corp. Responsibility Rating 16) Vigeo Eiris Rating 17) Solaron emRatings 18) Inrate Sustainability Rating	21) Thomson Reuters Corp. Responsibility Indices 22) Calvert Responsible Index Series 23) FTSE4Good Index Series 24) Dow Jones Sustainability Indices 25) MSCI ESG Indexes 26) Morningstar Global Sustainability Index	27) Mercer ESG Ratings 28) Social(k)

[71] We define ESG tools to include online documents, websites, databases, or applications. These online materials must perform at least one of the following activities: (1) list and provide information on ESG aspects of investments or entities, (2) assist users with selecting individual ESG investments, or (3) assist users with creating or managing a portfolio of ESG investments.

[72] We limited the scope of our environmental scan to ESG tools that: (a) cover investments, e.g. company stocks, mutual funds, and market segments, (b) assess U.S.-based investments, (c) are oriented to individual and institutional investors and advisors, (d) are standalone products that are widely available (in contrast to some firms that offer customized ESG analyses or their ESG services that are only available to their existing clients), and (e) cover multiple issues across one or more pillars of ESG.

ESG Investment Tools			
Mutual Funds & ETFs	**Companies**	**Indices**	**Other Entities**
Out-of-Scope Tools			
	29) Access to Medicine Index* 30) JUST Capital* 31) Corporate Equality Index* 32) Ethos Foundation's ESG Analyses* 33) Global Engagement Services' ESG Analyses Services* 34) Gaia Index* 35) Novethic Institutional Circle* 36) Verisk Maplecroft* 37) ET Global 800 Carbon Rankings*		

Note: The out-of-scope tools are denoted with an asterisk.

APPENDIX B – COMPLETE PROFILES OF ESG INVESTMENT TOOLS (INCLUDED IN

Appendix B provides detailed profiles of all ESG investment tools discussed in this report. The tools profiled in this section are:

1. Morningstar Sustainability Rating
2. SocialFunds.com
3. US SIF Sustainable and Responsible Mutual Fund Chart
4. MSCI ESG Fund Metrics
5. Bloomberg ESG Disclosure Score
6. Sustainalytics Company ESG Reports
7. Oekom Corporate Rating Reports
8. ISS QualityScore
9. Covalence EthicalQuote Ethical Snapshots
10. RobecoSAM Corporate Sustainability Assessment
11. RepRisk Company Reports
12. MSCI ESG Company Rating Reports
13. FTSE ESG Ratings
14. HIP Investor Ratings
15. Thomson Reuters Corporate Responsibility Ratings
16. Vigeo Eiris Sustainability Rating
17. Solaron emRatings
18. Inrate Sustainability Rating
19. CDP Open Data Portal
20. ISS-IW Financial Score
21. Thomson Reuters Corporate Responsibility Index
22. Calvert Responsible Index Series
23. FTSE4Good Index Series
24. Dow Jones Sustainability Indices
25. MSCI ESG Indexes
26. Morningstar Global Sustainability Index Family
27. Mercer ESG Ratings
28. Social(k)

Tool Profile 1: Morningstar Sustainability Rating

Morningstar Sustainability Rating

TOOL DESCRIPTION

The Morningstar Sustainability Rating (MSR) measures how well the companies held within a mutual fund manage their ESG risks and opportunities versus their peers. The rating uses company-level ESG analytics from Sustainalytics, a leading provider of ESG research, to calculate an aggregate rating for each mutual fund. The Morningstar Portfolio Sustainability Score (PSS) and MSR are calculated every month.

INVESTMENTS COVERED

The MSR is provided for over 20,000 mutual funds and over 2,000 ETFs. At least 50% of a fund's assets must be in one of the companies covered by Sustainalytics to be included. The MSR rates a fund relative to its peers. Thus, a minimum of 10 funds in a Morningstar Category must also receive a Portfolio Sustainability Score to receive an MSR rating.

ESG RATING

The MSR is created in a two-step process. First, Morningstar calculates a fund's Portfolio Sustainability Score (PSS). This measures how well the firms within the fund are managing their ESG risks. The PSS relies on Sustainalytics' ESG ratings for individual companies. Each individual company's ESG score is comprised of more than 70 general and industry-specific indicators that are weighted in calculating the final ESG score. The PSS is an asset-weighted average of the company ESG scores. The Portfolio Sustainability Score is the difference between the Portfolio ESG Score and the Portfolio Controversy Deduction; all three of these scores are on a scale of 0–100.

Morningstar then rates the fund relative to its Morningstar Category peers to derive the fund's Morningstar Sustainability Rating. Morningstar assigns ratings along a bell curve distribution to five groups: Low (1), Below Average (2), Average (3), Above Average (4), and High (5).

Morningstar applies the MSR based on the position of portfolio's overall sustainability score (PSS) within its Morningstar Category. For example, a portfolio whose PSS is in the highest 10% of its Morningstar Category receives an MSR of High (5), which means the portfolio's holdings have a high level of sustainability. The MSR can also be calculated for the individual pillars of ESG (E, S, and G) using the company-level information from Sustainalytics.

RATING SOURCE

Morningstar internally created the Morningstar Sustainability Rating, but the underlying data are company ESG ratings, provided by Sustainalytics.

FINANCIAL INFORMATION

The Morningstar Sustainability Rating is displayed in Morningstar Fund Reports, in addition to the historical financial performance of the fund and minimum investment required for investing in the fund. Trailing financial returns are displayed at 1 month, 3 months, 1 year, 3 years, and 5 years.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

Morningstar, a financial services firm, provides this tool and lists the Morningstar Sustainability Rating alongside other financial information about the fund in their fund report.

COST OF TOOL

The tool is provided at no cost to Morningstar members.

TOOL WEBSITE

The tool can be found at http://www.morningstar.com/company/sustainability.

Tool Profile 2: SocialFunds.com

SocialFunds.com

TOOL DESCRIPTION

SocialFunds.com provides information on socially responsible mutual funds, community or social investments, corporate research, and shareholder actions. It includes the Heart Rating, which measures certain ESG aspects of mutual funds.

INVESTMENTS COVERED

SocialFunds.com provides various types of information on over 200 mutual funds and other investments.

ESG RATING

The Heart Rating measures *socially responsible and religion-based* mutual funds' ESG performance. It is an aggregate of individual composite scores in three areas: shareholder advocacy, community investing, and ESG screening.

The scores range from 0–5 hearts. The largest component of this score is an ESG screening of sustainable and responsible mutual funds, which deals with how funds choose their holdings: avoidance/exclusionary screening, best in class screening, or affirmative screening. The second component is shareholder advocacy, which demonstrates the involvement of shareholders in decision-making. The third component is community involvement, which measures contributions to building communities in the form of investments in municipal bonds in low-income areas and community development financial institutions, for example.

RATING SOURCE

The Heart Rating is derived from Natural Investments (NI), a registered investment advisor. The Heart Ratings are based on information from a questionnaire and the mutual funds' prospectuses.

FINANCIAL INFORMATION

SocialFunds.com provides access to mutual funds' prospectus reports, which includes details like historical returns, minimum investment requirements, and investment fees for each fund. However, the Heart Rating does not include any financial information on funds.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

SRI World Group, an independent organization, creates and maintains information on SocialFunds.com.

COST OF TOOL

The tool is provided at no cost.

TOOL WEBSITE

The tool can be found at www.socialfunds.com.

Tool Profile 3: US SIF Sustainable and Responsible Mutual Fund Chart

US SIF Sustainable and Responsible Mutual Fund Chart

TOOL DESCRIPTION

US SIF's Sustainable and Responsible Mutual Fund Chart is a public tool that allows individual investors to compare cost, financial performance, screens, and voting records of various mutual funds.

INVESTMENTS COVERED

The US SIF Sustainable and Responsible Mutual Fund Chart includes sustainable and responsible mutual funds from US SIF's institutional members. As of March 2017, the chart included 214 mutual funds.

ESG RATING

The chart does not provide a rating system for the listed mutual funds.

RATING SOURCE

The Mutual Fund Performance Chart does not provide ratings on the funds. The financial information it provides, including financial returns and the total USD of assets under management, comes from Bloomberg.

FINANCIAL INFORMATION

The US SIF Sustainable and Responsible Mutual Fund Chart provides year-to-date, 1-year, 3-year, 5-year, and 10-year average returns. Additionally, it reports management fees, expense ratios, and account minimums for general and IRA investing.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

US SIF is a non-financial services firm.

COST OF TOOL

The tool is provided at no cost.

TOOL WEBSITE

The tool can be found at http://charts.ussif.org/mfpc/.

Tool Profile 4: MSCI ESG Fund Metrics

MSCI ESG Fund Metrics

TOOL DESCRIPTION

MSCI ESG Fund Metrics provide ESG ratings and analysis for mutual funds and ETFs.

INVESTMENTS COVERED

MSCI ESG Fund Metrics provides ESG metrics and ratings on 18,456 mutual funds and 2,397 ETFs around the world. To be included, a fund must have at least ten holdings, 65% ESG ratings coverage, and holdings data within the last 12 months.

ESG RATING

The MSCI Fund ESG Quality Score reflects how well the underlying holdings in a fund manage the medium- to long-term risks and opportunities that affect a holding's sustainability. The MSCI Fund ESG Quality Score rates funds on a scale of 0–10 (low–high). To calculate this score, MSCI first scores the underlying issuers within a fund based on their exposure to and management of key ESG issues. Next, MSCI produces a weighted average ESG score for the fund. Finally, percentiles are calculated in two ways. First, MSCI calculates a percentile based on the fund's ESG Quality Score relative to all global funds receiving a score. Second, MSCI calculates a percentile relative to the fund's peers.

The Score is based on the ESG scores of the issuers of the funds' holdings. The MSCI ESG Fund Metrics tool also provides data in 100 ESG-related categories to help evaluate portfolios on ESG-related risks, Exposure to Sustainable Impact Themes and Values Oriented Issues. The Fund Quality Score can also be calculated for the individual pillars of ESG (E, S, and G).

RATING SOURCE

MSCI ESG Research produces the ratings and uses a variety of data sources in its research, including government and non-governmental organization reports, company disclosures such as 10-K's, and media and news sources. It incorporates over 100 ESG metrics into the MSCI ESG Fund Quality Score.

FINANCIAL INFORMATION

The tool does not measure or provide financial performance information on companies.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

MSCI ESG Research, a subsidiary of MSCI, provides the tool. MSCI ESG Research is a Registered Investment Advisor and provides research, rating, and analysis of ESG-related business practices for companies, mutual funds and ETFs, and fixed income securities.

COST OF TOOL

Fees are customized based on several factors including total and type of assets under management, how the tool will be used, and geographic coverage.

TOOL WEBSITE

The tool can be found at https://www.msci.com/esg-fund-metrics.

Tool Profile 5: Bloomberg ESG Disclosure Score

Bloomberg ESG Disclosure Score

TOOL DESCRIPTION

The Bloomberg ESG Disclosure Score measures the degree to which companies demonstrate transparency by disclosing their approach to ESG issues.

INVESTMENTS COVERED

Bloomberg reports a score for over 10,000 mid to large capitalization (market capitalization of $2 billion or more) companies. Companies that are in a major investment index, or disclose quantitative environmental and social data are included in the assessment.

ESG RATING

The ratings range from 0 (low) to 100 (high) based on the extent and robustness of a firm's disclosure on ESG criteria. A higher number indicates that a company reports more information.

RATING SOURCE

Bloomberg score firms on 120 metrics using a proprietary model. Data are collected from annual reports, sustainability reports, press releases, publicly available data, third-party research, and a proprietary survey.

FINANCIAL INFORMATION

The score does not include financial performance information on companies. However, the score is provided alongside financial information in the Bloomberg Terminal.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

Bloomberg L.P. provides this score and other ESG information. Bloomberg is a leading provider of financial and business information.

COST OF TOOL

The tool is accessed through Bloomberg Terminals (which are fee-based). Bloomberg terminals cost $2,000–$3,000 per month for a two-year subscription.

TOOL WEBSITE

The tool can be found at https://www.bloomberg.com/bcause/.

Tool Profile 6: Sustainalytics Company ESG Reports

Sustainalytics Company ESG Reports

TOOL DESCRIPTION

Sustainalytics Company ESG Reports provide qualitative analysis and quantitative ratings that assess the extent to which individual companies address environmental, social and governance issues.

INVESTMENTS COVERED

Sustainalytics provides their Company ESG Reports for 6,500 companies with market capitalization ranging from less than $2 billion to greater than $10 billion across 42 industry sectors.

ESG RATING

Sustainalytics ESG Rating is on a scale of 0–100 (low–high). The ESG Rating calculates the extent to which a company addresses ESG issues in three areas:

- Preparedness
- Disclosure
- Performance

The rating accounts for more than 70 general and industry-specific weighted indicators and uses a specific combination of indicators for each industry peer group to enable company-level comparisons.
The report also contains a rating for each company (on a scale of 1 (low) -5 (high)) on its response to ESG-related incidents. The score accounts for the incident's ESG impact and the risk to the company's viability.

RATING SOURCE

Sustainalytics develops its ratings from company disclosure forms as well as from direct outreach to the companies.

FINANCIAL INFORMATION

The tool provides information on total revenue, net income, net earnings before taxes, and market capitalization.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

Sustainalytics specializes in providing ESG and governance research and analyses on over 6,000 companies.

COST OF TOOL

The tool is fee-based. Pricing is customized based on client needs including type and coverage of data access, the amount of assets under management, and how the data will be used.

TOOL WEBSITE

The tool can be found at http://www.sustainalytics.com/.

Tool Profile 7: Oekom Corporate Rating Reports

Oekom Corporate Rating Reports

TOOL DESCRIPTION

The Oekom Corporate Rating Reports reflects the social and environmental impact of individual companies.

INVESTMENTS COVERED

The Oekom Corporate Rating is available for approximately 3,800 companies.

ESG RATING

The Oekom Corporate Rating assesses the environmental and social factors of individual companies, on a letter grade scale from A+ to D−. Oekom uses a set of approximately 100 criteria on measures of environmental and social sustainability per industry to develop each company's rating. The OCR has a set of approximately 700 criteria, though only about 100 are used for a given industry.

Two components combine to create each rating: environmental sustainability and social sustainability. The two components are weighted according to the environmental and social impacts of the company's industry. If a company's industry has higher environmental impacts than its social impact, then when calculating the company's overall OCR, its environmental rating will have a larger weight than the social rating.

RATING SOURCE

Oekom develops the rating using several sources of information including annual reports, sustainability reports, interviews with company representatives and independent experts, news stories, and assessments from external parties (i.e. non-governmental organizations, governments, business associations, consumer protection groups, and research institutes).

FINANCIAL INFORMATION

The tool does not provide financial performance information on companies.

ESG FACTORS COVERED

The tool provides information on environmental and social factors.

PROVIDER OF TOOL

Oekom Research AG, a sustainable investment rating agency, provides the tool along with other research.

COST OF TOOL

The tool is fee-based. The cost of accessing Oekom's entire database including the Oekom Corporate Ratings is $200,000 per year.

TOOL WEBSITE

The tool can be found at http://www.oekom-research.com/index_en.php?content=orbit.

Tool Profile 8: ISS QualityScore

ISS QualityScore

TOOL DESCRIPTION

The ISS QualityScore is a scoring system that allows institutional investors to review governance metrics for individual companies.

INVESTMENTS COVERED

The ISS QualityScore provides coverage at the company level across 30 markets of mostly developed and emerging countries. ISS QualityScore covers approximately 5,600 companies, including members of stock indices such as the U.S. Russell 3000.

ESG RATING

The ISS QualityScore measures the quality of firms' governance practices in the following areas: Board Structure, Compensation/Remuneration, Shareholder Rights, and Audit & Risk Oversight.

The ISS QualityScore is measured on a scale of 1 to 10. A score of 1 denotes high quality governance practices and a score of 10 denotes poor governance practices. ISS QualityScore updates the scores daily.

Additionally, there are individual scores for four different pillars of governance:

- Board structure
- Compensation/remuneration
- Shareholder rights
- Audit & risk oversight

More than 200 individual factors that are used to calculate the ISS QualityScore. The set of factors that applies to a company varies by region, and each factor is weighted by the standards and understanding of governance practices by region.

RATING SOURCE

The ISS QualityScore is developed by ISS using several sources including public company filings and annual reports as well as feedback from the companies.

FINANCIAL INFORMATION

The tool does not provide financial performance information on companies. However, the company reports that contain the QualityScore include financial information (e.g. share price, market capitalization, and annual revenue) on the firms.

ESG FACTORS COVERED

The tool provides information on governance factors.

PROVIDER OF TOOL

ISS (Institutional Shareholder Services, Inc.) provides governance and responsible investment services to asset owners and managers, hedge funds, and asset service providers.

COST OF TOOL

The tool is fee-based. Pricing for a comprehensive dataset is approximately $20,000–$25,000.

TOOL WEBSITE

The tool can be found at https://www.issgovernance.com/solutions/iss-analytics/qualityscore/.

Tool Profile 9: Covalence EthicalQuote Ethical Snapshots

Covalence EthicalQuote Ethical Snapshots

TOOL DESCRIPTION

Covalence EthicalQuote provides monthly ESG Reputation Snapshots of companies that include an ESG rating, ranking within and across sectors, and performance in a number of areas (governance, economic, environmental, labor practices and decent work, human rights, social, and product responsibility).

INVESTMENTS COVERED

Covalence reviews the reputations of 3,400 companies because they are either the world's largest companies or members of the Swiss Performance Index. A company can ask to be reviewed if it has similar characteristics to companies that are currently reviewed.

ESG RATING

The Covalence EthicalQuote ESG Rating scores companies based on the sentiment of ESG-related news mentions. Companies who receive more positive media reaction to their ESG efforts have higher scores than frequently maligned companies.

The Covalence EthicalQuote ESG Rating is based on ESG-related news about companies. ESG news stories are categorized as positive or negative depending on the language and content of the news story and are mapped to at least one of Covalence's 50 ESG criteria. A company known for positive work in ESG areas will have a score closer to 100. Covalence largely gathers reports on a company's ESG behavior from online sources. Covalence assigns each news story points depending on the number of ESG criteria that the content is relevant to. The points are either positive or negative depending on whether the content of the story is positive or negative. Altogether, the Rating is based on the combination of both positive and negative points that a company accrues from its ESG-related news stories.

RATING SOURCE

Covalence gathers information using search engines and examining websites. Information can also be submitted directly to Covalence for their review.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

Covalence is a Swiss company that provides this tool along with other ESG research.

COST OF TOOL

The tool is fee based. The annual subscription is $7,900 for ratings on the universe of companies.

TOOL WEBSITE

The tool can be found at http://www.ethicalquote.com/.

Tool Profile 10: RobecoSAM Corporate Sustainability Assessment

RobecoSAM Corporate Sustainability Assessment

TOOL DESCRIPTION

The RobecoSAM Corporate Sustainability Assessment (CSA) evaluates how prepared companies are to address ESG issues. In addition, the Dow Jones Sustainability Indices uses RobecoSAM's company-level ESG research to create its ESG equity indices.

INVESTMENTS COVERED

The RobecoSAM Corporate Sustainability Assessment covers 4,000 companies that participate in its annual assessment. These 3,400 companies include the largest 2,500 public companies in the world.

ESG RATING

Each company is given a Total Sustainability Score (TSS), from 0 (low) to 100 (high), based on the answers to the CSA questionnaire. Benchmarks are also provided within each industry.

RATING SOURCE

The scores come from 80–120 industry-specific questions gathered in the CSA. The CSA measures companies' performance on sustainability issues that directly affect financial outcomes The CSA also incorporates other information on ESG-related controversies from sources that include consumer organizations, NGOs, governments, and international organizations.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

RobecoSAM is an investment firm that specializes in sustainability investing. Its service offerings include asset management, indices, impact analysis and investing, sustainability assessments, and benchmarking services.

COST OF TOOL

The tool is accessed through Bloomberg Terminals (which are fee-based). Bloomberg terminals cost $2,000–$3,000 per month for a two-year subscription.

TOOL WEBSITE

The tool can be found at http://www.robecosam.com/.

Tool Profile 11: RepRisk Company Report

RepRisk Company Report

TOOL DESCRIPTION

The RepRisk Company Report is one of a suite of reputational analytics services RepRisk provides that assesses companies based upon their exposure to ESG risks. These reports summarize both qualitative research gathered from third-party sources and quantitatively derived grades that cover up to 10 years of company history.

INVESTMENTS COVERED

The RepRisk Company Report provides individual assessments on 85,524 firms and performance by industry.

ESG RATING

The RepRisk Rating is a proprietary measure of a company's ESG-related risk. Companies are assigned a grade from AAA to D. AAA-rated companies are least exposed to ESG risk, whereas D-rated companies are exposed to the highest risk. The industry sector determines the risks.

RATING SOURCE

The ratings are based on data collected through the RepRisk ESG Risk Platform.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

RepRisk provides this tool and specializes in ESG risk data and analytics.

COST OF TOOL

The tool is fee-based and varies by report. Company reports range from $450–$3,500.

TOOL WEBSITE

The tool can be found at https://www.reprisk.com/our-solutions.

Tool Profile 12: MSCI ESG Company Rating Reports

MSCI ESG Company Rating Reports

TOOL DESCRIPTION

The MSCI ESG Ratings measure ESG-related risks and opportunities of companies and rate their performance relative to industry peers to inform institutional investors on ESG issues.

INVESTMENTS COVERED

The ratings cover 6,500 companies.

ESG RATING

The ESG rating is on a scale of AAA to CCC, with AAA being the highest rating that a firm can receive and CCC being the lowest rating that a firm can receive. The ratings measure individual companies' exposure to ESG-related risks based on industry and region. Companies are scored on industry-specific key issues, which are weighted and normalized by industry. The normalized score is converted to a letter rating.

RATING SOURCE

MSCI ESG Research develops the ratings using information from company disclosures, government databases, media sources, and macro data from academic, government, and NGO sources.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

MSCI ESG Research, a subsidiary of MSCI, provides the tool. MSCI ESG Research is a Registered Investment Advisor and provides research, rating, and analysis of ESG-related business practices for companies, mutual funds and ETFs, and fixed income securities.

COST OF TOOL

This tool is fee based. Fees are customized based on several factors including total and type of assets under management, how the tool will be used, and geographic coverage.

TOOL WEBSITE

The tool can be found at https://www.msci.com/esg-ratings.

Tool Profile 13: FTSE Russell's ESG Ratings

FTSE Russell's ESG Ratings

TOOL DESCRIPTION

FTSE Russell's ESG Ratings and data model are available to subscribers through a web interface. Users can also download the data to their local environment.

INVESTMENTS COVERED

The online data model provides information on over 4,100 companies. These companies are located in over 46 countries, including both developed and emerging markets.

ESG RATING

The ESG ratings are built on three pillars (Environmental, Social, and Governance) and fourteen themes (e.g. Biodiversity, Customer Responsibility, Anti-corruption, etc.). Each of these factors is quantified as an indicator, and each company's rating is built upon an average of 125 indicators. Ratings are presented in absolute terms on a scale of 1–5 and translated into relative ratings, on a scale of 1–100, by sector. Not only does the tool provide overall ratings by company, but it also allows users to view data at the pillar and theme level for customized analysis.

RATING SOURCE

While FTSE creates the ratings, an independent committee, external to FTSE Russell, oversees the ESG data model. To promote transparency, this rating tool uses publicly available data and FTSE provides their calculation methodology to users.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

FTSE Russell, a global index firm, provides this tool.

COST OF TOOL

The tool is provided for an undisclosed fee.

TOOL WEBSITE

The tool can be found at http://www.ftse.com/products/indices/f4g-esg-ratings.

Tool Profile 14: HIP Investor Ratings

HIP Investor Ratings

TOOL DESCRIPTION

HIP (Human Impact plus Profit) Investor Inc. provides information on the quantifiable impact of investments on society. The firm's aim is to provide a society-wide framework for all sectors that focuses on outcomes and results.

INVESTMENTS COVERED

HIP Investor rates over 32,000 investments globally, including 5,770+ equities, 26,700+ bond issuances, 100+ real-estate investment trusts (REITs), and 1000's of mutual funds and EFTs.

ESG RATING

The HIP Investor Rating analyzes three dimensions (operational outcomes, products and services, management practices) across five impact pillars (health, wealth, earth, equality, and trust). HIP produces a rating from 0-100 that quantifies the mitigators of future risk and drivers of return potential, along with the net positive or negative impact across the five pillars. This rating provides a way to measure and rank the current sustainability of a security, strategy, or fund against peers.

RATING SOURCE

HIP uses data collected from company annual reports and publicly available data from other sources such as governments, non-profits, among others.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

ESG FACTORS COVERED

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

HIP Investor, Inc. is an investment adviser and portfolio management firm.

COST OF TOOL

The tool is provided for a fee calculated as a percentage of total assets that are rated by the tool.

TOOL WEBSITE

More information on the HIP Investor Ratings can be found at http://hipinvestor.com/how-clients-use-hip/ratings/.

Tool Profile 15: Thomson Reuters Corporate Responsibility Rating

Thomson Reuters Corporate Responsibility Rating

TOOL DESCRIPTION

The Thomson Reuters Corporate Responsibility Ratings (TRCRR) measure the ESG performance of individual companies. The Ratings measures a company's ESG performance as well as its E, S, and G score.

INVESTMENTS COVERED

The TRCRR analyze the ESG performance of over 4,600 companies globally.

ESG RATING

The TRCRR are comprised of two separate scores: a 0 to 100 normalized score and a 0–100 percentile rank score. First, Thomson Reuters rates a firm using a normalized score ranging from 0–100 that measures all areas of a company's environmental, social, and governance performance. Next, a percentile rank is calculated that shows a company's performance percentile within its industry.

RATING SOURCE

The ratings are based on data from the ASSET4 database, which is managed by Thomson Reuters and contains over 226 key performance indicators on ESG. The rating itself is calculated using a Thomson Reuters internal methodology (described in Appendix C).

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

ESG FACTORS COVERED

The ratings use information on environmental, social, and governance factors.

PROVIDER OF TOOL

Thomson Reuters, an investment company, provides this tool along with news on business, financial, and global affairs.

COST OF TOOL

The cost of accessing the ratings in the Asset4 database is $600 per year or $60 per month.

TOOL WEBSITE

More information on the Thomson Reuters Corporate Responsibility Ratings can be accessed at http://www.trcri.com/images/TRCRR_Fact_Sheet_March_24_2014.pdf.

Tool Profile 16: Vigeo Eiris Rating

Vigeo Eiris Rating

TOOL DESCRIPTION

Vigeo Eiris rates individual companies using the Vigeo Eiris Rating, which reflects a composite score across six domains that reflect ESG issues.

INVESTMENTS COVERED

Vigeo Eiris provides ESG ratings for 3,500 securities across the globe on over 300 indicators. These ratings primarily include publicly listed firm with sparse coverage of private firms. While they do not rate mutual funds and other investments, they can conduct a custom analysis per client request.

ESG RATING

Vigeo Eiris developed a proprietary rating that is composed of six domains, which are built on 38 sustainability drivers (such as a company's environmental policies). These domains are the environment, social commitment, market behavior, human rights, governance, and human resources.

Criteria are weighted per sectoral relevance using three factors:

- Nature of rights, interests and expectations of stakeholders
- Stakeholders' vulnerability
- Risk categories for business

The final rating is numeric and ranges from 0–100. It measures the relevance of companies' and organizations' commitments, the effectiveness of their managerial systems, their ability to control risks and improve their performance on all environmental, governance, social and societal responsibility factors.

RATING SOURCE

Vigeo Eiris uses annual reports questionnaires and independently conducted research to develop its rating.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

THEMATIC FOCUS OF TOOL

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

Vigeo Eiris is the provider of the rating, along with other investment information. The company offers thematic and generic universes that can be customized to meet client demands. Vigeo Eiris focuses its assessment on the relevance of commitments about policy, the efficiency of policy implementation, and results.

COST OF TOOL

There are three levels of access to company information. Pricing varies depending on the level of access requested, areas and indexes covered and number of companies allocated.

TOOL WEBSITE

The Vigeo Eiris Rating can be found at http://www.vigeo-eiris.com/vigeo-eiris/methodologie-assurance-qualite/.

Tool Profile 17: Solaron emRatings

Solaron emRatings

TOOL DESCRIPTION

Solaron offers emRatings to evaluate a company's performance against a comprehensive set of over 400 ESG and industry-specific criteria. An overall rating is provided, as well as ranking against peers, benchmarking against peers overall and on specific Environmental, Social and Governance pillars.

INVESTMENTS COVERED

Solaron covers public and private firms based on client requirements.

ESG RATING

Solaron evaluates a company's performance against 400 ESG and industry-specific criteria. Companies are assigned a letter rating based on a weighted average of industry specific and general indicators across Environmental, Social, and Governance factors.

RATING SOURCE

The Solaron emRatings use a wide range of primary and secondary data sources including company annual reports, local language media and stakeholder interviews with customers, employees, suppliers, regulators, NGOS and 'non-customers'. The rating is created using a BIC (Best-in-Context) methodology, which reflects the most important ESG risks and opportunities that might influence shareholder value. This includes 16 key performance indicators across four metrics: financial impact, regulatory or policy implications, innovation potential and industry norms.

FINANCIAL INFORMATION

Solaron has limited financial information available on securities.

THEMATIC FOCUS OF TOOL

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

Solaron is the provider of the ratings.

COST OF TOOL

Solaron provides custom pricing based on the number and type of securities. Its fees are undisclosed to the public.

TOOL WEBSITE

The Solaron emRatings can be found at http://www.solaronworld.com/downloads/emRatings_Factsheet.pdf.

Tool Profile 18: Inrate Sustainability Rating

Inrate Sustainability Rating

TOOL DESCRIPTION

Inrate provides sustainability ratings through its customer tool on individual companies that reflect ESG issues. Inrate's sustainability assessment focuses especially on the impact of the product and services have on the environment and society.

INVESTMENTS COVERED

Inrate's Sustainability Rating covers over 2,600 companies across all major markets and over 300 bond issuers.

ESG RATING

Inrate's Sustainability Rating is a measure of the environmental and social impacts a company has throughout its products and practices, and a measure of its willingness and ability to effectively address related issues it faces. Inrate's sustainability assessment focuses on the impact the product and services have on the environment and society. Criteria fall into four major categories: environment, human resources, social issues, and governance. The rating uses an absolute sustainability scale to compare investment portfolios with each other or against an index.

RATING SOURCE

Inrate provides an assessment of 180 indicators that include a systematic assessment of management and operation practices with respect to sustainability. Inrate weights rates according to sectors. Each company is provided a qualitative rating as follows:

- A—Sustainable
- B—On the path to sustainability
- C—Not sustainable, but with less negative impact
- D—Not sustainable

Pluses and minuses are used to offer further nuance to the letter grades.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

THEMATIC FOCUS OF TOOL

The tool provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

Inrate is the provider of the ratings. This European firm offers ESG research, sustainability assessment, and shareholder services. Inrate's focus is to provide sustainability intelligence that allows capital markets to redirect investment flows toward a more sustainable economy. Inrate examines how companies integrate ESG issues into their products, services, strategy, and operations.

COST OF TOOL

The rating is provided at an undisclosed price to meet the client's need.

TOOL WEBSITE

The Inrate research offerings can be found at http://www.inrate.com/Site/Services/Sustainability-assessments.aspx.

Tool Profile 19: The Carbon Disclosure Project

The Carbon Disclosure Project

TOOL DESCRIPTION

The Carbon Disclosure Project is a non-profit organization that focuses on combating climate change. They measure the size of companies' carbon footprints and highlight ways to reduce them through adjusting business practices. The Carbon Disclosure project provides company-level scores for water stewardship and climate change.

INVESTMENTS COVERED

The Carbon Disclosure Project covers companies that respond to its survey. Over 1,400 of the largest relevant global companies are targeted. These companies are filtered from the MSCI All Country World Index based on economic and environmental criteria. Companies fall principally into the Consumer Discretionary, Consumer Staples, Energy, Healthcare, IT, Industrials, Materials, and Utilities sectors.

ESG RATING

The Carbon Disclosure Project scores companies A through F based on responses to survey questions about water stewardship and climate change.

RATING SOURCE

The Carbon Disclosure Project developed a survey, which it uses to calculate the rating.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

THEMATIC FOCUS OF TOOL

The Carbon Disclosure Project provides information on environmental factors, specifically water stewardship and climate change.

PROVIDER OF TOOL

The Carbon Disclosure Project is the provider of the ratings.

COST OF TOOL

Certain information is free. Datasets are available for an annual fee. The fees for the carbon and water datasets are $16,000 and $10,000, respectively.

TOOL WEBSITE

The Carbon Disclosure Project research can be found at https://www.cdp.net/en/research.

Tool Profile 20: ISS-IW Financial Score

ISS-IW Financial Score

TOOL DESCRIPTION

ISS offers the ISS-IW Financial score, which rates companies on E, S, and G factors.

INVESTMENTS COVERED

ISS-IW Financial Score covers over 3,000 companies.

ESG RATING

The ISS-IW Financial scores companies on a scale of 1–100. This is a customized scoring solution and allows clients to assign weights to the different ESG categories to tailor the scores.

RATING SOURCE

ISS uses information from various sources such as inter-governmental bodies, national bodies or agencies, the target company, proprietary research, and leading independent third-part services to create the score.

FINANCIAL INFORMATION

Financial data includes 52 Week High, 52 Week Low, Annual Dividend, Annualized Five Year TSR (%), Annualized Three Year TSR (%), Cumulative Five Year TSR (%), Cumulative Three Year TSR (%), Dividend Yield (%), EBITD (%), EPS, Market Cap (USD), One Year TSR (%), P/B Ratio, P/E, Price To Cashflow, Profit (%), ROA (%), ROE (%), ROI (%).

THEMATIC FOCUS OF TOOL

The ISS-IW Financial Score provides information on environmental, social, and governance factors.

PROVIDER OF TOOL

ISS is the provider of the ratings.

COST OF TOOL

Cost is customized based on a client's research needs.

TOOL WEBSITE

The ISS tools can be found at http://www.iwfinancial.com.

Tool Profile 21: Thomson Reuters Corporate Responsibility Indices

Thomson Reuters Corporate Responsibility Indices

TOOL DESCRIPTION

The Thomson Reuters Corporate Responsibility Indices function as a benchmarking system for ESG investors.

INVESTMENTS COVERED

This series of 12 indices measures the financial performance of companies with high ESG ratings. The individual ratings rely on information from the Thomson Reuters ASSET4 ESG database that rates the ESG practices of 4,600 public companies on 226 ESG metrics.

ESG RATING

ESG Ratings are provided for individual companies included on the indices, referred to as the Thomson Reuters Corporate Responsibility Ratings (TRCRR, see Tool Profile 15). The ratings are used in determining the indices' constituent companies.

RATING SOURCE

Data comes from the ASSET4 database managed by Thomson Reuters and contains over 226 key performance indicators that are used for creating the ESG ratings. The rating itself is calculated using a Thomson Reuters internal methodology (described in Appendix C).

FINANCIAL INFORMATION

Financial returns and company allocations for indices are available on fact sheets published by Thomson Reuters. The constituents and allocation of companies in Indices are available in their quarterly reports.

ESG FACTORS COVERED

The indices use information on environmental, social, and governance factors.

PROVIDER OF TOOL

Thomson Reuters provides this tool along with news on business, financial, and global affairs.

COST OF TOOL

To use the indices as a benchmark, there is a fee of $500 per month per index.

TOOL WEBSITE

The tool can be found at http://financial.thomsonreuters.com/en/products/data-analytics/market-data/indices/esg-index.html.

Tool Profile 22: Calvert Responsible Index Series

Calvert Responsible Index Series

TOOL DESCRIPTION

The Calvert Responsible Index Series is a set of indices composed of companies that operate their businesses in a manner consistent with Calvert's principles for responsible investment.

INVESTMENTS COVERED

The Calvert Responsible Index Series tracks general categorizations of companies, such as U.S. large capitalization companies and companies in developed markets, in a set of seven indices.

ESG RATING

Calvert weights ESG factors and assigns an ESG score to individual companies. The score measures each company's ESG performance. Calvert's ESG ratings are based on separate characteristics related to environmental, social, and governance issues. The score is calculated from multiple data inputs within these three ESG factors, and companies are scored within their common industries. Calvert includes companies in an index if their Calvert ESG scores meet specific requirements. The ESG scores are only used to develop the indices and are not a separate tool.

Calvert's Responsible Research Review Committee regularly reviews those companies to determine if they continue to warrant inclusion or should be excluded. The composition of the index is weighted based on the market capitalizations of the ten largest industries in the respective non-ESG index. Therefore, companies in larger industries receive larger weights in the responsible index, reflecting their weight in the general market.

RATING SOURCE

Calvert creates the ESG score. Calvert's Responsible Research Review Committee oversees all aspects of the ESG research process.

FINANCIAL INFORMATION

Calvert provides fact sheets that show the company allocations and indices' historical returns for the quarter-to-date and year-to-date, as well as 1-year, 3-year, 5-year, 10-year, and overall return. These fact sheets also display the minimum investment amount, investment fees and asset allocation for mutual funds that track these indices.

ESG FACTORS COVERED

The indices use information on environmental, social, and governance factors.

PROVIDER OF TOOL

The indices are developed by Calvert Research and Management, an investment company. In October 2016, global asset management firm Eaton Vance acquired Calvert to augment its ESG research offerings.

COST OF TOOL

Index information is available online for free. Funds that track each of these indices have required minimum investment amounts.

TOOL WEBSITE

The tool can be found at http://www.calvert.com/resources/calvert-responsible-indexes.

Tool Profile 23: FTSE4Good Index Series

FTSE4Good Index Series

TOOL DESCRIPTION

The FTSE4Good Index Series is a set of indices comprised of companies that have incorporated effective ESG practices into their operations. It is a set of benchmark and tradable indices for ESG investors. The index series is based on the FTSE Global Equity Index Series. The FTSE ESG Ratings are used to select the companies represented in the FTSE4Good Index.

The indices themselves can be invested in through various investment management platforms and are tracked by different ETFs on the market. Ratings are available through the QSD client platform, managed by FTSE and Russell, or through a data download.

INVESTMENTS COVERED

The FTSE4Good Indices consist of companies that have strong ESG-related practices. Each of the indices focus on a specific universe of investment, such as emerging markets or Malaysian markets, but with the additional focus on ESG. ESG Ratings are calculated by FTSE Russell. Ratings are provided for over 4,100 securities.

ESG RATING

The individual companies included in the indices have ESG ratings calculated by FTSE Russell.
FTSE Russell's ESG Ratings are on a scale of 0 (low) – 5 (high). The ratings are discussed in Tool Profile 13

A company must have an overall ESG rating of 3.1 to be included in an index. The score can be disaggregated into separate E, S, and G scores and is based on more than 300 indicators.

RATING SOURCE

FTSE Russell generates the ESG Ratings. Data is aggregated into different themes based on Environmental, Social, and Governance factors. FTSE Russell uses publicly available information, such as annual reports and company disclosures, to analyze the firms' ESG performance.

FINANCIAL INFORMATION

Information provided by FTSE regarding its FTSE4Good Series includes the historical financial returns of the index. In some instances, the composition of the index is also publicly available.

ESG FACTORS COVERED

The indices use information on environmental, social, and governance factors.

PROVIDER OF TOOL

FTSE Russell, a subsidiary of FTSE International Limited, provides this index series. It does not specifically sell investment advice or products, but its indices are used to create investment products.

COST OF TOOL

The tool is fee-based. An annual $18,000 licensing fee, to access the underlying data for the index series, is assessed to a client with $20 million in assets under management. Pricing is customized for clients so this would be different for other types of clients.

TOOL WEBSITE

The tool can be found at http://www.ftse.com/products/indices/FTSE4Good.

Tool Profile 24: Dow Jones Sustainability Indices

Dow Jones Sustainability Indices

TOOL DESCRIPTION

The Dow Jones Sustainability Indices are comprised of different geographically based indices that track companies with strong sustainability metrics. Dow Jones uses the RobecoSAM Corporate Sustainability Assessment (Tool Profile 10) to determine the companies to be included in each index.

INVESTMENTS COVERED

The Dow Jones Sustainability Indices covers 26 developed market and 20 emerging market countries. Each index is comprised of the top 10% of companies by Total Sustainability Scores from each industry categorization. The universe that Dow Jones covers is approximately 10,000 public companies represented in the S&P Global Broad Market Index.

ESG RATING

Each company is given a Total Sustainability Score (TSS), from 0 (low) to 100 (high), based on the answers to the RobecoSAM's Corporate Sustainability Assessment (CSA). Benchmarks are also provided within each industry.

RATING SOURCE

The CSA provides the Total Sustainability Score. Dow Jones uses the CSA scores in a rules-based selection process for inclusion into the index.

FINANCIAL INFORMATION

The Dow Jones Sustainability indices provide historical returns for each of their indices at the 1-month, 3-month, 1-year, 3-year, 5-year, 10-year, and year-to-date intervals. Information on the largest asset allocations in the index is also provided.

ESG FACTORS COVERED

The indices use information on environmental, social, and governance factors.

PROVIDER OF TOOL

Dow Jones and RobecoSAM develop the indices. All financial information about the indices is provided on Dow Jones' website. Various other investment companies use the indices to generate funds that track the Dow Jones Sustainability Indices. The indices are managed by S&P Dow Jones Indices.

COST OF TOOL

Limited index information (such as the historical returns and market capitalization) is available online for free. There is an annual $20,000 licensing fee for access to the list of companies and their associated weights in the indices.

TOOL WEBSITE

The tool can be found at http://www.sustainability-indices.com/index-family-overview/djsi-family-overview/.

Tool Profile 25: MSCI ESG Indexes

MSCI ESG Indexes

TOOL DESCRIPTION

MSCI creates its ESG Indexes using the MSCI ESG Ratings (Tool Profile 12).

INVESTMENTS COVERED

The MSCI ESG Indexes consist of several resources, including a series of global sustainability indices, a group of global socially responsible indices, and a group of global environmental indices. Each index family consists of global companies.

ESG RATING

The MSCI ESG Ratings for individual companies (discussed in Tool Profile 12) are the underlying ESG ratings used to construct the MSCI ESG Indexes. These ratings are on a scale of AAA to CCC. Indices are constructed by selecting companies with high ESG ratings from a parent index.

RATING SOURCE

MSCI ESG Research Inc. creates the ratings using information from company disclosures, government databases, media sources, and macro data from academic, government, and NGO sources.

FINANCIAL INFORMATION

Annual performances of the ESG Indexes are available through MSCI's fact sheets. Historical returns at 1-month, 3-month, 1-year, 3-year, 5-year 10-year, and year-to-date intervals are included. Investors can also find some information on the top constituents of the index.

ESG FACTORS COVERED

The MSCI ESG Indexes use information on environmental, social, and governance factors.

PROVIDER OF TOOL

MSCI ESG Research Inc., a subsidiary of MSCI, provides the tool. MSCI ESG Research Inc. is a Registered Investment Advisor and provides research, rating, and analysis of ESG-related business practices for companies, mutual funds and ETFs, and fixed income securities.

COST OF TOOL

This tool is fee-based and fees are only provided to clients. Fees are customized based on several factors including total and type of assets under management, how the tool will be used, and geographic coverage.

TOOL WEBSITE

The tool can be found at https://www.msci.com/esg-indexes.

Tool Profile 26: Morningstar Global Sustainability Index Family

Morningstar Global Sustainability Index Family

TOOL DESCRIPTION

The Morningstar Global Sustainability Index Family is a series of indices comprised of companies that exhibit high standards of sustainability while maintaining a risk/return profile similar to that of the overall market.

INVESTMENTS COVERED

The Morningstar Global Sustainability Index Family contains more than 25 indices. The indices provide benchmarks for ESG investment strategies. The series construction process assesses roughly 4,000 securities. The Indices include subsets that meet sustainability criteria.

ESG RATING

The indices do not provide an ESG rating; however, a Company Sustainability Score is created and applied in selecting the index constituents.

Morningstar assigns each company an ESG score on a scale 0 (low) -100 (high). This score is based on a company's management systems, practices, policies, and other ESG indicators. Then, Morningstar assigns a Controversy Score to each company. The Controversy Score gauges the seriousness of incidents related to company from 1 (low) -5 (severe). Finally, Morningstar creates the Company Sustainability Score by subtracting the Controversy Score from the company-level ESG score. When constructing the indices, the Company Sustainability Score is used to prioritize which company stocks are selected for each index.

RATING SOURCE

Morningstar creates the Company Sustainability Scores, but the underlying data are company-level ESG information, provided by Sustainalytics.

FINANCIAL INFORMATION

The tool does not provide financial information on the companies.

ESG FACTORS COVERED

These indices provide information on environmental, social, and governance factors.

PROVIDER OF TOOL

Morningstar, an investment company, provides this tool.

COST OF TOOL

The tool is provided for an undisclosed fee.

TOOL WEBSITE

The tool can be found at
https://corporate.morningstar.com/us/documents/Indexes/Susatainabilty_Factsheet_092716_FIN.pdf.

Tool Profile 27: Mercer ESG Rating

Mercer ESG Rating

TOOL DESCRIPTION

Mercer assesses over 5,000 investment manager strategies on how they integrate ESG risk and opportunities into their strategies, and active engagement with shareholders.

INVESTMENTS COVERED

Mercer's ratings measure the integration of ESG factors into investment strategies.

ESG RATING

The ratings are on a scale of ESG1 (highest ESG integration) to ESG4 (lowest ESG integration).
The criteria used to rate active investment strategies on ESG practices differ according to asset class, such as infrastructure, private equity, and hedge funds. In Mercer's ESG ratings process, they look for ESG factors to be a main driver in investment decisions. These factors include: how ESG factors are integrated and considered in the investment process, whether the investment manager and decision maker have some level of ESG expertise, if ownership is engaged in and aware of the actively managed fund's strategy, and if business leaders within the firm personally invest and believe in ESG-related values.

Mercer also rates passive investment managers on the same scale, ESG1 to ESG4 scale. However, the criteria used to rate these investment strategies are different. Industry collaboration, shareholder voting and engagement, ESG implementation and expertise, and ESG integration in the wider business of the company being evaluated are key factors in these strategies.

RATING SOURCE

Mercer creates the ratings internally. They collect information to develop the ratings through surveys and direct contact with the investment managers.

FINANCIAL INFORMATION

The tool does not measure or provide financial performance information on companies.

ESG FACTORS COVERED

The tool incorporates information on environmental, social, and governance factors.

PROVIDER OF TOOL

Mercer is an advisory company that provides this tool along with services in the following areas: health and benefits, wealth and investments, workforce and careers, and mergers & acquisitions.

COST OF TOOL

The tool is fee-based. Pricing is customized based on a client's needs and types of assets and ranges from $50,000–$60,000 per year.

TOOL WEBSITE

The tool can be found at https://www.mercer.com/our-thinking/mercer-esg-ratings.html.

Tool Profile 28: Social (k)

Social(k)

TOOL DESCRIPTION

Social (k)[73] offers ESG investment options and plan administration services to retirement plans and employers.

INVESTMENTS COVERED

Social(k) provides access to ESG investments for retirement plans.

Examples of its investment options include four types of ESG portfolios: Social(k) Fossil Free, Social(k) Low-Cost ESG, Social(k) Target Date, Social(k) Faith Based. Social(k) Fossil Free focuses on climate change issues, Social(k) Low-Cost ESG's main feature is low fees, Social(k) Target Date is designed for those who plan to retire by a certain date, and Social(k) Faith Based focuses on the environment and social justice issues. Social(k) also provides a list of sustainable and responsible mutual funds (from US SIF) and SRI account managers.

ESG RATING

Social(k) does not provide an ESG rating system.

RATING SOURCE

Social(k) does not provide an ESG rating system.

FINANCIAL INFORMATION

Social(k) provides information about historical returns and investment allocation for the ESG investments.

ESG FACTORS COVERED

The ESG investments available through Social(k) services incorporate information on environmental, social, and governance factors.

PROVIDER OF TOOL

Social(k) acts as a third-party administrator for retirement plans.

COST OF TOOL

The services provided to retirement plans are fee-based. Social(k) charges an annual fee of $250 per plan and $10 per plan account.

TOOL WEBSITE

The tool can be found at https://socialk.com/responsible/investments/socialk-esg-portfolios/.

[73] Social(k) is a company and its services are the tool that is described in the profile.

[This Page Is Intentionally Left Blank]

APPENDIX C – SUMMARIES OF ESG RATING METHODOLOGIES

Appendix C provides summaries of the methodologies used to create the ESG tool ratings discussed in this report. Twenty-three summaries are included *only* for ESG tools that release information about their methodology to the public. The summaries outline, where information is available: (1) the rating format and range of values, (2) the general uses for the rating, (3) the specific ESG criteria used for the rating, (4) the sources of information used for the rating, and (5) the specific process used to create the rating. Tools that do not provide ratings are excluded from this appendix.

Morningstar Sustainability Rating (Tool 1)

The Morningstar Sustainability Rating is a numeric score that evaluates the extent to which mutual funds manage environmental, social, and governance issues. Morningstar uses Sustainalytics company-level ESG scores on more than 6,500 companies worldwide and controversy scores on more than 10,000 companies worldwide to assess its mutual funds at the portfolio level. The Sustainalytics methodology is discussed in more detail later in this section.[74]

SocialFunds.com (Tool 2)

SocialFunds.com offers research and financial data regarding Socially Responsible Investing (SRI) oriented mutual funds in addition to company-level data that addresses ESG performance. The Natural Investments provides the Heart Rating included on SocialFunds.com and rates the ESG performance of a collection of these SRI mutual funds. The Heart Rating is a score from 1 to 5 hearts that covers the breadth and depth of social responsibility criteria. The rating solely evaluates the mutual fund; it does not evaluate holdings within the fund.

The Rating's methodology examines the avoidance and affirmative screening ESG selection methods used by the fund, shareholder advocacy (governance), community investing (social), and the research process that a firm uses. It weights the fund's screening and research as the largest component of the Rating. A fund that conducts proactive affirmative screening, including companies in its holdings based on their commitment to ESG values in their practices and production, receives the highest score in this category. Funds that conduct negative screening, excluding companies with products not aligned with ESG values, receive the next highest score. Those funds that include a company most committed to ESG values in a sector, without forsaking the sector itself, receive the lowest score.

The Heart Rating equally weights Shareholder Advocacy and Community Investment for the remaining components of the rating. Funds that take a more active role in promoting shareholder advocacy within the companies they hold receive a higher rating than those taking a more passive role. For the

[74] Detailed information on the methodology used to calculate the Morningstar Sustainability Rating can be found at https://corporate1.morningstar.com/Morningstar-Sustainability-Rating-Methodology-2/.

Community Investment criteria, funds that include companies that directly lend microcredit, for example, receive a higher score than those funds that invest in companies that invest in agency securities and corporate bonds.

SocialFunds collects information on these criteria from each fund manager using a questionnaire specifically developed to capture these issues. In addition, SocialFunds evaluates fund prospectus information using these three factors of ESG.

The 5-level Heart Rating is based on ranking the funds in equal 20 percentile buckets. The lowest 20% are given a score of 1 and the highest 20% are given a score of 5. This 5-level Heart Rating is generated separately for three categories: shareholder advocacy, community investing, and avoidance and affirmative screening.[75]

Bloomberg ESG Disclosure Score (Tool 5)

The Bloomberg ESG disclosure score is a numeric score from 1 to 100 that scores individual companies on their disclosure and transparency regarding environmental, social, and governance characteristics. Investors can use the Bloomberg ESG disclosure score to create custom ESG scores based on what variables or data points they find important. The investor can then share and inspect ESG scores for a subset of companies of interest.

Over 20,000 companies across more than 50 countries are scored based on information from company-sourced filings such as Corporate Social Responsibility reports, annual reports, company website, and Bloomberg surveys sent directly to the company. These ratings are a supplement to the Bloomberg Professional service that Bloomberg provides.

Bloomberg's ESG ratings are based on separate characteristics related to environmental, social, and governance issues. Environmental variables include data points related to carbon emissions, climate change effects, pollution, waste disposal, and renewable energy. Social variables include data points related to supply chain management, company discrimination lawsuits, political contributions, human rights abuses, and community relations. Governance variables include data points related to executive compensation, shareholder rights, staggered board of directors, and independent directors. However, all data points can be translated back to documents and filings from the company being scored.[76]

Sustainalytics Company ESG Reports (Tool 6)

Sustainalytics integrates quantitative and qualitative ESG insights into customer's investment processes. Their research methodology addresses a broad range of high-level ESG issues and trends that significantly affect each industry and company. Sustainalytics' research process uses data disclosed by companies (the companies that are rated) as well as those from media sources and nongovernmental organizations' reports.

Each ESG report highlights key indicators that are essential in assessing how good companies manage their exposure to key EGS issues. Sustainalytics defines the key ESG issues as the most material areas of exposure that determine key management areas for the company. Sustainalytics identifies these key

[75] Detailed information on the Heart Rating is available at https://www.naturalinvestments.com/using-the-social-rating/.
[76] Detailed information on the methodology used to calculate the Bloomberg ESG disclosure scores is available at: https://www.cfaboston.org/docs/ESG/BloombergLookBeyond2014.pdf.

ESG issues based on the following: an analysis of the peer group and its broader value chain, a review of companies' business models, the identification of key activities associated with environmental and/or social impacts, and an analysis of the business impacts that may result from inadequate management of these factors.

Performance on ESG issues is analyzed by comparing the company on a comprehensive set of core and sector-specific metrics. Based on the comparison, companies are then scored on these metrics and the scores weighted to determine the company's overall ESG performance. Each industry has a customized weight matrix that defines the relative importance of each metric and reflects the emphasis on key ESG issues per industry.

Sustainalytics also assesses companies by their level of involvement in major controversies or incidents that influence the environment and associated business risks. A company's involvement in controversy could indicate that the company's management systems are not sufficient to protect it from its ESG risk exposure. Controversy analysis includes a forecast of how the ESG rating will be affected over the next 12 months based on the category of the controversy.[77]

OEKOM Corporate Ratings (Tool 7)

Oekom Corporate Ratings assess a company's social and environmental performance of a company. The ratings system covers 5,500 companies in 56 countries. Oekom's coverage includes companies in large national and international indices, as well as companies leading sustainable social and environmental practices. Oekom's rating system consists of about 100 different social and environmental criteria for each individual company that result in an A+ to D- grade rating.

An important component of this rating process is close collaboration with the individual company. To calculate each rating, Oekum relies on company reports and documentation as well as interviews with company representatives. Additionally, Oekom employs a variety of independent experts to calculate the ratings. Oekum also collects external information through media scraping, interviews with independent experts (specifically, experts in environmental and social topics, such as sustainability, human rights, and employer rights), and assessments from independent specialists from NGOs, government agencies, business associations, research institutions, and other credible sources.

Oekom uses 700 total environmental and social criteria, however approximately 100 apply to each individual company based on industry specific factors. Environmental criteria include eco-efficiency, environmental products and services, and environmental management practices. Social criteria include fair treatment of staff and suppliers, societal and product responsibility, and strong business ethics.

Oekom calculates two scores, one for a company's social-based performance and one for a company's environmental-based performance. These two scores are combined to generate a single Corporate Rating. The combinations of scores differ for each rating; for example, a company in the automobile industry will have a higher weight on their environmental score than their social score. [78]

[77] Detailed information about the Sustainalytics ESG Research and Ratings is available at http://www.sustainalytics.com/esg-research-ratings/.
[78] Detailed information on Oekom's Corporate Ratings methodology is available at http://www.oekom-research.com/index_en.php?content=rating-methodik.

ISS QualityScore (Tool 8)

The ISS QualityScore is a numeric ranking from 1 to 10 that scores individual companies on four different governance themes, as well as an aggregate ranking for all four governance themes. Over 5,600 publicly traded companies across more than 30 countries are scored, including companies from investment indices such as the Russell 3000 and the S&P/TSX Composite that track the largest companies in the stock market. ISS provides a data verification system that allows companies to verify the quality of the data used to create their QualityScore and make any necessary change requests to ISS.

ISS QualityScore ratings are based on 220 questions falling under four themes related to company governance: (1) company board of directors, (2) company audits, (3) shareholder rights, and (4) compensation. Board of director data points include factors such as the number of women directors that serve on the board, the proportion of independent directors on the board, and the number of outside directors on the board. Audit data points include factors such as the tenure of an external audit, non-audit fees as a percentage of total assets, and adverse auditor opinions. Shareholder rights data points include factors such as voting rights of different classes of stock, number of shares designated as depositary receipts, and if the company has an absolute voting right ceiling. Compensation data points include factors like whether there is a cap on CEO bonuses, the ratio of CEO total compensation to next highest paid compensation, and whether the company provides loans to executives.

Answers to these 220 questions are used to calculate a raw numeric score for each company. The final 1-10 numeric ranking is based on these raw numeric scores and represents the decile ranking that a company's score falls under when compared to other companies in a specific region or investment index. The first decile represents the highest scores while the 10th decile represents the lowest scores.[79]

Covalence EthicalQuote ESG Ratings (Tool 9)

The Covalence EthicalQuote ESG Rating is a numeric score that measures a company's reputation on environmental, social, and governance factors. The score can be negative or positive and include fraction values (i.e. 35.5). The numeric score is accompanied by a ranking (on an A–E scale).

The universe of companies for the score consists of 2,800 companies across the globe within 18 sectors, plus the 100 largest companies from the Swiss Performance Index. Covalence EthicalQuote ratings are based on separate characteristics related to seven categories: (1) Governance, (2) Economic, (3) Environmental, (4) Labor Practices, (5) Human Rights, (6) Social, and (7) Product Responsibility. The environmental category is like the environmental category in the traditional ESG framework and the governance category is like the governance category in the traditional ESG framework. The remaining five categories map to the social category in the traditional ESG framework. Environmental variables include news items relating to impact of products on nature and animals, reuse and recycling of products, and compliance with environmental standards. Social variables include news items related to humanitarian actions, impacts on local communities, and contributions to political parties. Governance variables include news items related to stakeholder engagement, governance structure, and board independence.

Companies are scored based on aggregated online documents that include environmental, social, and governance factors. These documents come from three sources: search engines, individual websites,

[79] Detailed information on the methodology used to calculate the ISS QualityScore is available upon request at: https://www.issgovernance.com/solutions/iss-analytics/qualityscore/.

and user-based submissions via e-mail or Covalence's contact form. Information and data for the ratings are gathered through news items resulting from search engines, websites, and correspondents. The search engine scours the web for information coming from the companies themselves, the media, blogs, NGOs, consultants, trade unions, international organizations, governments, and academia. Covalence also follows individual websites for news updates and gets information from reader submission of content.

News items are translated to data points by conducting sentiment analysis and determining how many positive and negative criteria the news item hits on based on a total of 50 criteria spread across the seven categories above. News items can match at most five criteria, so the maximum score for each news article can be +5 or -5.

The ratings methodology for the Covalence EthicalQuote score is based on the integer scores that result from their sentiment analysis of online content. The first score is taken by summing together the positive and negative news items ($Score = Positive\ News - Negative\ News$). The score is then divided by the total absolute value of points awarded to a company ($Rate\ Score = Score / (Positive\ News + Negative\ News$), giving the rate of positive news of all the company's current news. Next, the raw score is multiplied by the rate score calculated, ($Rate\ Adjusted\ Score = Score * Rate\ Score$). Lastly, the final EthicalQuote score is calculated by multiplying the rate adjusted score with a sum of EthicalQuote scores from previous time periods weighted to place more importance on recent scores. The Ethical Quote equation is calculated as follows:

$$EthicalQuote(t) = Rate\ Adjusted\ Score * \sum_{i=i}^{T} EQ(t-i) * (1 - (.02 * i)$$

The final EthicalQuote score is given a grade from A–F based on its ranking for each of the seven umbrella categories.[80]

RobecoSAM Corporate Sustainability Assessment (Tool 10)

The RobecoSAM Corporate Sustainability Assessment (CSA) is a questionnaire sent to companies that includes questions on environmental, social, and governance-related issues in their industry. In 2016, 867 companies completed the assessment. RobecoSAM invites 3,400 companies, the world's largest publicly traded companies in 60 different industries, to participate in the survey. Each question is scored on a scale of 1 to 100. Once the scores for each question are tabulated, the questions are rolled up into larger criteria categories. The companies are then ranked against their peers in each criterion and assigned a score based on their percentile ranking from 1 to 100. The questions within a criterion are weighted so that some questions are more important in determining a criterion score than others. The question weights for each criterion are posted on RobecoSAM's Corporate Sustainability Assessment website. Companies assessed by RobecoSAM's CSA are included in the ESG ratings and rankings of other providers, such as the Dow Jones Sustainability Index (DJSI) World Index.

The questions in RobecoSAM's CSA consist of two general categories: transparency-based questions and performance-based questions. Transparency questions relate to a company's ability to disclose information, such as whether the company reports the number of women managers in its corporate

[80] Detailed information on the methodology used to calculate the Covalence EthicalQuote scores is available at http://www.ethicalquote.com/docs/CovalenceEthicalQuoteMethodology.pdf.

structure. Performance questions relate to the actual number of women managers in its corporate structure. Both the transparency and performance sets of questions cover governance, environmental, and social factors. In addition, governance, environmental, and social factors are included in the questionnaire for each industry. However, based on the industry, the weights and types of questions may change. For instance, an electric utilities company will have a higher weight on environmental questions than a banking or pharmaceutical industry. Specifically, examples of governance related issues include questions on codes of business conduct, marketing practices, and supply chain management. Questions on environmental issues include biodiversity issues, climate change strategies, and water-related risks arising from companies. Questions on social issues include human capital development, occupational health and safety, and philanthropy. The questions themselves are formatted in mostly quantitative ways to ensure a standardized scoring process, however some questions are qualitative or subjective. In these instances, RobecoSAM analysts evaluate the response based on a predefined scoring system that can be converted to a quantitative score.

News and media coverage are also built into RobecoSAM's CSA. RobecoSAM uses RepRisk's platform to gather news on companies related to crime, fraud, human rights issues, and other negative news. An additional media coverage-related weight is added to the CSA so that this may affect the CSA score. The weight will vary based on industry.[81]

RepRisk Company Reports (Tool 11)

RepRisk Company Reports and their associated ratings cover 84,000 companies globally in 34 different sectors. The issues that RepRisk reviews cover environmental, social, and governance portions of a company's risk. Environmental issues include global pollution, impacts on ecosystems and landscapes, and animal mistreatment. Social issues include human rights abuses, social discrimination, and forced or child labor practices. Governance issues include fraud, tax evasion, and instances of corruption, bribery, or extortion. RepRisk pays special attention to key and timely ESG-related issues, including gambling, weapons manufacturing, land grabbing, fracking, and other issues when deciding upon their ESG ratings. RepRisk data comes from a proprietary screening tool that screens over 80,000 media and stakeholder sources in 15 different languages. These media sources include government agencies, NGOs, newsletters, blogs, social media feeds such as Twitter, think tanks, and regulator publications.

The RepRisk Rating is a grade based metric that rates companies on a range of AAA to D. The grade measures a company's ESG-related reputational risk exposure (the RepRisk index) against the ESG risk exposure of the respective country and industry group for that company.[82]

MSCI ESG Ratings, MSCI ESG Indexes, and MSCI Fund ESG Metrics (Tools 12, 25, and 4)[83]

The methodology for constructing the MSCI ESG Ratings (Tool 12) includes several steps. First, the data collection process begins with over 140 research analysts assessing over 1,000 indicators based on ESG policies, programs, and performance metrics. These data include information from 65,000 individual directors and 13 years of shareholder meeting results. The data sources come from specialized datasets from the government, NGOs, company disclosure documents such as 10-K's and sustainability reports,

[81] Detailed information on RobecoSAM's CSA is available at http://www.robecosam.com/images/Measuring_Intangibles_CSA_methodology.pdf.
[82] Detailed information on RepRisk Company reports is available at https://www.reprisk.com/content/static/reprisk-esg-business-intelligence_introductory-presentation_short.pdf/.
[83] These two tools are listed together because Tool 25 uses the ratings in Tool 12.

and daily-monitored news sources. Then, the indicators are aggregated to focus on 37 key issues that are selected annually for each industry and weighted. These 37 key issues are used to determine a rating for the environmental, social, and governance components separately and for an overall ESG rating.

For environmental indicators, key issues include carbon emissions, raw material sourcing, toxic emissions and waste, and opportunities in clean technology. For social indicators, key issues include health and safety issues, chemical safety, controversial sourcing, and access to health care. For governance indicators, key issues include corporate pay and tax transparency. Companies are rated on a 1-10 scale for each key issue. Next, ratings are calculated for each company relative to the company's industry and are weighted according to importance of the component issues for that industry. Formal review of the issue weights is conducted at the end of the year. Finally, a AAA to CCC rating for each company is calculated by normalizing scores within the company's respective industry.

MSCI ESG Indexes (Tool 25) provide 180-190 indices to track companies with strong environmental, social, and governance profiles. The ESG indices are constructed based on a "Parent," non-ESG-oriented index. For example, the MSCI USA ESG Universal Index starts out with a potential universe of companies based on the MSCI USA Index. MSCI then reweights and screens securities based on its ESG rating.

Indices are created by excluding stocks of companies with the weakest ESG ratings or missing scores. Stocks are also excluded if the company has severe controversies regarding ESG issues, such as being involved with controversial weapons manufacturing. The remaining stocks are re-weighted based on the market capitalization weights of the respective industries in the parent, non-ESG index.

MSCI Fund ESG Metrics (Tool 4) also use the MSCI ESG Ratings. MSCI Fund ESG Metrics provides the ESG Quality Score, which is a weighted average of the ESG Ratings of the issuers of each fund's holdings. The percentile ranks assigned to each fund are based on each fund's ESG Quality Score in comparison to the ESG Quality Scores of all other funds and funds in its peer category.[84]

FTSE ESG Ratings and FTSE4Good Indices (Tools 13 and 23)

FTSE4Russell's ESG ratings cover 300 indicator variables across 14 themes that fit into three pillars that relate to environmental, social, and governance practices. Environmental variables include data points related to water use, climate change effects, biodiversity, and pollution. Social variables include data points related to customer responsibility, human rights and community issues, labor standards, and health and safety practices. Governance variables include data points related to anti-corruption practices, tax transparency, risk management, and governance. Criteria to create variables are not described, such as transforming variables to threshold variables or the methodology used to create any new variables. All data points fall under the oversight of an independent committee of experts from the investment community, companies, NGOs, unions and academia. Criteria are based only on publicly available data and do not involve any data privately provided by a company.

The FTSE4Good Indices is a series of 17 indices that consists of companies that rate highly on environmental, social, and governance characteristics and are a subset of the universe of companies in

[84] Detailed information on these MSCI tools is available at:
- MSCI ESG Ratings https://www.msci.com/documents/1296102/1636401/MSCI_ESG_Ratings.pdf
- MSCI ESG Indexes https://www.msci.com/documents/10199/242721/MSCI_ESG_Indexes.pdf/42ef2d23-c4ef-4672-8476-52bbb8c98cca
- MSCI Fund ESG Metrics https://www.msci.com/esg-fund-metrics

the FTSE Global Equity Index series. These non-ESG indices cover 7,400 securities across 47 different countries. For example, the FTSE4Good Global Index may consist of any of the companies currently in the FTSE Developed Index, an underlying index of conventional investments. Each constituent of the underlying index is rated based on FTSE's ESG Ratings model. This model rates companies on a scale of 1 to 5. This rating system is used as a criterion for inclusion into various FTSE4Good indices. A company will be included in an ESG-related index for the developed market if the ESG rating of the company is 3.1 or higher. For ESG-related indices based on emerging markets, an ESG rating of 2.0 is required. Once included, a company may be removed from a developed market index if they receive an ESG rating below 2.5. For an emerging market, the removal threshold is 1.8. Companies that produce tobacco, weapons, weapon components, or coal are automatically excluded. Companies involved in sensitive areas, such as nuclear power generation, are subject to additional constraints besides the ESG rating for inclusion.[85]

HIP Investor Ratings (Tool 14)

The HIP Investor Ratings cover over 32,000 investments from across the global and asset classes. Among these are more than 5,770 companies, 26,700 bond issuances, 100 real-estate investment trusts (REITs), and over 1,000 mutual funds and ETFs. Each investment is rated on a scale of zero to 100 that represents the company's sustainability. HIP defines sustainability as a combination of financial return and human impact and reports that their ratings quantify 84% of an investment's market value that cannot be explained by balance sheet data.

The HIP Investor Ratings are built on three dimensions: Operational Outcomes, Products and Services, Management Practices. HIP assesses each company's sustainability along these dimensions using a construct that they term the five "impact pillars:" health, wealth, earth, equality, and trust. These dimensions and themes are intended to holistically address future risk, return potential, and net effect on society. HIP collects the data for their quantitative assessment from company annual reports, as well as publicly available data from other sources such as governments and non-profits.[86]

Thomson Reuters Corporate Responsibility Ratings (Tool 15)

The Thomson Reuters Corporate Responsibility Ratings (TRCRR) measure the ESG performance of over 4,600 companies globally. The TRCRR are based on data provided by ASSET4, a leading global provider of ESG data. ASSET4 collects data on over 500 individual ESG criteria from multiple sources including company reports, company filings, company websites, NGO websites, CSR Reports, and established and reputable media outlets.

The full rating process produces three numeric values for each company screened. First, there is a raw score on a scale of 0 to 1. These raw scores are calibrated to be robust over time while also robust relative to each company's peer group. Second, the raw scores are normalized and adjusted for skewness and the differential between the mean and the median of all the scores. These normalized scores are then fitted to a bell curve to derive ratings between 0 and 100 for each company. Third, percentile ranks are calculated for all companies screened, based on a company's normalized raw score.

[85] Detailed information on the methodology used to create the FTSE4Good indices is available at http://www.ftse.com/products/downloads/f4g-index-inclusion-rules.pdf.
[86] Summary information on HIP Investor Ratings is available at http://hipinvestor.com/how-clients-use-hip/ratings/.

The TRCRR follow the convention of ASSET4's classification by using three pillars. The environmental pillar consists of three categories: emission reduction, product innovation, and resource reduction. The social pillar has seven categories: community, diversity, employment quality, health-and-safety, human rights, product responsibility, and training-and-development. The governance pillar has five categories: board functions, board structure, compensation policy, shareholders' policy, and vision-and-strategy.[87]

Vigeo Eiris Sustainability Rating (Tool 16)

Vigeo Eiris provides ESG research and tools to investors. Their Vigeo Eiris Sustainability Ratings span over 3,200 companies and consider performance on all ESG factors (environmental, social, and governance). Their analytical framework incorporates recommendations from the United Nations, International Labour Organization, Global Compact, European Union, and others. This framework considers six risk factors: environment, community involvement, business behavior, human rights, governance, and human resources. These factors may or may not be included in the composite score assigned to each company, depending on the business sector, and each component is weighted depending on its importance in an individual company's business model.

Vigeo Eiris next maps these risk factors into three pillars: leadership, implementation, and results. Vigeo Eiris selected these pillars due to their broad applicability across business models, and their relationship to practical results. Each of these pillars is rated from multiple angles to form a composite score. Leadership is assessed on visibility, exhaustiveness, and ownership. Implementation is assessed on means, scope, and coverage. Results are scored via indicators, stakeholder feedback, and the company's responsiveness. The final ratings fall on a scale of zero to 100. Vigeo Eiris considers 0–30 to be weak, 31–50 to be limited, 51–60 to be robust, and 61–100 to be advanced.

The Vigeo Eiris Sustainability Rating methodology is certified by ARISTA. This standard indicates that the Vigeo Eiris tool has passed an audit of the quality, integrity and the transparency of the methods.[88]

Solaron emRatings (Tool 17)

Solaron emRatings are a global ESG ratings product that rates over 900 stocks originating in over 40 countries on various practices in environmental, social, and governance issues. The emRating can be integrated with the tools that Solaron provides to its clients, such as the Global ESG Performance Tracker and the Global Newsfeed. The performance tracker is a platform that can be used to look at various ESG metrics and can be customized to the user. The Newsfeed is a database of global ESG-related news that has been drawn from over 3,000 sources.

emRatings are based on 400 general and 200+ industry-specific indicators that can be grouped into separate environmental, social, and governance categories. Solaron analysts extract data from company website and publicly available company reports to collect the information for these indicators. These reports include a company's annual reports, sustainability reports, corporate social responsibility reports, codes of conduct, and other company filings. Solaron analysts also investigate news sources to collect additional information to factor into scores. In addition, Solaron reaches out to stakeholders and

[87] Detailed information on Thomson Reuters Corporate Responsibility Ratings is available at https://www.thomsonreuters.com/content/dam/openweb/documents/pdf/tr-com-financial/methodology/corporate-responsibility-ratings.pdf.
[88] Detailed information on Vigeo Eiris Sustainability Ratings is available at http://www.vigeo-eiris.com/en/vigeo-eiris/methodology-quality-assurance/.

relevant interviewees, such as customers, employees, competitors, regulatory bodies, suppliers, and other parties. Once all the data are collected, the company is scored based on the 600+ indicators within each ESG category and each indicator is given industry-specific weights. The weighted score of each indicator is aggregated up to its respective ESG category to create a separate environmental, social, and governance score. Finally, these separate ESG scores are combined to create an overall weighted average score.[89]

Inrate Sustainability Rating (Tool 18)

Inrate's tool is primarily used by financial institutions and institutional investors. Inrate explicitly connects the information provided in their tool to methods for engaging companies on sustainability issues and indicates that their tool can be used to follow the UN Principles for Responsible Investment. While the ratings are primarily produced by Inrate's in-house staff, the organization partners with multiple experts such as the Green Design Institute at Carnegie Mellon University and INFRAS, a policy consultancy.

Inrate's first step in developing a company's sustainability rating is identifying the most appropriate sector for the company. For some companies, this assignment will not correspond with how the company is usually classified, for example for a financial index. However, Inrate prioritizes a classification that matches the final purpose of a company's products and services. For example, a car manufacturer would be categorized as transportation rather than manufacturing. From the sector identified, Inrate uses metrics that correspond to sector-specific sustainability issues. The goal is to identify companies that achieve high levels of sustainability relative to their peers. After the quantitative assessment is complete, Inrate's analysts perform a qualitative review where adjustments may be made. While the quantitative results are based on company reports, the qualitative assessment is based largely on observable results. Inrate's final Sustainability ratings are reported as letter grades where an A would be considered a safe investment, B would be good, C merits concern, and a D rating would be considered very problematic.[90]

CDP Open Data Portal (Tool 19)

CDP (formerly called the Carbon Disclosure Project) is a global non-profit that focuses on environmental sustainability. CDP performs research on over 5,600 companies and 533 cities across 90 countries and focuses on risks associated with climate change, forests, greenhouse gas emissions, and water. The purpose of the CDP rating (called the CDP Disclosure Score) is to measure the degree to which entities have assessed, disclosed, and engaged with their environmental impact. A high score does not directly indicate high performance on environmental issues. Instead, it measures a company's level of engagement with the issues. The data for CDP's analyses are voluntary disclosures from rated entities via a questionnaire.

Companies that respond to the questionnaire are assessed on four levels of environmental stewardship: disclosure, awareness, management, and leadership. Disclosure is the most basic level of environmental stewardship and leadership is the highest. Companies can accumulate points for each level and are scored based on what percentage of the total points they accumulate. However, if companies rate

[89] Detailed information on the Solaron's emRatings is available at http://www.solaronworld.com/downloads/emRatings_Factsheet.pdf.
[90] Detailed information on the Inrate Sustainability Rating is available at http://inrate.com/Site/Approach/Sound-Understanding.aspx.

poorly on a low level (i.e. disclosure), they do not accumulate points on higher levels. Point scores are converted to letter grades based on the highest level they achieve. Companies that merely disclose environmental data receive D grades while companies that show leadership on environmental issues receive A grades.[91]

ISS-IW Financial Score (Tool 20)

The IW Financial Score is an ESG tool that includes a platform where users can define their own criteria and receive customized ratings that facilitate comparisons among companies. The IW Financial Score covers a broad range of environmental, social, and governance issues. In January 2017, Institutional Shareholder Services Inc. (ISS) acquired IW Financial, an ESG research firm. The IW Financial Score tools are still marketed independently through ISS. However, ISS intend to integrate them with their existing QualityScore tool that focuses specifically on governance issues. ISS expects to launch the combined product at the end of 2017.[92]

Thomson Reuters Corporate Responsibility Indices (Tool 21)

Thomson Reuters Corporate Responsibility Indices consist of 12 indices and include companies with strong ESG practices. The indices are derived from an underlying index published by S-Network Global Indices. The Corporate Responsibility Indices are mapped to the S-Network Global Indices based on similar regions and capitalization sectors. For instance, the Thomson Reuters Corporate Responsibility Large Cap ESG Index has a potential universe of companies that consists of all companies that are included in the S-Network U.S. Equity Large-Cap 500 Index. The Corporate Responsibility Indices take a subset of the companies in the S-Network equivalent based on their rating from Thomson Reuter's Corporate Responsibility Ratings. This ratings system scores approximately 4,600 companies worldwide.

To construct the Corporate Responsibility indices, each of the companies in the underlying index are separated by one of ten industry sectors. The stocks that correspond to the highest 50% of Corporate Responsibility rating for each of the ten sectors are included in the Corporate Responsibility index. Each stock is then weighted within its sector based on two factors. The first factor is the float market capitalization of the stock compared to other stocks in a similar sector. The second factor is the stock's Corporate Responsibility rating. After the stocks are weighted within sector, the entire index universe is examined. Each sector is reweighted based on the representation of that sector (in terms of market capitalization) in the underlying index. Each index is reviewed during scheduled quarterly reviews. Changes to the index include weight adjustments, and additions/deletions to the index. Additions and deletions are executed in December or when a stock undergoes deletion in the underlying index.[93]

Calvert Responsible Indices (Tool 22)

The Calvert Responsible Indices are a group of seven indices tracking companies with strong environmental, social, and governance practices. The indices initial universe is based on the universe of the corresponding non-ESG index based on geography and market capitalization, such as the S-Net 1000 U.S. Large Cap Index (SN1000), or companies that are involved in specific ESG-related practices, such as

[91] Detailed information on the CDP Ratings is available at https://www.cdp.net/Documents/Guidance/2016/Scoring-Introduction-2016.pdf.

[92] Information on the IW Financial Score is available upon request at: https://www.issgovernance.com/esg/iwfinancial/

[93] More detailed information on Thomson Reuters Corporate Responsibility Indices can be found at http://financial.thomsonreuters.com/content/dam/openweb/documents/pdf/tr-com-financial/methodology/corporate-responsibility-indices-methodology.pdf.

water research or global sustainable energy research. Each company in the initial universe for Calvert's responsible indices is given an ESG score calculated from Calvert.

Calvert's ESG ratings are based on separate characteristics related to environmental, social, and governance issues. The score is calculated from multiple data inputs within these three ESG factors and companies are scored within their common industries. Companies are included in an index if their Calvert ESG scores meet specific inclusion requirements. Companies are reviewed on an ongoing basis to determine whether the company should continue to be included or be excluded from the respective index by Calvert's Responsible Research Review Committee. Calvert's Responsible Research Review Committee oversees all aspects of the ESG research process. The composition of the index is weighted based on the market capitalizations of the ten largest industries in the respective non-ESG index. Therefore, companies in larger industries receive larger weight in the responsible index, correctly reflecting their weight in the general market.[94]

Dow Jones Sustainability Indices (Tool 24)

The Dow Jones Sustainability Indices is a series of 29 indices that consists of companies that rate highly on environmental, social, and governance practices. The initial universe for each index consists of the companies in the respective non-ESG Dow Jones index. For example, the DJSI World Index may consist of any of the 2,500 largest companies in the S&P Global Broad Market Index (BMI). Each DSJI index may consist of approximately 200 or more companies from these underlying conventional indices. Scores are taken from RobecoSAM's Total Sustainability Score, which is calculated from RobecoSAM's annual Corporate Sustainability Assessment (CSA).

The universe of possible companies for each Sustainability index is reduced to include only the following: (1) companies that participate in RobecoSAM's CSA questionnaire or (2) companies that have a float-adjusted market capitalization above a specified threshold. This threshold differs for each index, but ranges between $100 million and $500 million. The companies are then grouped by region and industry. Once the companies are separated into region/industry combinations, Dow Jones will sum up the market capitalization of all the selected companies in each region/industry combination. If the summed market capitalization does not meet the threshold of 50% of the conventional companies' market capitalization for that region/industry combination, Dow Jones will add companies to the DJSI region/industry combination until the 50% threshold is met. These companies are added to the region/industry combination in descending order of market capitalization. After this population of companies is finalized for each Sustainability index, all companies that have a Total Sustainability Score less than 40% of the highest scoring company in the index are removed. The final set of companies included in the index are selected by ranking the companies from the last step by their Total Sustainability Score and taking those that are in the top percentile of Sustainability scores. This percentile differs for each index, but ranges between 10–30%. Companies with scores that are within 0.3 points of the last selected company will also be included. Companies are then weighted in the index based on industry-specific market capitalizations of the underlying conventional index.[95]

---

[94] Detailed information on the Calvert Responsible Indices is available upon request at https://www.calvert.com/calvert-responsible-indexes.php.

[95] Detailed information on the methodology for the Dow Jones Sustainability indices is available at http://us.spindices.com/documents/methodologies/methodology-dj-sustainability-indices.pdf.

Morningstar Global Sustainability Index Family (Tool 26)

The coverage universe of the Morningstar Global Sustainability indices draw from the large- and mid-capitalization subsets of the Morningstar Global Equity Indexes, which represent 90% of global market capitalization in developed and emerging markets.

The indices are created through a series of steps. Companies manufacturing controversial weapons (including anti-personnel mines, cluster munitions, and chemical or biological weapons) or derive more than 50% of revenue from tobacco products are excluded from the coverage universe. Then, a company level ESG score on a scale of 0 (low) to 100 (high) is applied based on a company's management systems, practices, policies, and other ESG indicators. Additionally, a Controversy Score gauges the seriousness of incidents related to company from 1 to 5 (low to severe). The two scores are combined to create the Company Sustainability Score. Next, stocks are selected in priority order of their Sustainability Scores until they reach 50% coverage by float-adjusted market capitalization of the parent index. Eligible companies that have experienced serious controversies are excluded from the index. Lastly, the index constituents are weighted according to the same benchmarks (e.g. by region or industry) in their parent index. The weights in the Sustainability indices are within zero to two percentage points of the parent index's corresponding weights.[96]

Mercer ESG Rating (Tool 27)

Mercer provides ESG ratings for more than 5,000 active investment strategies. The ESG rating is qualitative and ranges from ESG1 to ESG4, with ESG1 being the rating that corresponds to strong ESG integration in their investment process. The criteria used to rate investment strategies on ESG practices differ by asset class, such as infrastructure, private equity, and hedge funds.

Mercer's ESG ratings focus on four factors:

1. How are ESG factors integrated and considered in the investment process?
2. Does the investment manager and decision maker have some level of ESG expertise?
3. Is ownership engaged in and aware of the actively managed fund's strategy?
4. Do business leaders within the firm personally invest and believe in ESG-related values?

The ratings criteria above are collected through surveys and talking with the investment manager.

Mercer also provides another ratings system, the ESG(P) ratings. This rating scale is used to assess passive investment managers. This rating is on the same ESG1 to ESG4 scale. However, the criteria used to rate these investment strategies are different. Key factors in the ESG(P) rating process include industry collaboration, shareholder voting and engagement, ESG implementation and expertise, and ESG integration in the wider business of the company being evaluated.

[96] Detailed information on the Morningstar Global Sustainability Index Family is available at https://corporate.morningstar.com/us/documents/Indexes/Susatainabilty_Factsheet_092716_FIN.pdf.

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE ISSUES IN INVESTING

A Guide for Investment Professionals

CFA Institute

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE ISSUES IN INVESTING

A Guide for Investment Professionals

© 2015 CFA Institute. All rights reserved.

CFA Institute is the global association of investment professionals that sets the standards for professional excellence. We are a champion for ethical behavior in investment markets and a respected source of knowledge in the global financial community.

Our mission is to lead the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society.

ISBN: 978-1-942713-21-0
October 2015

Contents

Introduction 1

1. Background: ESG Issues in Investing 3
   - 1.1. Context and Objectives of This Guide 3
   - 1.2. Examples of ESG Issues 4
   - 1.3. ESG Considerations Are Not New 5
   - 1.4. Various Labels, Same Issues 5
   - 1.5. Moral Values vs. Economic Value 6
   - 1.6. Short-Termism 6
   - 1.7. Externalities 7
   - 1.8. Majority Consider ESG Issues 8
   - 1.9. Awareness Has Been Growing 9
   - 1.10. ESG Data Usage Rising 10
   - 1.11. ESG Issues: To Consider or Not to Consider 11
   - 1.12. Focusing on the Relevant and the Material 13
   - 1.13. Climate Change and Other Environmental Issues 13
   - 1.14. Social Issues Affect More Than Reputation 13
   - 1.15. Governance Issues Widely Considered 14
   - 1.16. Principles, Standards, and Advocacy 15
   - 1.17. Law and Regulation 15
   - 1.18. Relevance across Asset Classes 16
2. Application: The Six Methods for Considering ESG Issues 17
   - 2.1. Exclusionary Screening 17
   - 2.2. Best-in-Class Selection 18

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

2.3. Active Ownership 20
2.4. Thematic Investing 22
2.5. Impact Investing 24
2.6. ESG Integration 25
2.7. ESG Integration Used More Widely 28
3. Debate: Issues regarding ESG Considerations 30
3.1. Disclosure Remains a Challenge 30
3.2. Fiduciary Responsibility 33
3.3. Financial Performance 34
3.4. Fossil Fuel Divestment and Stranded Assets 34
3.5. Regional Differences 35
3.6. Innovations in Impact Investing: Green Bonds and Social Impact Bonds 35
3.7. ESG Issues and Passive Investing 36
3.8. Modern Applications: Smart Beta 36
3.9. Obstacles to Practical Implementation 36
3.10. The Challenge of ESG Education 38
3.11. ESG Education and CFA Institute 40
3.12. Conclusion 41
References 43

Abstract

The practice of considering environmental, social, and governance (ESG) issues in investing has evolved significantly from its origins in the exclusionary screening of listed equities on the basis of moral values. A variety of methods are now being used by both value-motivated and values-motivated investors in considering ESG issues across asset classes. There is, however, a lingering misperception that the body of empirical evidence shows that ESG considerations adversely affect financial performance. For investment professionals, a key idea in the discussion of ESG issues is that systematically considering ESG issues will likely lead to more complete investment analyses and better-informed investment decisions.

Introduction

A critical factor in the financial performance of investments is the investor's ability to identify drivers of the expected risk and return of investments. Financial analysts and portfolio managers are expected to be familiar with the financial factors that drive the value of an investment. However, issues that are difficult to measure in monetary terms and that do not form part of traditional financial metrics also affect the risk and return of investments—at times, decisively. In general, they are referred to as *environmental*, *social*, and *governance* (ESG) issues.

ESG issues are often highlighted by news media when investors suffer sudden and substantial losses on listed equities—losses that are attributed to poor management of risks posed by one or more of these ESG issues. For example, at a number of companies—including Petrobras, Enron, Banco Espírito Santo, Parmalat, and Toshiba—governance risk has proved costly for investors.

Regarding environmental risks, the health and safety record of BP in the run-up to the Gulf of Mexico oil spill in 2010 was worse than that of its peer group. When this fact was brought to the fore after BP's share price had fallen, it reinforced the need to analyze ESG performance indicators. The ongoing drought in California has also re-emphasized the need to consider water stress, a prominent ESG issue, in investment analyses for the businesses concerned, from agricultural farming to semiconductor manufacturing. Concerns about climate change and fossil fuel assets becoming stranded are finding expression in shareholder resolutions at the annual meetings of large oil companies, such as Shell.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

In addition, social issues (e.g., labor relations) can have a significant and direct impact on a company's financial performance—for instance, the South African mining company Lonmin experienced a breakdown in its relationship with its workforce in 2012. For other companies, labor relations may have an indirect impact through reputation—for example, Walmart is frequently criticized for its labor practices.

In the past, the governance issues were seen as relevant mainly for *value*-motivated investors and the environmental and social issues as relevant mainly for *values*-motivated investors. Not anymore. There is a growing realization that whether motivated by economic value or moral values, ESG issues are relevant for all long-term investors.

Although ESG issues often receive attention owing to extreme events that cause sharp drops in the stock prices of relatively large listed companies, they are *not* confined to equities, extreme events, or large companies. The ESG issues and related megatrends, such as scarcity of a natural resource (e.g., potable water) and changing demographics (e.g., the economic rise of pro-sustainability millennials), are relevant to investment risk and return across asset classes.

For investment professionals, a key idea in the discussion of ESG issues is that systematically considering ESG issues will likely lead to more complete analyses and better-informed investment decisions.

This guide is divided into three chapters. Chapter 1 provides background information needed to understand ESG considerations in investing, Chapter 2 explains the application of different methods of considering ESG issues, and Chapter 3 explores salient issues in the debate on ESG considerations.

1. Background: ESG Issues in Investing

This chapter provides the context for this guide as well as shares information needed to understand the discussion on ESG issues in investing.

1.1. Context and Objectives of This Guide

CFA Institute has been educating investment professionals on governance issues in investing for many years. In 2005, CFA Institute published "The Corporate Governance of Listed Companies: A Manual for Investors," which was followed by a second edition in 2009.

In 2008, with the growth in the body of knowledge on social and environmental issues, CFA Institute published "Environmental, Social, and Governance Factors at Listed Companies: A Manual for Investors." The focus of the publication was how to integrate ESG risk and opportunity issues into a fundamental analysis of listed equities. Since then, CFA Institute has continued to produce educational content on ESG issues in investing in a variety of forms (e.g., short books, articles, conference proceedings, video, and audio). A number of CFA Institute members in different parts of the world who are on the cutting edge of the practice of considering ESG issues in investing have been keen to work with CFA Institute to produce more educational content in this area. There is also interest in knowing the perspective of members regarding ESG considerations in investments. Since 2013, CFA Institute has been pursuing its Future of Finance initiative,[1] a global effort to shape a more trustworthy, forward-thinking financial industry that better serves society. These developments, together with a perceived need for a brief guide for investment professionals on the state of ESG considerations in investing, have led to the publication of this guide. As stated by Paul Smith, CFA, president and CEO of CFA Institute:

> CFA Institute believes that every investment analyst should be able to identify and properly evaluate investment risks, and ESG issues are a part of this evaluation, our exam curriculum emphasizes risk management, and our members are increasingly interested in continuing education materials on ESG.

[1] See www.cfainstitute.org/FutureFinance.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

In this context, the objectives of this guide are to (1) serve as a primer for investment professionals on ESG considerations in investments across asset classes, (2) inform the reader of the state of the discussion and practices regarding ESG considerations in investments, and (3) share the views of CFA Institute members regarding ESG considerations in investments.

Throughout this publication, we refer to the results of a survey of CFA Institute members on ESG issues. On 26 May 2015, 44,131 members who are portfolio managers and research analysts were invited via email to participate in an online survey. The survey closed on 5 June 2015; 1,325 valid responses were received, for a response rate of 3% and a margin of error of ±2.7%.

This guide was written in collaboration with practitioners who specialize in ESG issues. Some case studies included in this guide were contributed by these professionals and are duly sourced to them.

1.2. Examples of ESG Issues

There is no one exhaustive list of ESG issues. ESG issues are often interlinked, and it can be challenging to classify an ESG issue as only an environmental, social, or governance issue, as **Table 1** shows.

These ESG issues can often be measured (e.g., what is the employee turnover for a company?), but it can be difficult to assign them a monetary value (e.g., what is the cost of employee turnover for a company?).

Table 1. Examples of ESG Issues

Environmental Issues	Social Issues	Governance Issues
Climate change and carbon emissions	Customer satisfaction	Board composition
Air and water pollution	Data protection and privacy	Audit committee structure
Biodiversity	Gender and diversity	Bribery and corruption
Deforestation	Employee engagement	Executive compensation
Energy efficiency	Community relations	Lobbying
Waste management	Human rights	Political contributions
Water scarcity	Labor standards	Whistleblower schemes

1.3. ESG Considerations Are Not New

The consideration of ESG issues in investing for economic value is not a new phenomenon. Many investors have long considered such issues in fundamental investment analysis by including an assessment of reputational risk, regulatory developments, or such megatrends as an aging population. Some ESG analysis is also built into traditional analytical frameworks, such as Porter's Five Forces. The modern references to ESG analysis, however, refer to a systematic consideration of relevant and material ESG issues rather than to a cursory inclusion of one or more of them. The consideration of ESG issues is a complement to (not a substitute for) traditional fundamental analysis, and ESG issues remain relevant throughout the investment process—from the initial analysis to the buy/sell/hold decision to ongoing ownership practices.

Because of the prominence of large corporations in the global economy and the large proportion of corporate securities held by fiduciary investors, as well as the challenge of trust in finance,[2] there is also a sustained interest in ESG issues in investing by civil society, policymakers, and, of course, news media.

1.4. Various Labels, Same Issues

Various labels are used to describe investments that consider ESG issues, from the relatively traditional *socially responsible investing* to the more recent *responsible investing* and *sustainable investing*. Traditional socially responsible investing is most closely associated with avoiding morally questionable businesses, whereas sustainable investing is usually characterized by identifying investment risks and opportunities with the help of ESG analysis. There is, however, a lack of consistency in the use of such labels, and different labels can be used to mean overlapping ideas. Today, those who say they practice socially responsible investing describe it in much the same way as those who say they practice sustainable investing. The common theme underlying the various labels is an emphasis on ESG issues. Therefore, in this guide, we use the relatively neutral term ESG issues to remain focused on how these issues need to be considered for a more complete investment analysis and better-informed investment decisions regardless of how the investment may be labeled.

[2] See www.cfainstitute.org/learning/future/getinvolved/Pages/investor_trust_study.aspx.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

1.5. Moral Values vs. Economic Value

Investors consider ESG issues for various reasons. Some may see them solely as economic risks and opportunities—a source of economic value. Others may see ESG issues not just as risks and opportunities but also as a matter of moral values. Those motivated by moral values may not wish to become complicit in actions they find objectionable or may actively attempt to make a positive impact on society or the environment. For instance, regardless of the economics of investing in the tobacco industry, an individual investor or a health-related charity may find investing in tobacco unacceptable because smoking is harmful to one's health. But other investors may not share the same concerns. They may invest in the tobacco industry if they believe it is an economically attractive investment, and they may look at ESG issues simply to complement their traditional financial analysis. A fundamental point in the "value versus values" debate is that all investors pursue the same *economic value* (even if with different investment objectives and time horizons), but they inevitably have different *moral values*. The different exclusionary screens used in traditional socially responsible investing help explain the different values being implemented in investing.

Both the values-based and the value-based ESG approaches co-exist in investment management. Values-based investing has also shown growth and evolution. For example, consider that in faith-based finance, the global Islamic finance industry is widely reported as one of the fastest-growing segments in finance. Similarly, there is much interest among both investors and policymakers in modern impact investing, which blends value and values. That said, value-based investing is clearly larger than values-based investing.

1.6. Short-Termism

A major and recurring theme regarding ESG issues is that they do not fit well with short-termism in investing—that is, the excessive focus of some corporate leaders, investors, and analysts on quarterly earnings and a lack of attention to long-term value creation. There are structural reasons and practices that cause short-termism in financial markets, most notably, financial incentives and culture. ESG issues do not fit well with short-termism because they tend to affect financial performance over longer periods. For instance, the poor governance of a large company is more likely to affect the company over the long term than in the next quarter. CFA Institute has been covering the issues of short-termism and corporate culture in its publications, and in the interest of brevity, we do not discuss those issues here.[3]

[3]To see our work on short-termism, see www.cfainstitute.org/ethics/topics/Pages/explore_short_termism.aspx.

1.7. Externalities

Whose responsibility are the externalities linked to ESG issues, such as climate change? More specifically, can the burden of externalities be left to governments and regulators to bear alone?

One view is that confronting climate change through government policy, such as the EU's emissions-trading system, has yet to generate the desired results. Investors should not knowingly leave something to governments that governments have yet to deal with effectively and that will inevitably affect the lives of beneficiaries of the investments. Another view is that fiduciary investors cannot be expected to take responsibility for what is beyond their control, and it is unrealistic to bring externalities within the ambit of fiduciary responsibility.

Perhaps a middle ground between these two views on externalities and investment management is the pursuit of "stewardship" along the lines of the UK Stewardship Code, with a "comply or explain" requirement, which "aims to enhance the quality of engagement between asset managers and companies to help improve long-term risk-adjusted returns to shareholders."[4] Another case in point is the Code for Responsible Investing in South Africa, which "gives guidance on how the institutional investor should execute investment analysis and investment activities and exercise rights so as to promote sound governance."[5]

An interesting case in this debate on externalities is the very large investment funds with global portfolios—"universal owners"—that are exposed to the risk that some investments in the portfolio may affect the returns of other investments. For example, some companies might benefit by externalizing environmental costs through pollution, which, in turn, affects other companies, thus affecting the returns of the universal owner's portfolio. Externalities are an economic reason why universal owners should engage with investee companies and policymakers, but the wider debate on externalities and institutional investors is far from settled.

[4]See www.frc.org.uk/Our-Work/Codes-Standards/Corporate-governance/UK-Stewardship-Code.aspx.
[5]See www.iodsa.co.za/?page=CRISACode.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

1.8. Majority Consider ESG Issues

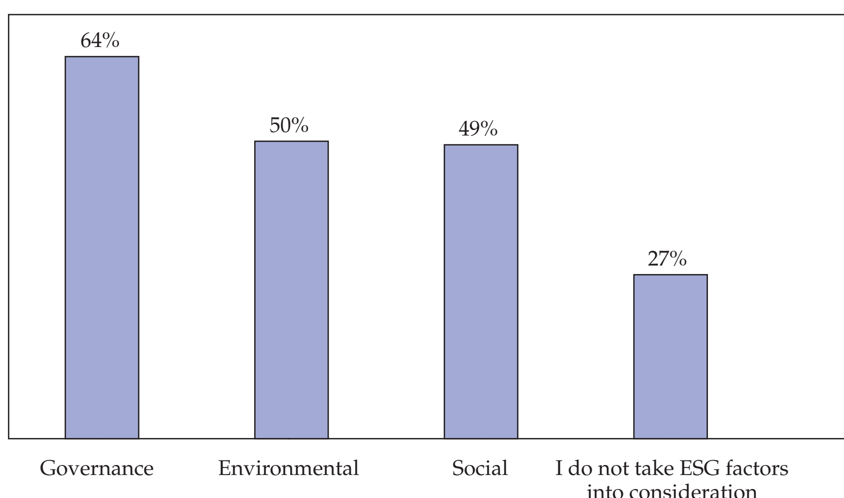
The discourse on ESG issues is based on the premise that these issues, particularly the environmental and social issues, do not receive sufficient consideration in investment decision making. A number of reasons are offered to explain why this is the case. Three stand out:

- It is difficult to assign a monetary value to ESG issues and to integrate them into quantitative models.
- ESG-related disclosure by companies may be limited, unverified, and nonstandardized.
- ESG issues tend to influence financial performance in the long term whereas many investors, as suggested earlier, have relatively short-term horizons.

Despite these challenges, consideration of ESG factors is becoming more common. Evidence points to a growing awareness of ESG issues in investing. In our survey, only 27% of respondents said that they do not consider ESG issues. Thus, 73% consider at least environmental, social, or governance issues, or combinations thereof, in investment decisions (**Figure 1**).

Figure 1. ESG Issues Considered

Which, if any, of the following ESG issues do you take into account in your investment analysis or decisions?

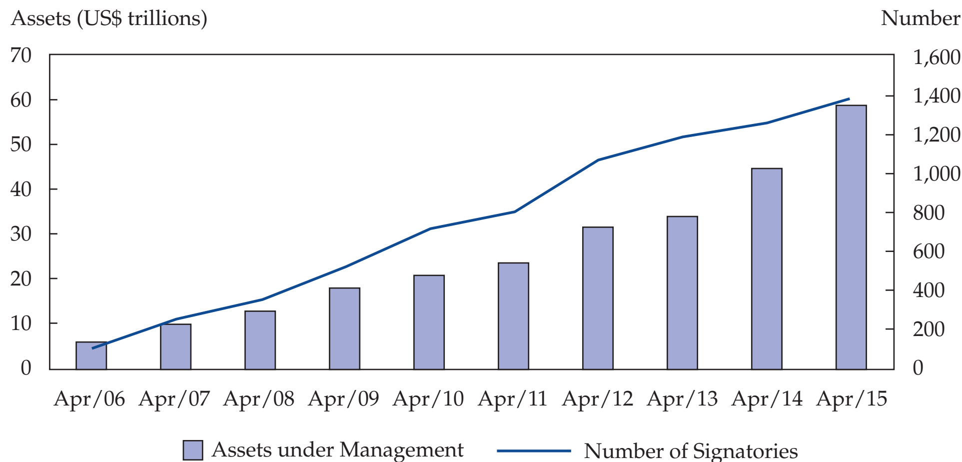


1.9. Awareness Has Been Growing

A well-known indicator of the increasing awareness of ESG issues is the rapidly growing list of signatories to the United Nations–supported Principles for Responsible Investment (PRI), the principal framework for investors who wish to integrate the consideration of ESG issues into their investment decision making. According to PRI, the assets under management (AUM) of its signatories have grown from less than $6 trillion at PRI's launch in 2006 to nearly $60 trillion as of April 2015 (**Figure 2**).

Critics argue that such voluntary consideration of ESG issues results in a reclassification of AUM without a substantive change in how investment decisions are made. Their point is not without merit, and we discuss this criticism later in the guide. But the sheer size of these assets supports the view that many asset owners, investment firms, and professional service providers are giving important consideration to ESG issues in making their investment decisions.

Figure 2. PRI Signatories and Assets under Management



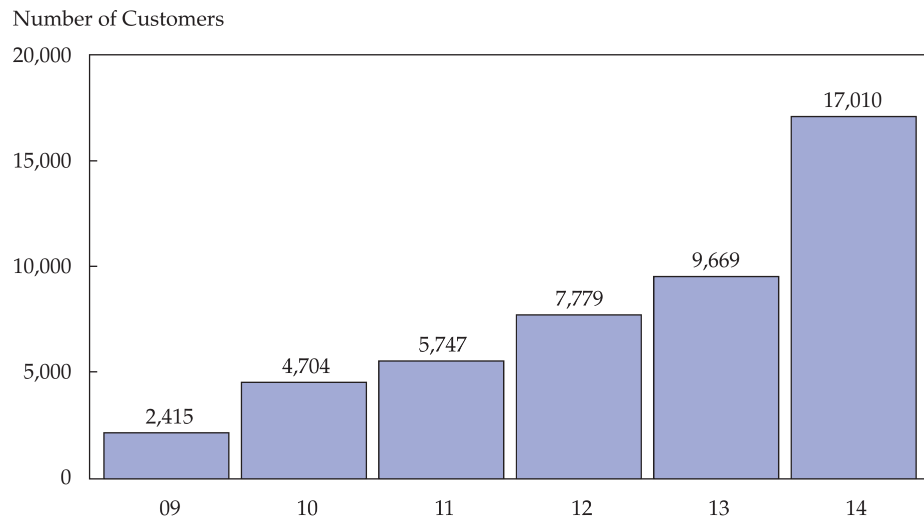
© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

1.10. ESG Data Usage Rising

Another indicator of the growing awareness and consideration of ESG issues is the availability and usage of ESG data and professional services. According to Bloomberg, the number of its customers using ESG data grew by 76% during 2013–2014 (**Figure 3**).

There is a growing number of ESG data and research providers as well as rankings and ratings from both mainstream and specialized providers, such as Reuters, MSCI, and Sustainalystics. Morningstar, a well-known provider of investment research, has announced that it will start offering ESG scores for funds in 2015.

Figure 3. Bloomberg ESG Data Unique Users, FY2009–FY2014



1.11. ESG Issues: To Consider or Not to Consider

Responding to the question, "Why do you take ESG issues into consideration in your investment analysis/decisions?," the highest proportion of survey respondents selected "to help manage investment risks." This response is consistent with the literature on ESG issues, which tends to describe them primarily as risk factors. The fact that clients/investors demand it came in second, which makes intuitive sense. When asset owners demand that investment managers pay attention to ESG issues, managers must take notice. The asset owners could be motivated by value and/or values. Interestingly, "regulation requires it" was selected by only 7% of respondents, supporting the view that the consideration of ESG issues in investing is not led by regulation (see **Table 2**).

We asked those who responded that they do not consider ESG issues to share their reasons why. The top two reasons were lack of demand from investors and the immateriality of ESG issues. Not surprisingly, when these respondents were asked what would make them consider ESG issues, the top two reasons were demand from clients/investors and the materiality of ESG issues with respect to financial performance (see **Figure 4**).

We return to the critical issue of financial performance and ESG issues later in the guide.

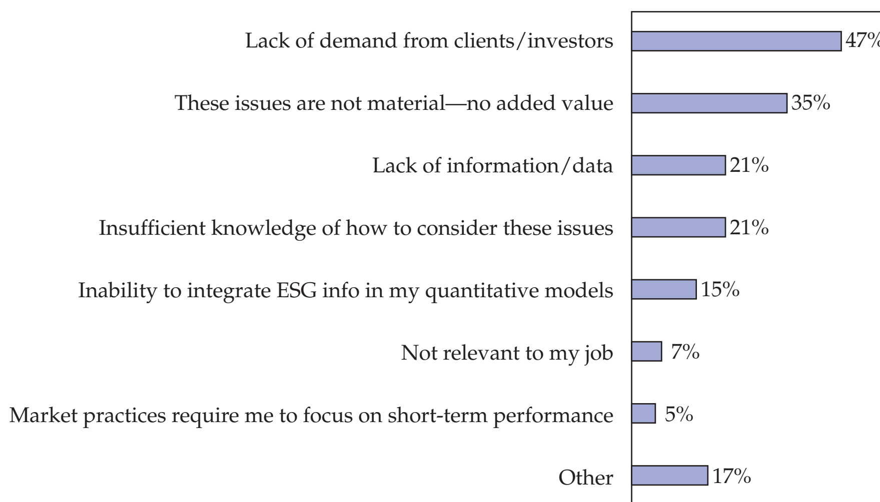
Table 2. Why Consider ESG Issues?

Survey Response	Respondents (%)
To help manage investment risks	63
Clients/investors demand it	44
ESG performance is a proxy for management quality	38
It's my fiduciary duty	37
To help identify investment opportunities	37
My firm derives reputational benefit	30
Regulation requires it	7
Other	5

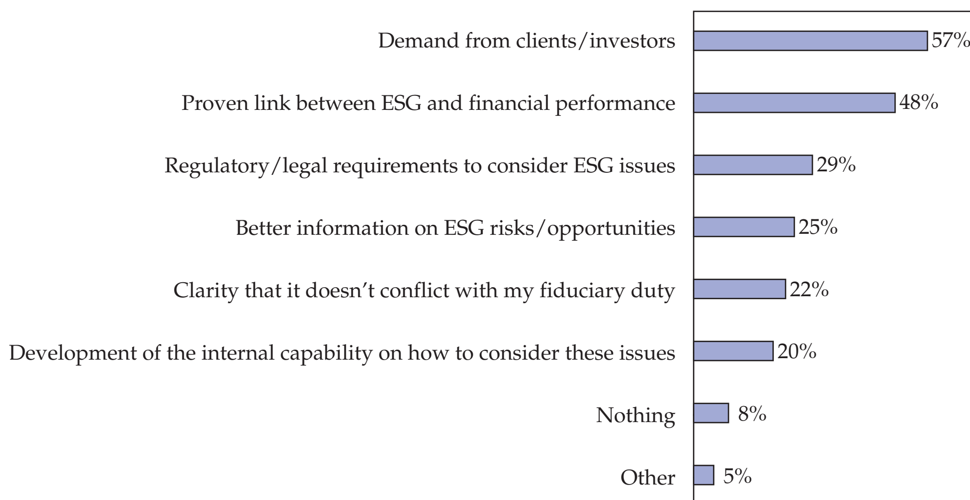
© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

Figure 4. Reasons for Not Considering/Considering ESG Issues

A. Why do you not take any ESG issues into consideration in your investment analysis/decisions?



B. What, if anything, would cause you to begin considering ESG issues in your investment analysis/decisions?



1.12. Focusing on the Relevant and the Material

There are numerous ESG issues, and an investment analyst must narrow them down to a set of issues that are most relevant and material. This process requires reasoning and empirical work and will vary by sector. For example, utilities face greater exposure to environmental risks than do software providers, just as clothing manufacturers face supply chain challenges concerning labor standards that do not seem to affect the financial services industry. A company that incorporates ESG exposures into its long-term strategic planning and adequately communicates that fact to investors will provide a more complete picture of its prospective value.

Complementing traditional financial analysis with a consideration of ESG issues faces the challenge of the changing relative importance of these issues over time. In spite of this challenge, some industry- and sector-specific ESG performance indicator standards have been developed by such entities as the European Federation of Financial Analysts Societies and the Sustainability Accounting Standards Board.

1.13. Climate Change and Other Environmental Issues

According to the Intergovernmental Panel on Climate Change (2014), the continued emission of greenhouse gases is "increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems" and risks posed by climate change would require "substantial and sustained reductions in greenhouse gas emissions." The World Economic Forum's "Global Risks 2015 Report" lists "failure of climate-change adaptation" as number 5 of the "top 10 risks in terms of impact" (World Economic Forum 2015, p. 3).

The risks posed by climate change mean that carbon-intensive energy sources face more regulation and taxation. Future climate change regulations will likely touch many sectors, including those outside carbon-intensive industries—most prominently, insurance.

Although climate change may be the most prominent environmental issue facing investors, it is clearly not the only one. In the CFA Institute survey, respondents rated environmental degradation and resource scarcity above climate change (see **Figure 5**).

1.14. Social Issues Affect More Than Reputation

Social issues play an increasingly important role in the public's perception of investments. News of a poor health and safety record or oppressive labor practices can damage a company's reputation and thus its profitability. Similarly, social trends, such as a growing concern about obesity, are likely to affect the long-term prospects of such sectors as food.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

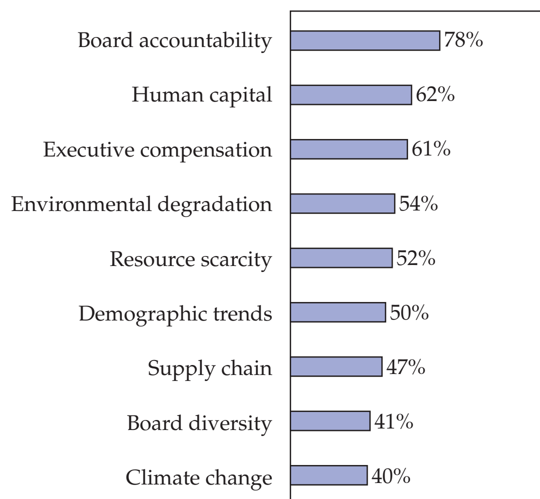
The effects of social issues, however, are not confined to reputation. A breakdown in a company's relationship with labor or the communities it operates in can hurt its profitability. But the effects need not be permanent. Companies can change their practices and convince their stakeholders and investors that they have done so. A case in point is Nike: In the 1990s, Nike was associated with sweatshops in its supply chain in developing countries but took corrective measures to address the issue.

1.15. Governance Issues Widely Considered

Governance issues tend to remain relevant and material across companies and sectors. Historically, among the ESG issues, corporate governance has been covered the most in business and finance curricula and in investment research and analysis. In our ESG survey, respondents also cited a governance issue—board accountability—first when asked which set of issues they consider. Nevertheless, social issues (e.g., human capital) and environmental issues (e.g., environmental degradation) also appear among the issues rated highest by respondents (see Figure 5).

Figure 5. Relative Importance of ESG Issues

Please rate the following ESG issues in terms of importance to your investment analysis/decisions on a scale of 1 to 5, where 1 is not important at all and 5 is very important.



The top rating given by these investment professionals to board accountability, followed by a mix of social and environmental issues, differs from the impression generated by some of the ESG news flows, which often center on climate change.

1.16. Principles, Standards, and Advocacy

A number of principles, standards, and conventions—and associated advocacy organizations—serve as a common reference point for investors considering ESG issues, including PRI (mentioned earlier), UN Global Compact, Equator Principles, OECD Guidelines for Multinational Enterprises, International Labor Organization Declaration on Fundamental Principles and Rights at Work, SA 8000 (auditable social certification standards for decent workplaces), and ISO 26000 (guidance on how businesses and organizations can operate in a socially responsible way). Some investors use these frameworks in applying ESG methods, such as exclusionary screening and active ownership. Others are likely to refer to them in ESG integration.

There are also organizations in different parts of the world that are working to promote ESG considerations in investing. These include the Global Sustainable Investment Alliance (including USSIF and Eurosif), Global Reporting Initiative, Sustainability Accounting Standards Board, World Resources Institute, International Integrated Reporting Council, CDP (formerly, Carbon Disclosure Project), Accounting for Sustainability, Global Impact Investing Network (GIIN), and International Corporate Governance Network, among many others.[6]

1.17. Law and Regulation

A range of laws and regulations pertaining to ESG issues are already in place—and more keep coming. A 2013 study by KPMG, the Centre for Corporate Governance in Africa, the Global Reporting Initiative, and UNEP states that there are 180 laws and regulatory standards in 45 countries pertaining to corporate sustainability reporting; of those, 72% are mandatory (p. 8). A prominent example is the codes of corporate governance used in different parts of the world. Other examples include the exclusion of controversial weapons (Belgium), a stewardship code for institutional investors (United Kingdom), and disclosure of CSR (corporate social responsibility) activities of listed companies (Malaysia). A recurring development, in various parts of the world, is a requirement that investors

[6]For more information about some of these organizations, see http://bit.ly/ESG-orgs.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

disclose to what extent they consider environmental and social issues in investment decisions and shareholder rights.

1.18. Relevance across Asset Classes

Most of the discourse on ESG issues has been focused on listed equities, but the practice of considering ESG issues with respect to other asset classes, most notably fixed income, is growing.

In fixed income, ESG issues are mostly about risk. ESG analysis in fixed income considers how such issues as carbon emissions, labor relations, and corruption might affect issuers' creditworthiness. A useful reminder is the case of the mining company Lonmin. After violent labor conflicts in Marikana, South Africa, in 2012, the company was forced to issue a warning regarding the servicing of its debt. Thus, risk pertaining to social issues, which could easily be overlooked in a traditional financial analysis, could also prove costly for fixed-income investors.

As in equities, governance in fixed income is the most analyzed of the ESG issues. For example, in an emerging-market high-yield corporate debt issue, fixed-income investors need to understand the full corporate structure and governance of the issuing entity and related entities before making any investment decision.

In recent years, such organizations as PRI and INSEAD have put together some case studies on ESG considerations in other asset classes, including private equity, but more needs to be done to clarify how to consider ESG issues across asset classes.

2. Application: The Six Methods for Considering ESG Issues

In Chapter 1, we discussed background information on ESG considerations in investing. In Chapter 2, we explain how ESG considerations in investing are being implemented. Investors use six methods for bringing ESG considerations into their decision making: exclusionary screening, best-in-class selection, thematic investing, active ownership, impact investing, and ESG integration. These methods are not mutually exclusive and are often used in combinations. They are used by both value- and values-motivated investors.

2.1. Exclusionary Screening

Exclusionary screening refers to avoiding securities of companies or countries on the basis of traditional moral values (e.g., products or services involving alcohol, tobacco, or gambling) and standards and norms (e.g., those pertaining to human rights and environmental protection). In values-based exclusions, the focus is on the business of the company, and entire sectors are excluded. In norms-based screening, the focus is on the company's behavior regarding internationally accepted norms in such areas as human rights and labor standards. Where such values-based avoidance is built into the governing legislation (e.g., a ban on financing controversial weapons), exclusionary screening can also become a legal obligation.

Exclusionary screening is the oldest ESG method. An important point to note regarding exclusionary screening based on values and norms is that the particular security will not be invested in regardless of how economically attractive it may become. The remainder of this section is derived from the descriptions provided by MSCI in 2014 in explaining the values-based and norms-based exclusions for its ACWI Select Global Norms and Criteria Index.

Exclusions for the ACWI Select Global Norms and Criteria Index

Companies involved in (1) serious violations of widely accepted international norms of responsible corporate behavior and (2) certain controversial business activities are excluded. The norms-based exclusions are defined as violations of standards related to human rights, working conditions, the environment, anti-corruption, and control of weapons. The business activities exclusions are for involvement in alcohol, gambling, tobacco, military weapons, and adult entertainment.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

Examples of Violations of International Norms

Human rights: Companies involved in serious violations of internationally accepted norms concerning fundamental human rights, as defined in Principles 1 and 2 of the UN Global Compact, are excluded. Such violations include involvement in abuses concerning civil and political liberties, the deleterious impact of a firm's operations on freedom of expression and free speech, and infractions concerning the rights of indigenous peoples. Companies assessed as being involved in "very severe" controversies concerning the following key performance issues are excluded: human rights abuses, support for controversial regimes, freedom of expression and censorship, and impact on local communities.

Working conditions: Companies involved in serious violations of internationally accepted norms concerning fundamental labor rights, as defined in Principles 3, 4, 5, and 6 of the UN Global Compact, are excluded from the index. Such violations include involvement in forced labor, child labor, employment discrimination, and failure to respect employee rights of freedom of association and collective bargaining.

Examples of Involvement in Controversial Businesses

Alcohol: Companies earning greater than 5% of revenues from the manufacture, distribution, or sale of alcoholic beverages are excluded.

Gambling: Companies earning greater than 5% of revenues from (1) owning and/or operating gambling establishments and/or (2) the manufacture or sale of products necessary for the gambling industry are excluded.

2.2. Best-in-Class Selection

Best-in-class selection refers to preferring companies with better or improving ESG performance relative to sector peers. It could be implemented on either the level or the change in ESG performance—that is, investing more in companies with better ESG performance levels or momentum relative to sector peers. Best-in-class methodology is sometimes referred to as positive selection or positive alignment. In the remainder of this section, we discuss the application of best-in-class selection by NN Investment Partners.[7]

[7]Formerly, ING Investment Management; our thanks to Nina Hodzic and Jeroen Bos for contributing information for this section.

Approach to Best-in-Class Selection

NN Investment Partners determines the relative position of companies in their respective industry by using ESG scores, which are based on both the opportunities and the risks that companies face. ESG criteria comprise around 150 factors, partly depending on the industry. Analysts look at whether a company has ESG policies and management systems in place, whether it has signed up for international initiatives, and what the actual conduct of the company is. For each industry, analysts at NN Investment Partners initially focus on the top 50% of companies in terms of ESG scores in each sector. Selection of companies that are close to the sector average depends on overall portfolio construction features, such as sector and regional risk characteristics and restrictions.

Belief regarding Best in Class

NN Investment Partners believes that the best-in-class method can improve the risk and/or return characteristics of a portfolio. A strong ESG policy makes companies more aware of the various risks they face and increases overall transparency. Companies that score well on ESG issues are often more efficient with lower environmental costs—for example, a lower electricity or water bill. In addition, these companies are expected to have empowered human capital, resulting in higher productivity and a stronger reputation among clients, other stakeholders, and society itself. A strong governance framework secures the legal position of a (minority) shareholder in many ways, which starts to matter in difficult times. A best-in-class methodology needs to be combined with a check on ESG controversies in order to avoid potentially misleading claims, or "greenwashing." Also, momentum in ESG performance is a strong signal of a change in the market's perception of a company. Therefore, both the level of ESG scores and the change in ESG scores over time need to be considered. Two examples of best-in-class companies, included in NN Investment Partners' sustainable equity strategies, follow.

Best in Class: ASICS

ASICS, together with its subsidiaries, manufactures and sells sporting goods. The company is headquartered in Japan. Through constant research and innovation, the company creates products and services that help people enjoy the physical and mental benefits of sports, contributing to a healthy society. ASICS seeks to integrate sustainability as a basic consideration in the design of its processes and products and to improve sustainability throughout the entire value chain. ASICS regularly checks working conditions in its supply chain. ASICS' rating system scores each factory on a range of criteria, such as working hours and health and safety. ASICS' ESG score, as determined by NN Investment Partners on the basis of data from Sustainalytics, is 68.4 versus the industry average of

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

57.2. The company scores well above average in all three areas (environmental, social, and governance) and shows positive momentum over the years. The company exhibits strong ESG policies, reflecting a commitment to mitigate related risks and impacts. There is significant evidence that corporate behavior at ASICS is in line with its strong ESG policies.

Best in Class: Linde

Linde is a global gas and engineering company headquartered in Germany. The company offers a wide range of compressed and liquefied gases as well as chemicals. Linde develops new applications in close collaboration with its customers, taking into account their specific needs. The company pays particular attention to the environmental impact of its production processes and focuses on making its technical processes and plants more energy efficient. In this way, the company can reduce carbon emissions of its own operations as well as those of its customers. The company has clear targets in the energy efficiency area. An improvement of 0.8% was reached between 2008 and 2012, and a further 0.86% a year is required to meet the 2017 target. The company's water intensity is well below the industry average. Linde's ESG score is 74.7 versus the industry average of 63.3 and shows positive momentum. The company scores well above average in all three areas (environmental, social, and governance). Linde has strong ESG policies and management systems and systematically identifies and controls risks along the product value chain. There is significant evidence that Linde is "walking the talk" with its strong ESG policies.

2.3. Active Ownership

Active ownership refers to the practice of entering into a dialogue with companies on ESG issues and exercising both ownership rights and voice to effect change. Engagement with a company could be for monitoring or influencing outcomes and practices regarding ESG issues. Active ownership is in sharp contrast to the idea that investors should vote with their feet—that is, simply sell off the investments with questionable practices.

Activism varies in terms of aggressiveness of the approach. Some investors may use publicized and confrontational measures, whereas others may prefer a more discreet approach. Note that "active ownership" is not necessarily the same as "activist investing," which may rely more on aggressive measures commonly associated with hedge funds.

The following actions are part of active ownership:

- Vote in shareholder general meetings.
- Write a letter to the company.

- Meet with company representatives.
- Raise a question at a general meeting of the shareholders.
- File a shareholder resolution.
- Attempt to gain a seat on the board.
- Call for an extraordinary/special meeting of the shareholders.
- File a complaint with the regulator/authority.
- Issue a statement to the news media.

Achieving the desired results of active ownership takes time and is not without cost—most notably, staff time—thus, some investors prefer to pool resources and outsource some of the activities related to engagement. Next, we look at case examples of active ownership directly relevant to ESG issues.

JP Morgan Chase's Say-on-Pay Vote

In the United States, say-on-pay votes are mandated by the Dodd–Frank Act. Under the statute, shareholders can endorse or object to executive compensation. Most companies can get majority support for proposed executive compensation. In 2014, according to Towers Watson, the average support for company pay practices was 91%, and only 2% of companies failed to get majority support. In 2015, in the say-on-pay vote at JP Morgan Chase, a record low percentage of shareholders approved the company's pay packages for its executives. This compensation proposal also faced criticism from proxy adviser Institutional Shareholder Services. In total, 61% voted in favor of the measure at the annual meeting—down from 79% in 2014 and 94% in 2013. After the vote, it was reported that JP Morgan's board would consider changes to compensation policies for top executives.

The Church of England and Environmental Standards

In 2013, the Church Investors Group (of the Church of England) continued its engagement program of encouraging companies that operate in carbon-intensive sectors, or that could be considered laggards in comparison with their peers, to report their greenhouse gas emissions to the CDP (formerly, Carbon Disclosure Project) and to adopt emissions-reduction measures. To enable engagement across the whole market, the initiative was based on sending tailored letters to the targeted companies. The program resulted in a

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

72% improvement in the environmental performance of the 53 companies targeted. An academic assessment of the initiative showed, with 90% confidence, that Church Investors Group members were responsible for the most improvement among the FTSE 250 companies.[8]

Mitigating Governance Risk through Engagement

During 2013–2015, Sparinvest, an asset management firm in Denmark, held a dialogue with the management of a telecom company headquartered in Japan to improve both the substance and the transparency of the latter's anti-corruption strategies, policies, and systems. This engagement between Sparinvest and the telecom company was part of a wider engagement coordinated by PRI. Through meetings and regular communications with management, Sparinvest encouraged the company to improve in a number of indicators, including greater disclosure around whistleblower policies and incidents; the application of anti-corruption policies to contractors, subcontractors, and suppliers; and internal risk assessments and regular monitoring of the internal anti-corruption program. During the period of engagement, the company issued its first annual report with information on the integration of its sustainability and corporate social responsibility practices as well as its first anti-bribery handbook for its increasingly global workforce, covering such risks as facilitation payments. Most significantly, the company issued a clear statement of zero tolerance of corruption. At the beginning of the engagement, in 2013, a third-party provider scored the company—on the basis of public disclosure and a binary scoring method—25% against a series of 18 governance-related indicators. After the engagement with Sparinvest, the company's score rose to 81%.[9]

2.4. Thematic Investing

Thematic investing refers to investing that is based on trends, such as social, industrial, and demographic trends. A number of investment themes are based on ESG issues, including clean tech, green real estate, sustainable forestry, agriculture, education, and health. Although thematic investing is not confined to ESG issues, here we focus on examples of thematic investing that pertain to ESG issues.

[8]Church Investors Group, "Being Good Stewards: Church Investors and Corporate Engagement" (www.churchinvestorsgroup.org.uk/system/files/documents/JamesCorah/CIG-GoodStewards.pdf).
[9]Olivia Mooney, Principles for Responsible Investment; information courtesy of David Orr, Sparinvest.

Profile of a Water- and Air-Themed Fund

This fund is for investors who (1) wish to invest in the shares of companies focused on the water-related sector worldwide, (2) are willing to bear significant variations in market value and thus have a low aversion to risk, and (3) have a long-term investment horizon (at least seven years). It aims to invest in equities issued by companies operating in the water and air sectors worldwide. The companies targeted in the water sector include water production companies; water conditioning and desalination companies; water suppliers; water bottling, transport, and dispatching companies; companies specializing in the treatment of waste water, sewage, and solid, liquid, and chemical waste; companies operating sewage treatment plants; and companies providing equipment, consulting, and engineering services in connection with these activities. The companies targeted in the air sector include those responsible for inspecting air quality, suppliers of air-filtration equipment, and manufacturers of catalytic converters for vehicles. The fund invests at least two-thirds of its total assets in equities issued by companies operating in the water sector.

Profile of an Alternative Energy–Themed Fund

The investment objective of this fund is to provide investors with long-term capital. To achieve this objective, the fund intends to invest at least 80% of its net assets in equity securities of globally based companies involved in the alternative energy or energy technology sectors. Alternative energy includes energy derived from such sources as solar and wind power, hydro-electricity, tidal flow, wave movements, geothermal heat, and biomass/biofuels. Energy technology includes technologies that enable these sources to be harnessed; various kinds of storage and transportation of energy, including hydrogen and other types of fuel cells, batteries, and flywheels; and technologies that conserve energy or enable more efficient use of energy. Fund managers believe that over the next 20 years, the alternative energy sector will benefit from the combined effects of higher energy prices driven by population growth, developing world industrialization, and diminishing fossil fuel supplies; falling costs of alternative energy assets as the technology improves; energy security concerns; and climate change and environmental issues. The fund is a long-only equity portfolio of 30 equally weighted positions.

Profile of a Food- and Agriculture-Themed Fund

This fund seeks to achieve capital appreciation. To achieve this investment objective, it invests in a global and diversified portfolio of investments that provide exposure to the food and agriculture sectors. The fund is permitted to invest in a broad range of instruments, including transferable securities, units in collective investment schemes, exchange-traded funds, and exchange-traded commodities. It intends to take full advantage of the

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

ability to invest directly in derivatives in order to achieve the objective. In particular, the fund is expected to combine core conventional long-only holdings with synthetic equity swaps, contracts for differences for long and short equity positions, stock indexes or stock index options, and equity derivatives and equity derivatives baskets.

2.5. Impact Investing

Impact investing refers to investing with the disclosed intention to generate and measure social and environmental benefits alongside a financial return. According to Global Impact Investing Network, the practice of impact investing has four core characteristics: (1) investors intend to have a social and/or an environmental impact, (2) investments are expected to generate a financial return on capital and, at a minimum, a return of capital, (3) investments are to generate returns that range from below market to risk-adjusted market rate, and (4) investors are committed to measuring and reporting the social and environmental impacts.

The following examples concern Bridges Ventures, an impact investing specialist firm founded in 2002 in the United Kingdom.

Investment Strategy

According to the firm, its

> investment strategy is to focus on opportunities where investments can generate investor returns through helping meet pressing social or environmental challenges—be it backing businesses that generate jobs in underserved markets, or building environmentally friendly care homes for the elderly to sustain an ageing population, or providing flexible financing for innovative community transport models.

The Gym

The Gym pioneered the concept of low-cost gyms in the United Kingdom, opening its first site in 2008. It provides fitness facilities in purpose-built gyms that are open 24 hours and located mainly in underserved areas. The transaction represents a 50% internal rate of return (IRR) and a 3.7× multiple for investors in Bridges funds, of which a minority were rolled over to retain a 25% stake going forward, enabling these investors to benefit from the future growth in the business.

The Hoxton

The investment in the hotel The Hoxton produced employment for one of the bottom 3% of deprived wards in England. More than 70% of The Hoxton staff live in underserved areas. The hotel has won praise and awards from different publications, including *GQ*, the *Guardian*, and Observer Travel Awards. It has consistently achieved 90% or greater occupancy rates for its 208 rooms. The exit delivered a return of £13.3 million to Sustainable Growth Fund I, representing an IRR of 47% and 8.8× the total investment, and £1.9 million to Sustainable Growth Fund II, representing an IRR of 35% and 3.4× the total investment.

SimplySwitch

SimplySwitch is an independent and free online and telephone-based price comparison and switching service that offers consumers immediate, impartial information on the most economical and appropriate gas, electricity, home phone, broadband, and mobile phone suppliers. It was also the first service of its kind to be accessible by telephone as well as the web, making it easier for those who lack the resources or know-how to go online to save money on their household bills. SimplySwitch was sold for £22 million. The exit returned £7.5 million, which represented a money multiple of 22× for investors.[10]

2.6. ESG Integration

ESG integration refers to systematic and explicit inclusion of ESG risks and opportunities in investment analysis. Unlike the best-in-class method, ESG integration does not necessarily require peer group benchmarking or overweighting (underweighting) the leaders (laggards). Similarly, ESG integration does not require any *ex ante* criteria for inclusion or exclusion. The integration of ESG risks and opportunities into investment analysis is relevant for most, if not all, investors. The following are examples of ESG integration.

Valuation of Mining Companies and ESG Risks

When valuing stocks in the mining sector, analysts at Citi Research analyze the management of the relevant ESG issues by the mining companies. In particular, analysts carry out environmental and social impact assessments and closure planning to gauge the quality of the process that mining companies use to assess and manage the environmental and social impacts of a mine throughout its life and beyond. As part of these assessments,

[10]See www.bridgesventures.com/exits.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

analysts use environmental indicators (e.g., the ISO 14001, a family of standards that provide practical tools to manage environmental responsibilities) as well as health and safety indicators (e.g., lost production time due to labor injury frequency), along with an analysis of government relations and local economic and community engagement. These analysts are of the view that effective management of ESG risks can significantly reduce mine development lead times, which they see as critical to future earnings capacity. Exercising their judgment, the analysts appropriately adjust the discount rate for mining companies that have lower ESG risks. For example, in one case, the discount rate of a mining company with better ESG management was adjusted from 10.7% to 7.5%, which increased the estimated intrinsic value of its stock by 29%.[11]

Valuation of a Mining Stock and ESG Issues

Anglo American, a mining company with operations spread across a number of countries, has received mixed assessments of its ESG performance. Although some analysts have taken a favorable view of the company's ESG performance for such reasons as its risk mitigation processes and track record on environmental management, others have taken a different view. In 2015, analysts at Robeco, an asset management company, stated that Anglo American scores low on some of its most material ESG issues, such as occupational health and safety and management of local stakeholders. These analysts believe that in platinum mining, Anglo American's profitability is affected by wage inflation and labor strikes. Accordingly, these analysts revised their forecasts of costs upward by 400 bps, which reduced margins by 80 bps and the target price by –7%. In addition, reflecting several ESG factors, analysts at Robeco adjusted the weighted average cost of capital upward by 50 bps, which reduced the target price by –12%. The total impact of integrating ESG risk analysis into the Robeco analysts' estimate of Anglo American's target price is –19%.[12]

Valuation of Utilities and ESG Risks and Opportunities

In the United States, the Environmental Protection Agency's emission and carbon regulations are expected to have a material impact on valuing the power sector. Analysts at ClearBridge Investments believe that these regulations will increase the operational costs of the power plants with higher emission levels (e.g., older, less efficient coal plants) and require additional environmental spending. According to these analysts, incremental expenditures on environmental retrofits should make smaller, older coal plants uncompetitive and lead to their retirement. Implementation of mercury regulations alone could

[11]Justin Sloggett, Principles for Responsible Investment, email message to one of the authors.

[12]Justin Sloggett, Principles for Responsible Investment, email message to one of the authors; our thanks to Willem Schramade, Robeco Asset Management, for permission to use the Robeco information.

lead to retirement of an estimated 17% of the country's coal-fired capacity by 2017. Thus, the companies owning newer plants with lower emissions (consisting of renewables, efficient coal, combined cycle gas plants, and nuclear plants) will be relative winners. The increasing penetration of distributed solar power generation and utility-scale energy storage will have a disruptive effect on utilities over the longer term. For example, NextEra Energy (NEE), the largest wind and solar energy producer in the United States, will see a higher output growth and a more efficient cost structure than some of its peers as it drives earnings growth with these low-carbon energy sources. ClearBridge analysts believe that NEE has an attractive above-average earnings growth rate of 6%–8% and an attractive relative valuation.[13]

Deepwater Horizon *and BP Credit Default Swap Spreads*

Poor management of ESG factors can contribute to corporate default, price volatility of credit securities, credit rating downgrades, and widening credit default swap (CDS) spreads. Consider the example of BP. On 20 April 2010, the *Deepwater Horizon* oil-drilling platform exploded, killing 11 workers and resulting in a large oil spill, the results of which cost BP several billion dollars. Prior to the catastrophe, some of the ESG research on BP had shown that the company had significant safety and environmental violations at its US operations, including fines. For example, in March 2005, 15 people died and 180 were injured in an explosion at BP's Texas City refinery; in March 2006, there was a massive spill from a BP pipeline at Prudhoe Bay, Alaska. Most investors were not paying attention to the concerns that some ESG research reports had raised. In 2010, as news of the oil spill hit the markets, the BP five-year CDS spread jumped from under 100 bps to as high as 600 bps. Only then did market participants start to pay attention to BP's unenviable record on health and safety. Not only BP's shareowners but also its creditors were affected. Had investors paid attention to ESG research, they could have taken a number of actions to manage BP's higher-risk profile—for example, by underweighting BP in their portfolios or by engaging with BP to improve its health and safety standards.[14]

ESG in Private Equity: Apax Partners

Apax Partners adopted the Private Equity Council's guidelines for responsible investment in 2009 and became a signatory to the Principles for Responsible Investment in 2011. According to Apax Partners, it considers sustainability issues in the early stages of

[13]According to Tatiana Thibodeau, senior analyst at ClearBridge Investments (http://www.clearbridge.com).
[14]Presentation by Christoph Klein on ESG integration in fixed income at the 2015 CFA Institute Annual Conference.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

any potential investment opportunity and monitors them throughout its stewardship of the investee company. Apax Partners has a number of initiatives in place in its portfolio companies to reduce complexity, waste, and energy consumption. Two examples, the first pertaining to energy and the second to waste management, follow.

Plantasjen: This company has improved its energy performance by increasing insulation in all newly built stores and by installing heat pumps in six stores in the last 12 months. The increased insulation has reduced the energy consumption of the newly built stores by approximately one-third compared with older stores, and the newly installed heat pumps have reduced energy consumption by approximately 20%.

KCI: This company offers a recycling program for facilities and patients that allows the safe disposal of certain single-patient negative pressure wound therapy (NPWT) devices. KCI provides this recycling program free of charge to the customer. KCI has partnered with Sharps Compliance Inc. to convert customer-recycled KCI single-patient NPWT devices into PELLA-DRX, an industrial resource with a BTU content greater than or equal to that of coal. Therefore, none of the Sharps Compliance–processed medical waste ends up in a landfill; instead, it is repurposed into an industrial resource capable of powering homes and businesses.[15]

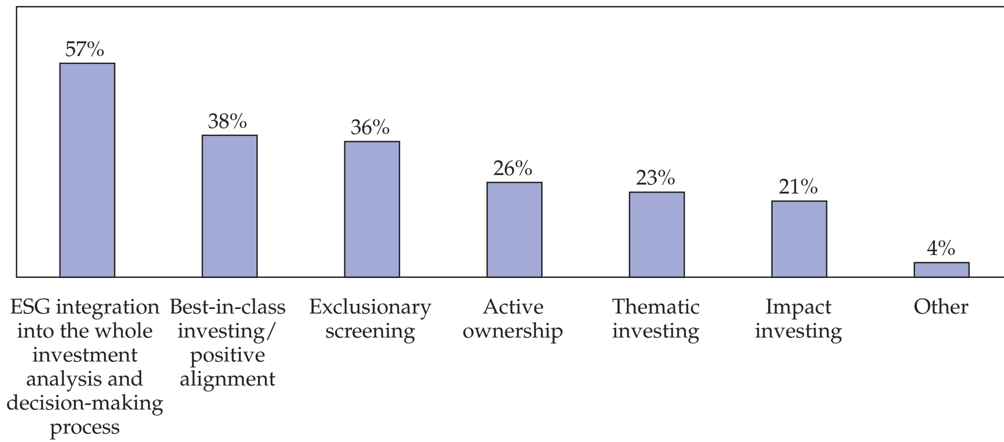
2.7. ESG Integration Used More Widely

Our survey responses indicate that ESG integration is the most used (57%) of the six methods available. This finding contrasts sharply with the perception that ESG issues are only about the exclusionary screening of "sin stocks" (alcohol, tobacco, and gambling). With the signatories of PRI, which emphasizes ESG integration, having nearly $60 trillion (as of April 2015) in AUM, it makes intuitive sense that ESG integration is becoming more common among investment professionals (**Figure 6**).

[15]The case study on Apax Partners was adapted from INSEAD, "ESG in Private Equity: A Fast-Evolving Standard" (2014): http://centres.insead.edu/global-private-equity-initiative/research-publications/documents/ESG-in-private-equity.pdf.

Figure 6. Methods of Considering ESG Issues

A. How do you take ESG issues into consideration in your investment analysis/decisions?



© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

3. Debate: Issues regarding ESG Considerations

In this third and final chapter, we cover a range of issues that come up in the debate on ESG considerations in investing.

3.1. Disclosure Remains a Challenge

Investors can consider ESG issues in their investment decisions only if they have relevant and timely information to do so. At present, mandatory corporate disclosure provides limited information on ESG-related risks and opportunities. The ESG-related disclosure may be released at a different time than the regular financial statements, making integration harder.

It is worth noting, however, that disclosure and data have improved. Some initiatives—such as the Sustainable Stock Exchanges Initiative,[16] which shows how exchanges can work together with investors, regulators, and companies to enhance corporate ESG transparency—are seeking to improve ESG disclosure. Similarly, availability of data is on the rise, even if better quality and greater quantity are needed. For instance, the number of large global companies that disclose their greenhouse gas emissions and water management and climate change strategies to CDP, an environmental nongovernmental organization, rose from 295 in 2004 to 5,003 in 2014.

Our survey shows that for the majority of respondents, public information, third-party research, and company reports are the main sources of ESG information. As many as 61% of respondents agree that public companies should be required to report at least annually on a cohesive set of sustainability indicators in accordance with the most up-to-date reporting framework (**Figure 7**).

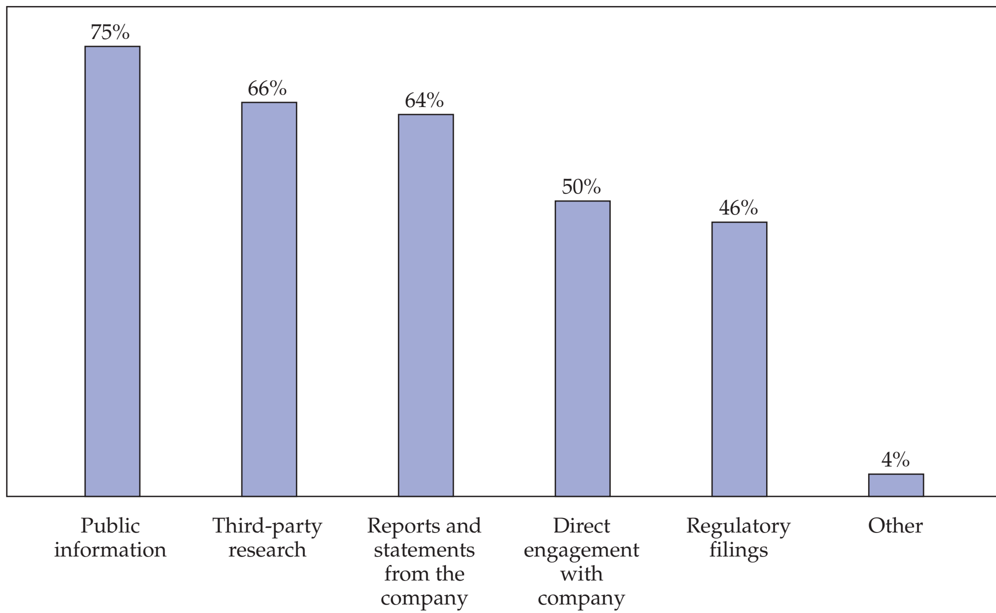
The challenge with voluntary disclosure is that companies may disclose and exaggerate only what reflects well on them and downplay or not disclose what does not. This behavior could both limit ESG analysis and bias it in favor of disclosure rather than performance.

A clear majority (69%) of these respondents agree that ESG disclosures by listed companies should be subject to some level of independent verification. Respondents were divided on whether ESG disclosures should be subject to limited verification or similar to an audit and whether ESG professional services firms or public accounting firms should carry out the independent verification (**Figure 8**).

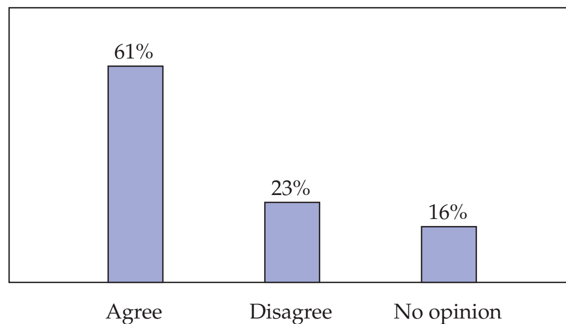
[16]See www.sseinitiative.org.

Figure 7. ESG Information Sources and Mandatory Reporting

A. How do you get ESG information/data?



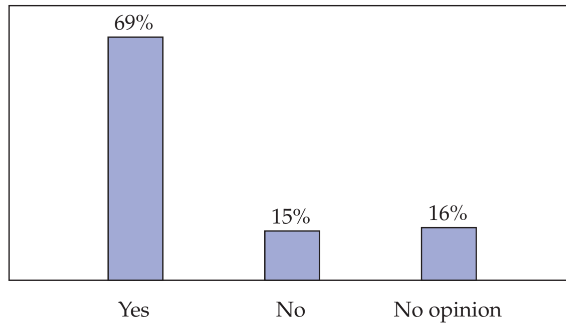
B. Do you agree or disagree that public companies should be required to report at least annually on a cohesive set of sustainability indicators in accordance with the most up-to-date reporting framework?



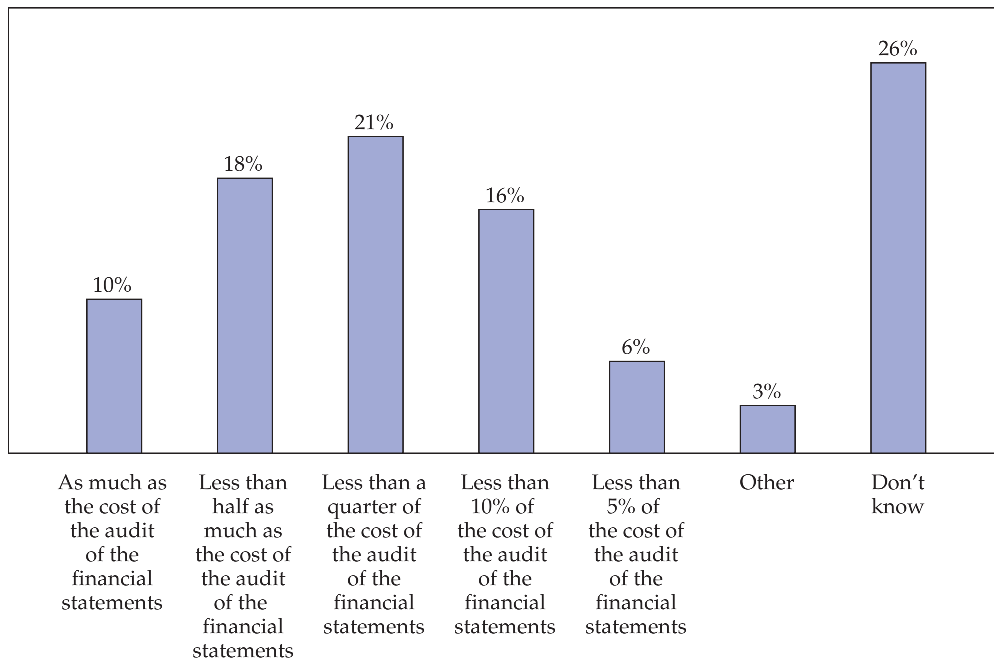
© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

Figure 8. Verification of ESG Disclosures and Its Cost

A. Do you think it is important that ESG disclosures be subject to some level of independent verification of ESG disclosures?



B. Which best represents your view on how much should be spent to obtain independent verification?



Disclosure and independent verification come with a cost. Only 10% of respondents said that listed companies should spend on an ESG audit as much as they spend on an accounting audit.

3.2. Fiduciary Responsibility

The law regarding fiduciary duty varies from country to country and is thus difficult to generalize. Two reports—"A Legal Framework for Integrating Environmental, Social, and Governance Issues into Institutional Investment," also known as the Freshfields Report (2005),[17] and the Fiduciary II Report (2009)[18]—found that considering ESG issues in pursuing economic value is permitted, if not required, by legal interpretations of fiduciary duty. However, there remains some ambivalence on the subject. For instance, in our member survey, when asked why they consider ESG issues, 37% of respondents indicated that they do so because it is their fiduciary duty. Among those who do not consider ESG issues, 22% suggested that they would consider ESG issues if they had clarity that doing so does not conflict with their fiduciary duty.

Based on an analysis of eight countries, including both common law and civil law jurisdictions, in the context of ESG integration, the report "Fiduciary Duty in the 21st Century" contends that "failing to consider long-term investment value drivers, which include environmental, social and governance issues, in investment practice is a failure of fiduciary duty" (Sullivan, Martindale, Feller, and Bordon 2015, p. 9).

The case for the consideration of ESG issues by fiduciary investors is strengthened when the law governing fiduciary duty facilitates it. For example, in South Africa, the updated Regulation 28 of Pension Funds Act 24/1956, effective 1 January 2012, explicitly includes references to ESG considerations:

> A fund has a fiduciary duty to act in the best interest of its members whose benefits depend on the responsible management of fund assets. . . . Prudent investing should give appropriate consideration to any factor which may materially affect the sustainable long-term performance of a fund's assets, including factors of an environmental, social and governance character.

The reasoning underlying fiduciary responsibility is inevitably linked to what effect ESG considerations have on the financial performance of investments. There is a lingering misperception that the principal ESG method is exclusionary screening, to be used by only values-motivated investors.

[17]See www.unepfi.org/fileadmin/documents/freshfields_legal_resp_20051123.pdf.
[18]See www.unepfi.org/fileadmin/documents/fiduciaryII.pdf.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

3.3. Financial Performance

Financial performance is one area that has received substantial, if not the most, attention in research on ESG issues. The Sustainable Investment Research Initiative Library,[19] a searchable database of academic studies, lists hundreds of research papers regarding ESG issues, many of which are on performance.

In 2014, a report by the University of Oxford and Arabesque Partners analyzed about 200 studies to assess how sustainable corporate practices can affect investment returns. It concluded that "88% of the research shows that solid ESG practices result in better operational performance of firms and 80% of the studies show that stock price performance of companies is positively influenced by good sustainability practices" (Clark, Feiner, and Viehs 2014).

There are other such literature reviews and metastudies. The metastudy on ESG issues and performance by Mercer (2009)—"Shedding Light on Responsible Investment: Approaches, Returns and Impact"—reached similar conclusions.

The key point is that, on the whole, the empirical evidence does not support the notion that ESG considerations necessarily adversely affect performance. In the case of ESG integration, this finding makes intuitive sense because, in principle, there should be no adverse impact on performance if it is simply about doing a more complete investment analysis.

3.4. Fossil Fuel Divestment and Stranded Assets

Divestment campaigns have been part of the evolution of ESG considerations in investing. A prominent divestment campaign concerned South Africa's apartheid regime in the 1980s. Such campaigns tend to make their impact by influencing the public discourse, which could result in stigmatization of the companies and sectors involved and, more importantly, changes in legislation affecting them. The latest divestment campaign pertains to fossil fuels in the context of climate change and touches on a range of sectors, from coal mining to steel. Many educational endowments face pressure from students and other stakeholders to divest from fossil fuel. Some endowments have announced decisions to divest, whereas others have announced decisions not to divest. A key point made by divestment campaigners is that one should not be able to profit from injustice. But investment firms' divestment based on moral values raises concerns about fiduciary duty and financial performance.

One area in which the debate on fossil fuel divestment becomes an economic consideration for fiduciary investors is *stranded assets*. There is a risk that some climate-sensitive assets, most notably fossil fuel reserves, could suffer from write-offs or downward revaluations, or

[19]See www.calpers.ca.gov/page/investments/governance/sustainable-investing/siri-library.

conversion to liabilities largely because of regulation. If financial markets do not price the risks of stranded assets, investment performance could be affected.

3.5. Regional Differences

There are perceived differences across (and within) regions on how willing and able investment firms are to address ESG issues in investing. The results of our survey seem to confirm such differences. Some of the responses most favorable to ESG issues tended to come from the Europe, Middle East, and Africa (EMEA) region and the Asia-Pacific region and the least favorable from North America. A relatively high proportion of survey respondents in the Asia-Pacific region consider ESG issues (78%), followed closely by members in the EMEA region (74%). Respondents in the Americas region are the least likely to use ESG information in their decision-making process, but even there, a solid majority (59%) do consider ESG issues. The proportions of respondents who do not take ESG issues into consideration (33%) and do not think ESG training is necessary (30%) are highest in North America. There is a perception that, on the whole, Western Europe is leading the ESG practice. These regional differences could obviously change over time, and the reasons behind these differences are not well understood. For instance, in developed markets with relatively strong regulation, investors could arguably be assuming that some of the ESG issues are being taken care of through regulation.

3.6. Innovations in Impact Investing: Green Bonds and Social Impact Bonds

The green bonds market came into being in 2007 with the help of multilateral banks. Green bonds enable capital raising and investment for new and existing projects with environmental benefits—but they are a process rather than a product. That's because the Green Bond Principles,[20] their chief framework, are a set of voluntary guidelines about process. Although this market segment has grown quickly, a key question facing green bonds concerns *additionality*—that is, whether green bonds finance projects that would not be funded otherwise. With estimated issues below $100 million a year in 2015, green bonds remain a small niche in the overall fixed-income market.

Another innovation in impact investing is social impact bonds, the first of which was launched in 2010. A social impact bond is a contract between a special purpose vehicle and the government in which the government commits to pay for improved social outcomes,

[20]See www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/green-bond-principles.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

such as reduced recidivism rates for prisoners. Social impact bonds give investors a chance to address social problems through investing. They strike a balance between giving money away altruistically and seeking a financial return solely for one's own benefit—an economic return plus a social return. The market for social impact bonds is estimated to be much smaller than the market for green bonds.

3.7. ESG Issues and Passive Investing

Although ESG issues have historically been associated with active investing, they are also relevant to passive investing or, more generally, rules-based investing. Investors can benefit from ESG considerations when they are integrated into the benchmark index. A number of such indexes are being offered. In addition, passive investors can use active ownership to manage their ESG risks. However, they need a policy and systems to ensure that different investment managers do not take opposing positions while exercising active ownership on behalf of the same asset owner.

3.8. Modern Applications: Smart Beta

ESG methods are being used with such techniques as smart beta. In the context of equity indexes, smart beta generally refers to weighting schemes that do not use market capitalization. There have been attempts to apply smart beta together with ESG criteria. One way to construct a smart beta ESG index is to use an alternative weighting to stocks already selected for higher ESG ratings. One such low-volatility smart beta ESG index was launched in 2015,[21] which measures the performance of the 50 least volatile from within a selection of sustainable stocks and excludes alcohol, tobacco, gambling, armaments and firearms, and adult entertainment. Another way to build it is to first filter stocks using such criteria as low volatility and then apply ESG criteria for the alternative weighting scheme.

3.9. Obstacles to Practical Implementation

There is some criticism of how ESG issues are taken into consideration. Some of the criticism echoes the arguments that environmentalist and entrepreneur Paul Hawken made against socially responsible investing in 2004. Hawken said that "the cumulative investment portfolio of the combined SRI [socially responsible investing] mutual funds is

[21]"S&P Dow Jones Launches Smart Beta ESG Index," *Global Investor* (30 March 2015): www.globalinvestormagazine.com/Article/3441004/S-P-Dow-Jones-launches-smart-beta-ESG-index.html.

virtually no different than the combined portfolio of conventional mutual funds" (Hawken 2004, p. 16). The implication is that if every company can be deemed investable using one method or another, the credibility of "responsibility" suffers.

There is no denying the inherent subjectivity of ESG consideration, just as there is no denying the inherent subjectivity of active investing in general. However, the degree of subjectivity regarding both process and outcome remains an ongoing challenge for ESG integration. Two analysts applying discounted cash flow analysis may reach very different valuations, but there is reasonable clarity on what process they follow, and there are long-standing textbooks that explain this process. The same is not true of ESG integration. If "responsible" portfolios include investments with contested ESG performance, the greater subjectivity exacerbates the concerns about credibility.

The practice of considering ESG issues needs more clarity on how to apply ESG methods—most notably, ESG integration. Of course, it can be understandably difficult to use evidence-based cause-and-effect attribution for ESG methods. Demonstrating how values-based exclusionary screening leads to avoiding certain businesses is relatively straightforward, but demonstrating how value-based ESG integration leads to better-informed investment decisions is more complex. Without understating this difficulty, not attempting to document how ESG integration informs investment decisions will not help its cause.

It is important not to exaggerate the benefits of ESG analysis. It faces some of the same limitations as traditional analysis and may not necessarily lead to investment insights. For example, BP scored high in some ESG ratings before the *Deepwater Horizon* catastrophe in 2010. Similarly, Volkswagen scored high in some ESG ratings before its emissions scandal came to light in 2015.

Although more disclosure on ESG issues by companies remains a demand by some investors, it is not without debate. One issue is that, although some investors seem favorably disposed to demand more disclosure from listed companies, the disclosure practices of investment management firms and asset owners regarding ESG issues are not known to be much better. One argument suggests that for investors to make the case for greater disclosure more convincing, they need to demonstrate that they are willing to walk the talk themselves.

There is an expectation among those interested in ESG issues that as more and more investors consider ESG issues, more pressure is placed on the companies they invest in to improve their ESG performance—which should both reduce risk for investors and make the world a better place. There is, however, an ongoing tension between authenticity

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

and mainstreaming. If an increasing proportion of global AUM claims to consider ESG issues without attributable difference in investment decision making or in the behavior of investee companies, it will not help build the credibility of ESG considerations.

3.10. The Challenge of ESG Education

Those who might consider ESG issues in investing remain in need of more education and training. A little over half (53%) of respondents indicated that employees at their firm do not receive training on ESG issues (**Figure 9**).

Of those who do, the most common ways are miscellaneous sources (e.g., conferences and publications) and learning by doing (**Figure 10**). A low level of training and formal education does not breed confidence in how rigorously ESG issues are being considered in investment analysis.

Although the literature on ESG issues covers their effect on financial performance extensively, there remains a gap regarding how to consider ESG issues in practice. Perhaps expanding on the "how to" should now rank higher on the ESG research agenda.

Figure 9. Employee Training on ESG Issues

Do any employees at your firm receive training on how to consider ESG issues in investment analysis/decisions?

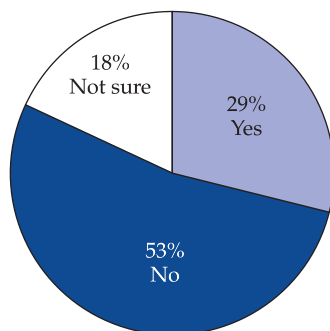
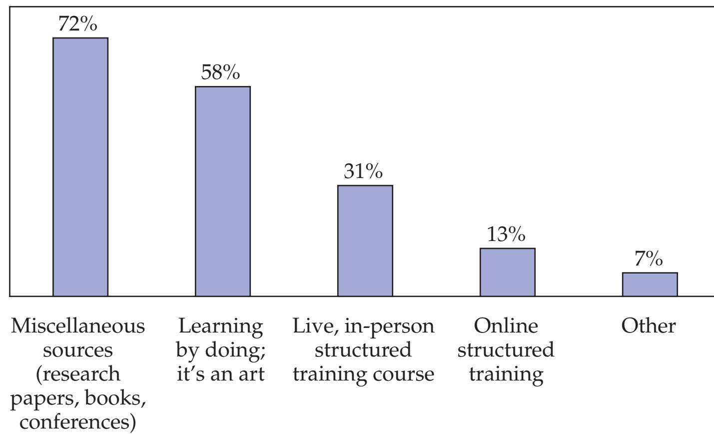
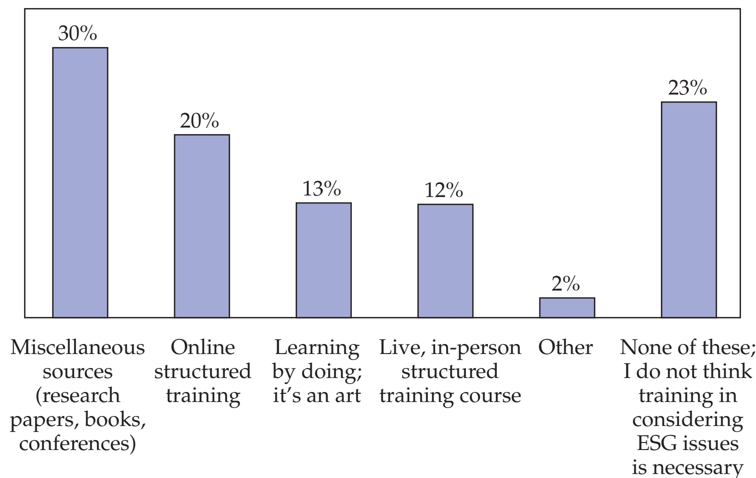


Figure 10. Modes of Training on ESG Issues

A. How do employees at your firm receive training on how to consider ESG issues in investment analysis/decisions?



B. If you would like employees at your firm to receive training in considering ESG issues, what would be your preferred mode?



© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

3.11. ESG Education and CFA Institute

CFA Institute believes that every investment analyst should know about the investment risks and opportunities posed by ESG issues. CFA Institute helps investment professionals better understand ESG issues in investing through its educational programs—most notably, the CFA® Program—and learning opportunities for continuing professional development (CPD).

ESG Content in the CFA Program Curriculum

Like any other topic, the ESG content in the CFA Program is determined by the practice analysis process,[22] whereby CFA Institute determines what should be included in the CFA Program through a survey of investment practitioners. Although the CFA Program curriculum changes from year to year, the 2015 curriculum has the following readings that directly address ESG issues/responsible investing:

- **Level I:** Volume 4—Corporate Finance and Portfolio Management, Corporate Finance, Study Session 11, Reading 40, The Corporate Governance of Listed Companies: A Manual for Investors (Note: The reading is devoted to corporate governance.)
- **Level II:** Volume 3—Corporate Finance, Reading 26, Corporate Governance (Note: The reading includes a section specific to ESG risks.)
- **Level III:** Volume 4—Fixed Income and Equity Portfolio Management, Reading 24, Equity Portfolio Management (Note: Socially responsible investing is explained at some length.)

Given the increasing interest in ESG considerations in investing, the Education Advisory Committee of CFA Institute initiated a reassessment of the coverage of ESG issues in the Candidate Body of Knowledge,[23] with the goal of identifying the scope and practical implications of ESG investing appropriate for the CFA Program. In 2014, as part of this initiative, four practice analysis sessions were held in London, New York City, Amsterdam, and Hong Kong with ESG experts. The participants at these meetings had considerable expertise in ESG issues and were a rather diverse group in terms of designation (both CFA charterholders and noncharterholders), perspective (buy side, sell side, investor relations, industry associations, and vendors), and market sector (equity, fixed income, and

[22]See www.cfainstitute.org/programs/cfaprogram/courseofstudy/Pages/practice_analysis.aspx.
[23]See www.cfainstitute.org/programs/cfaprogram/courseofstudy/Pages/cbok.aspx.

private equity). Having conducted these practice analysis sessions, we are in the process of updating the ESG-related content in the CFA Program, and we will continue to evaluate the volume and emphasis of ESG issues in the CFA Program curriculum.

CFA Institute CPD ESG Content

CFA Institute has been producing educational content on ESG issues in investing for many years, which is now too extensive to be listed here. We have also been covering some of the key topics that underlie ESG issues, such as short-termism and gender and diversity, without necessarily labeling them ESG content. The CPD methods consist of events, including online events, and a variety of print and digital publications, with both shorter and longer reads. In 2014, we added an online course, ESG-100,[24] to our growing list of ESG-related offerings. The ESG-100 provides questions and answers in a self-quiz format, so you can gain and/or test your understanding of ESG issues in investing. To our knowledge, this course is the only free online course regarding ESG issues. To assist investment professionals in accessing our CPD ESG content, we provide a one-page list.[25]

3.12. Conclusion

Both value-motivated and values-motivated investors consider ESG issues in investment decisions. The practice of considering ESG issues in investing has evolved significantly from its origins in exclusionary screening of listed equities on the basis of moral values. There are, however, some lingering myths about ESG considerations, and the results of our survey have debunked three, as shown in **Table 3**.

Table 3. Myth vs. Reality

Myth	Reality
Investment firms consider ESG issues primarily for reputational reasons.	The top reason investment professionals consider ESG issues is to manage risks.
ESG issues are mostly about climate change.	The top ESG issue investment professionals consider is board accountability.
ESG methods are confined to exclusionary screening.	There are six major methods, of which ESG integration is used most widely by investment professionals.

[24]See www.cfainstitute.org/learning/products/onlinelearning/Pages/103978.aspx.
[25]See www.cfainstitute.org/learning/future/knowledge/pages/esg.aspx.

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

Important challenges face the evolving practice of considering ESG issues in investing. An obvious and structural challenge, which is not unique to ESG considerations, is short-termism in financial markets. But there are others. For instance, the case for "what" and "why" for ESG considerations has been made with sufficient clarity, but there is a need to clarify "how to" apply ESG methods—most notably, ESG integration—across asset classes.

One objective of this guide is to explain the state of ESG discourse to investment professionals. Although a number of topics are part of the ESG discourse, for investment professionals a key idea in the discussion of ESG issues is that systematically considering ESG issues will likely lead to more complete analyses and better-informed investment decisions.

If you are a member of CFA Institute and you would like to participate in our educational initiatives regarding ESG issues, we invite you to join the CFA Institute members LinkedIn subgroup on ESG issues in investing. To see the continuing professional development resources regarding ESG issues in investing provided by CFA Institute, which are available to both members and nonmembers, please visit http://bit.ly/ESG-learn.

References

CFA Institute. 2008. "Environmental, Social, and Governance Factors at Listed Companies: A Manual for Investors." *Codes, Standards, and Position Papers*, vol. 2008, no. 2 (May): www.cfainstitute.org/learning/products/publications/ccb/Pages/ccb.v2008.n2.1.aspx.

Clark, Gordon L., Andreas Feiner, and Michael Viehs. 2014. "From the Stockholders to the Stakeholders: How Sustainability Can Drive Financial Performance." University of Oxford and Arabesque Partners (September): www.smithschool.ox.ac.uk/library/reports/SSEE_Arabesque_Paper_16Sept14.pdf.

Hawken, Paul. 2004. "Socially Responsible Investing." Natural Capital Institute (October): www.baldwinbrothersinc.com/sites/default/files/SociallyResponsibleInvesting.pdf.

Intergovernmental Panel on Climate Change. 2014. "Climate Change 2014: Synthesis Report" (www.ipcc.ch/news_and_events/docs/ar5/ar5_syr_headlines_en.pdf).

KPMG, Centre for Corporate Governance in Africa, Global Reporting Initiative, and UNEP. 2013. "Carrots and Sticks: Sustainability Reporting Policies Worldwide—Today's Best Practice, Tomorrow's Trend" (www.globalreporting.org/resourcelibrary/Carrots-and-Sticks.pdf).

Mercer. 2009. "Shedding Light on Responsible Investment: Approaches, Returns and Impacts" (November): www.law.harvard.edu/programs/lwp/pensions/conferences/cm_europe12_09/Shedding_light_on_responsible_investment_free_version.pdf.

MSCI. 2014. "MSCI ACWI Select Global Norms and Criteria Index" (February): www.msci.com/eqb/methodology/meth_docs/MSCI_ACWI_Select_Global_Norms_and_Criteria_Index_Feb14.pdf.

Sandor, Richard L., Nathan J. Clark, Murali Kanakasabai, and Rafael L. Marques. 2014. *Environmental Markets: A New Asset Class*. Charlottesville, VA: CFA Institute Research Foundation (January): www.cfainstitute.org/learning/products/publications/rf/Pages/rf.v2014.n1.1.aspx.

Sullivan, Rory, Will Martindale, Elodie Feller, and Anna Bordon. 2015. "Fiduciary Duty in the 21st Century." United Nations Global Compact, UNEP Finance Initiative, PRI, and Inquiry.

World Economic Forum. 2015. "Global Risk 2015 Report" (www.weforum.org/reports/global-risks-report-2015).

© 2015 CFA INSTITUTE. ALL RIGHTS RESERVED.

AUTHORS

Usman Hayat, CFA
Content Director (Islamic Finance and Environmental, Social, and Governance Issues in Investing)

Matt Orsagh, CFA, CIPM
Director
Capital Markets Policy

CONTRIBUTORS

Kurt N. Schacht, JD, CFA
Managing Director
Standards and Advocacy

Rebecca A. Fender, CFA
Head
Future of Finance

We thank all the reviewers who shared their views on this publication. We also thank our colleagues Bobby Lamy, CFA, head, Curriculum Development, and Greg Siegel, CFA, director, Curriculum Development, for their support.

THE AMERICAS
(800) 247 8132 PHONE (USA and Canada)
+1 (434) 951 5499 PHONE
+1 (434) 951 5262 FAX

915 East High Street
Charlottesville, VA 22902
USA

477 Madison Avenue
21st Floor
New York, NY 10022
USA

ASIA PACIFIC
+852 2868 2700 PHONE
+852 8228 8820 INFO HOTLINE
+852 2868 9912 FAX

23/F, Man Yee Building
68 Des Voeux Road
Central, Hong Kong SAR

Si Wei Beijing Enterprise Management Consulting Company Limited
Unit 7, Level 12, Office Tower C1, The Towers, Oriental Plaza
No 1 East Chang An Avenue, Dong Cheng District
Beijing, 100738, China

CFA Institute India Private Limited
Naman Centre, Unit No. 103
1st Floor, Bandra-Kurla Complex, G Block, Bandra (East)
Mumbai 400 051, India

EUROPE, MIDDLE EAST, AND AFRICA
+44 (0) 20 7330 9500 PHONE
+44 (0) 20 7330 9501 FAX

131 Finsbury Pavement
7th Floor
London EC2A 1NT
United Kingdom

Rue du Champ de Mars 23
1050 Brussels, Belgium

www.cfainstitute.org
info@cfainstitute.org

FIDUCIARY DUTY AND THE MARKET FOR FINANCIAL ADVICE

VIVEK BHATTACHARYA[1], GASTÓN ILLANES[1,2], and MANISHA PADI[3]

[1]Department of Economics, Northwestern University

[2]National Bureau of Economic Research

[3]University of Chicago Law School

May 1, 2019

ABSTRACT. Recent regulatory debate in the financial advice industry has focused on expanding fiduciary duties to broker-dealers. Proponents of this reform argue that it would improve the advice given to clients and limit losses from agency problems, while detractors counter that such regulation would increase compliance costs without directly improving consumer outcomes. This paper evaluates these claims empirically, using a transactions-level dataset for annuity sales from a major financial services provider and exploiting state-level variation in common law fiduciary duty. We find that imposing fiduciary duty on broker-dealers shifts the set of products they sell to consumers, away from variable annuities and towards fixed indexed annuities. Within variable annuities, fiduciary duty induces a shift towards lower-fee, higher-return annuities with a wider array of investment options. We develop a model that leverages the distributional changes in products sold to test the mechanism by which fiduciary duty operates. We find evidence that fiduciary duty does not solely increase the cost of doing business but that it has the intended effect of directly improving financial advice.

KEYWORDS. fiduciary duty, financial regulation, financial advice, retirement markets, annuities.

JEL CODES. G23, G28, K15, L51, L84.

CONTACT. vivek.bhattacharya@northwestern.edu, gaston.illanes@northwestern.edu, manishap@uchicago.edu.
We are grateful to the Wharton Consumer Analytics Initiative for organizing the collaboration with the data sponsor, as well as to many people at the data sponsor for assistance in understanding the dataset and the industry. We would like to thank Ignacio Cuesta, George Deltas, Ali Hortaçsu, Neale Mahoney, Rob Porter, Jim Poterba, Jimmy Roberts, Nancy Rose, Brad Shapiro, and Paulo Somaini for helpful comments, as well as participants at numerous conferences and seminars. Matias Escudero and David Stillerman provided excellent research assistance. Bhattacharya and Illanes acknowledge financial support from the National Science Foundation under Grant No. SES 1824463 and from the Northwestern Institute on Complex Systems. Padi acknowledges support from NSF Social, Behavioral and Economic Sciences Fellowship, Award Number 1715010, and the Center for Equitable Growth. All errors are our own.

Electronic copy available at: https://ssrn.com/abstract=3281345

I. Introduction

Many individuals in the United States buy complex financial products to save for retirement, and they use financial advisers to help them find, evaluate, and choose between these products. As in any industry where experts provide advice to less-informed customers, a natural concern is whether incentives are aligned. This concern is exacerbated in the financial advice industry, as many advisers are compensated on commission, receiving higher payouts from steering clients towards high fee products. Regulators—such as the Securities and Exchange Commission, state regulatory authorities and courts, and the Department of Labor—have recognized this potential conflict of interest and imposed various "standards of care" to alleviate it. The most stringent standard of care is that of fiduciary duty, which roughly requires advisers to act in the best interest of their consumers.[1] Currently, financial advisors licensed as *registered investment advisers* (RIAs) have a fiduciary duty towards their clients at the national level, while those licensed as *broker-dealers* (BDs) do not. In recent years, regulators have discussed expanding fiduciary duty to include all financial advisers, including broker-dealers and registered investment advisors.[2] Supporters of the expansion argue that imposing fiduciary duty on all advisers will alleviate conflicts of interest and ensure that retirees choose products that are better suited to their needs. Opponents argue that fiduciary duty does not have a noticeable impact on product choice—because competition already disciplines financial advisers, because the conflict-of-interest was overblown to begin with, or because fiduciary duty does not actually constrain advisers at all—but will instead increase the cost of doing business, leading to fewer advisers in the market and fewer retirees purchasing beneficial products.

This paper evaluates these competing claims empirically. First, we estimate the causal effect of fiduciary duty and test for the presence of a constraint on low-quality advice using a new dataset of transaction-level data for annuity sales from an anonymous financial services provider ("FSP"). FSP is a large company—within the top-five companies by market share in the market for annuities—that is representative of other large companies in this industry in terms of types of products offered, size

[1]Section II.A discusses in greater detail what comprises fiduciary duty in various settings.

[2]In 2016, the Department of Labor promulgated rules expanding fiduciary duty to broker-dealers handling retirement savings. After several delays during the Trump administration, the Fifth Circuit struck down the rule as overreaching the DoL's administrative powers (see Chamber of Commerce of the USA v. United States Department of Labor, No. 17-10238 (5th Cir. 2018)). Several state treasurers have since signed an appeal to the SEC, asking for federal action expanding fiduciary duty to broker-dealers. See https://www.marketwatch.com/story/is-the-fiduciary-rule-dead-or-alive-what-its-fate-means-to-you-2018-03-16.

Electronic copy available at: https://ssrn.com/abstract=3281345

of the adviser network, and financial health. This dataset contains information about every contract sold by FSP from 2008–2015, detailed data about the product and adviser and some limited data on the client. Crucially, for each transaction we observe the type of adviser (RIA vs. BD) and granular geographic information about the locations of the transacting parties.

Although broker-dealers do not have fiduciary duty at the national level, state courts in several states have ruled that they are fiduciaries to their customers. In this paper, we will argue that fiduciary duty has a causal impact on outcomes by leveraging comparisons between broker-dealers and registered investment advisers across state borders where fiduciary status for broker-dealers differs. To do so, we will focus on two related estimators that will deliver the causal impact of fiduciary duty under different assumptions: a differences-in-differences estimator (across counties on different sides of a state border and across adviser types), and the difference within advisor type across the border. The differences-in-differences estimator will be robust to demand changes at the borders, provided they are constant across adviser types, but will not be robust to spillover effects of regulation onto RIAs. Interpreting the within-adviser type difference causally requires the assumption of no systematic demand differences at the border, but under this assumption it delivers an estimate of the causal effect of the regulation onto broker-dealers and of the spillover effect onto RIAs. As a result, this estimator is robust to the presence of spillover effects onto RIAs. Strikingly, we find that across a wide variety of outcome variables, the difference across the border for registered investment advisers is zero, which has two important implications. First, for this to hold in the presence of a demand break across the border, one would need a spillover effect onto RIAs that perfectly counteracts the demand break, which we believe to be implausible. This, together with a battery of other checks, lends credence to the identifying assumptions embedded in the border difference. Second, since the difference for RIAs is often insignificant, implies that the estimates of fiduciary duty on broker-dealers from the two strategies largely agree in magnitude.

Using these strategies, we find that extending fiduciary duty to broker-dealers leads to a compositional shift in the set of products purchased by their clients. More specifically, broker-dealers sell fewer variable annuities relative to fixed indexed annuities under fiduciary duty.[3] The effect of fiduciary duty on variable annuity sales is substantial: about three-fourths of all annuities sold by a typical broker-dealer are variable annuities, and imposing fiduciary duty on broker-dealers

[3]The structure of annuity products is discussed in greater detail in Section II.B.

Electronic copy available at: https://ssrn.com/abstract=3281345

reduces this proportion by around 9 percentage points. This is not the case for registered investment advisers, whose sale composition does not change. Unfortunately, it is difficult to make welfare statements about this shift, as fixed indexed annuities do not dominate variable annuities (or vice-versa). However, variable annuities have been under significant scrutiny by regulators, given their poor reputation as high fee, low yield products.[4]

We also study the effect of fiduciary duty on the product characteristics of transacted variable annuities. By focusing on a single product type and on characteristics that have a straightforward welfare interpretation, such as fees, we are able to make clearer statements about advice quality. Annuity products have complex and multidimensional fee structures, and we find that extending fiduciary duty to broker-dealers causes their clients to purchase products with lower fees on many of these dimensions. Moreover, under fiduciary duty broker-dealers steer customers towards products with a larger and more diverse set of investment options that, under several alternative assumptions on the portfolio allocation, lead to improved mean returns. We then aggregate all these dimensions by formulating and solving a dynamic programming problem to compute the net present value of all variable annuities in the dataset, assuming optimal execution by a risk-neutral individual. We find that broker-dealers with fiduciary duty sell their clients higher-return variable annuities. Along all of the aforementioned specifications, we find no evidence that of spillover effects of regulation onto registered investment advisers.

These results tell us that fiduciary duty has an impact on consumers, but they cannot tell us the mechanism underlying this effect. To disentangle the mechanism, we develop a model of entry into the provision of financial advice with heterogenous adviser qualities and differentially regulated firms that encompasses the arguments of both detractors and proponents of extending fiduciary duty to all broker-dealers. Detractors argue that this reform will only increase the cost of doing business, regardless of advice quality. If this argument, which we call the *fixed cost channel*, is true, then fiduciary duty will lead to exit of broker-dealers, and potentially to entry of registered investment advisers. However, proponents argue that it will constrain advisers from providing low quality advice. We name this argument the *advice channel*. If this channel holds, some advisers will improve their advice, while others will find it unprofitable to remain in the market, and will exit.

[4]See, for example, https://www.thinkadvisor.com/2014/07/28/variable-annuities-a-top-source-of-customer-compla/?slreturn=20181123212558 or https://www.finra.org/sites/default/files/InvestorDocument/p125846.pdf.

Electronic copy available at: https://ssrn.com/abstract=3281345

Moreover, their exit may induce the entry of previously unprofitable advisers offering high quality advice. The distinguishing feature between these two mechanisms is that there cannot be entry of broker-dealers offering high quality advice if fiduciary duty operates solely through the fixed cost channel.

Distinguishing between these two channels has important implications for policy, as the advice channel implies that fiduciary duty constrains advisers' ability to provide low-quality advice, while the fixed cost channel implies that fixed cost increases happen to lead to an equilibrium with on average fewer low quality advisers. Moreover, we argue that if fiduciary duty were to operate solely through the latter channel, then the mean impact is less likely to be externally valid or to be robust to different levels of stringency in the fiduciary standard.

To study the impact of fiduciary duty on market structure, we leverage an additional dataset provided by FSP with information about all advisers who can sell annuities in the United States, including those who have not transacted with the company. We find that imposing fiduciary duty on broker-dealers reduces the number of broker-dealer firms operating in the market by about 16%. Moreover, we document a compositional shift to not just investment advisory firms—whose number are not significantly affected by the regulation—but also to broker-dealer firms with larger footprints.

We then use the predictions of the model to test whether any of the shift in equilibrium purchases is plausibly driven by a change in advice. As our model predicts, product quality may increase directly through the advice channel or indirectly through the fixed cost channel if exiting firms offer more distorted advice. By leveraging the distribution of advice, rather than simply its mean, we find evidence that is consistent with the advice channel, and are able to determine that regulations that increase the fixed cost of operating as a financial adviser would have the unintended consequence of driving the firms that provide the highest-quality advice out of business. Fiduciary duty works, at least in part, as intended—by improving financial adviser's advice to their clients.

There are several important limitations to our analysis. To begin, our estimates are specific to variation in fiduciary duty induced by common law. State legislation or national rulemaking by the DOL or SEC may induce a number of other effects. If the sole difference between common law and these other efforts is the stringency of enforcement, the presence of the advice channel provides suggestive evidence that rules may continue to improve product selection. However, state legislation

Electronic copy available at: https://ssrn.com/abstract=3281345

or national rulemaking may also lead to product reformulation, an issue that we are not able to address. Another limitation is that we are not able to make statements on social welfare. There are two main reasons for this. First, one may believe that differentiation in this industry is not large enough to counteract the inefficiency from free entry (Mankiw and Whinston, 1986), and as a result exit of firms can be welfare enhancing. Since we do not have structural estimates of profits or fixed costs, we cannot speak to this effect. Moreover, as Agarwal, Chomsisengphet, Mahoney, and Stroebel (2014) discuss, distorted advice can lead to excessive private demand for products, relative to the social demand function. In such a setting, exit of firms can also increase welfare if it leads to additional exertion of market power and higher prices. Despite these limitations, we believe that by providing evidence that fiduciary duty has an effect on consumer choice, that this effect leads consumers to purchase higher quality products, and that these findings must have come, at least partially, from improved advice, this paper provides an important contribution into this policy debate.

Related Literature. Despite the importance for public policy of studying the impact of fiduciary duty, there has been limited empirical work on this topic—possibly in part because of a lack of useful data. We are aware of a small number of papers that study questions similar to ours. Finke and Langdon (2012) classify states based on whether they place common-law fiduciary duty on broker-dealers and find that fiduciary duty does not impact the number of broker-dealers per household. They also run surveys with financial advisers to ask whether fiduciary duty standards constrain the advice they give to clients. Their estimates on both dimensions are noisy, and they suffer from the important drawback that comparisons are conducted *across entire states*. Our border strategy at least partially addresses the issues that states with fiduciary duty may be different in other dimensions. Kozora (2013) considers a temporary change in the fiduciary standard of a subset of brokers in the municipal bond market and finds that more strict standards led to more recommendations of investment-grade bonds. Finally, Egan (2017) considers the impact of fiduciary duty in the reverse convertible bond market, documenting significant dispersion in the market value of these bonds and high likelihoods of purchase of dominated products. Through the lens of a search model, he estimates that extending fiduciary duty to all financial advisers would increase consumers' risk-adjusted returns by 2%. We are also aware of concurrent work-in-progress by Labro

Electronic copy available at: https://ssrn.com/abstract=3281345

and Omartian (2017) of fiduciary duty on compliance activities.[5]

This paper is related to a broader literature on the market for financial advice. While theoretical work on financial advice has a long tradition,[6] there is a growing body of recent empirical work on this market. Recent work has studied the prevalance and geographic concentration of misconduct in this industry (Egan, Matvos, and Seru, 2019); we should be clear that nothing in our dataset is evidence of misconduct, but our paper does highlight geographic concentration of certain types of advice and choice behavior induced by regulation. In this paper we are agnostic about the potential recourse for offering suboptimal advice, but Kozora (2017) provides some evidence on this dimension by studying how properties of the product influence arbitration. There is some debate in the academic literature on the extent of conflict-of-interest problems in financial settings. A number of papers have documented intermediates responding to commissions and other incentives rather than offering clients appropriate advice,[7] although none of these papers study how proposed regulation might influence these outcomes. On the other hand, Linnainmaa, Melzer, and Previtero (2016) show that advisers' personal portfolios look like their clients', suggesting that suboptimal advice may be due to misconceptions about products rather than commissions.[8] Our results suggest that equilibrium product choice likely depends on something other than advisor beliefs: financial regulation does have a substantial impact.

This work adds three main contributions to this literature. First, it provides estimates of the causal effects of extending fiduciary duty to broker-dealers on the equilibrium set of products sold by both broker-dealers and registered investment advisers, and on product quality. Second, it shows that while these average causal effects are interesting for the analysis of this specific fiduciary duty policy, they are not informative of the channel through which fiduciary duty operates. Moreover, the implications for external validity of the aforementioned causal effects are starkly different across channels. Third, it shows sufficient conditions for fiduciary duty to operate as a constraint on

[5]To our knowledge, Labro and Omartian (2017) use a different cut of our dataset but focus on changes induced by the FINRA Know-Your-Customer Rule.

[6]See Inderst and Ottaviani (2012a). Inderst and Ottaviani (2012b) provides a good summary of the literature.

[7]See, for instance, Anagol, Cole, and Sankar (2017) in the context of life insurance in India, Mullainathan, Noeth, and Schoar (2012) for financial advisers in the United States (although without any discussion of fiduciary standards), Dickstein (2015) in the context of medicine, Guiso, Pozzi, Tsoy, Gambacorta, and Mistrulli (2017) for mortgages in Italy, Hong (2017) and Barwick, Pathak, and Wong (2017) for real estate, and Camara and Dupuis (2014) and DellaVigna and Hermle (2017) for movie reviews.

[8]Using a related dataset, Foerster, Linnainmaa, Melzer, and Previtero (2017) show that advisers tend to give similar advice to all their clients, which is also consistent with misguided beliefs.

Electronic copy available at: https://ssrn.com/abstract=3281345

low-quality advice, and documents empirical evidence for this channel. This final result lends credence to the position that extending fiduciary duty to broker-dealers at the federal level would be beneficial to consumers, by leading to increases in the quality of advice.

The rest of the paper proceeds as follows. Section II discusses institutional details: the market for financial advisers, fiduciary standards, and properties of annuities. Section III describes the data. Section IV discusses the effect of fiduciary duty on product choice. Section V presents the model of fiduciary duty that will guide the remainder of the analysis. Section VI discusses the effect of fiduciary duty on market structure. Section VII uses the model to disentangle whether fiduciary duty operates through the entry channel or the advice channel, and Section VIII concludes.

II. Institutional Details

In this section, we introduce the relevant details of the institutional setting. Section II.A discusses the role and types of financial advisers in the US and how fiduciary standards governing their behavior have evolved. Section II.B then discusses details of variable, fixed, and fixed indexed annuities, which are the specific products we study in this paper.

II.A. Financial Advisers and Fiduciary Duty

The United States has two types of financial advisers, which evolved separately for historical reasons but now largely serve similar functions. The first type, registered investment advisers (RIAs), are regulated at the federal level by the SEC under the Investment Advisers Act of 1940. The second, broker-dealers (BDs), were initially conceived as mere brokers, but have grown into the role of providing financial advice as well. They are subject to the Securities Exchange Act of 1934 and regulated by state law and by FINRA, a private industry regulator. Registered investment advisers must be affiliated with a brokerage firm in order to sell certain products, including annuities, and thus many such advisers are *dually registered* as broker-dealers and investment advisers. They are subject to fiduciary duty at the federal level on their advisory accounts. In our sample, all transacting advisers will be either broker-dealers or dual registrants—as they are selling annuities—but we will refer to them as BDs and RIAs nevertheless.

All financial advisers tend to perform many of the same functions when working with individuals.

Electronic copy available at: https://ssrn.com/abstract=3281345

Their primary role is to recommend and facilitate the purchase of investment vehicles, which are originally issued by upstream financial services providers. Given their history of brokering transactions, BDs tend to be paid by commission, receiving a fraction of the fee associated with a product. Compensation schemes for RIAs, on the other hand, tend to be a combination of commissions and "fees", which are a percentage of assets under management. Following the literature, we refer to RIAs who accept both commissions and fees as "fee-based", and to RIAs who only accept fees as "fee-only." Advisers who are compensated, even in part, on the basis of commissions have a conflict of interest: they have an incentive to recommend higher fee products that benefit themselves over lower fee products that benefit their customers.

The patchwork of federal, state, and private regulation overseeing adviser behavior attempts to combat this conflict of interest by imposing legal duties on advisers. All BDs nationwide have a federal duty to deal fairly with their customer and must recommend products that are "suitable" for the consumer, as per FINRA regulation. This requirement does not specify that BDs must prioritize the customer's best interest over their own, as long as the product they recommend satisfies FINRA's suitability rules.[9] BDs are also required to provide customers with each product's prospectus, which includes all technical details about the investment vehicle but is not easily understood by a layperson. Any dispute that arises over a BD's regulatory compliance is arbitrated through FINRA's private dispute resolution process. Other claims may be brought under state or federal law. Nationwide regulation of RIAs is more stringent. RIAs have fiduciary duty imposed on them by the SEC, which requires that the RIA place the interest of the customer over the RIA's own interest. Fee-only advisers have no incentive to violate this duty, but fee-based advisers that take commissions also face a requirement of transparency towards the consumer, such as disclosure of compensation arrangements. RIAs must obtain the best price for each contract, and RIAs that recommend higher commission products must justify that recommendation by using proprietary SEC-approved software that validates recommendations and by drafting disclosures to clients, among other costly compliance measures. If a customer has a dispute with an RIA, the customer may sue in state or federal court, or enter into FINRA arbitration or external private arbitration.[10]

[9]See `http://www.finra.org/industry/suitability`.

[10]Arbitrability varies across claims and states, although, to our knowledge, not across adviser types. Some, but not all, states will allow tort claims to be brought that are very similar in nature to arbitrable claims even when there are mandatory arbitration clauses in the contract between client and adviser.

Electronic copy available at: https://ssrn.com/abstract=3281345

Consumer groups and the SEC have long been troubled by the arbitrary difference in regulatory standards across BDs and RIAs. Studies by the SEC (SEC, 2011, 2013a,b) have suggested that that consumers often do not realize that BDs have an incentive to sell high commission products. They also are unable to tell whether their financial adviser is technically classified as a BD or a RIA, and many assume that all advisers are fiduciaries. Motivated by these concerns, the SEC recommended that standards be harmonized across BDs and RIAs, requiring all advisers dealing with retail investors to offer the best possible contract in the investor's interest. The DOL promulgated a rule in 2016 largely following the SEC recommendation.[11] The rule would place a fiduciary duty on BDs that handle retirement savings for retail investors and require all advisers to sell customers the best available contract for that customer. In addition, the DOL rule requires contracts between advisers and consumers that specify the fiduciary duty and allow consumers to bring class action lawsuits to enforce it. The financial adviser industry pushed back on this rule, claiming it would significantly increase compliance costs for BDs and raise the spectre of expensive class action litigation, potentially putting some BDs out of business.[12] However, a number of decisions by the Trump administration along with legal rulings make it unlikely, at the time of this draft, that the rule will go into effect.[13]

This project takes advantage of variations in state common law that have already imposed fiduciary obligations on financial advisers in certain states, in order to estimate the impact of imposing fiduciary duties on BDs. Some states have imposed a common law duty of care that rises to the level of a fiduciary duty, or imposes a higher standard than required of BDs at the federal level. Finke and Langdon (2012) classify states into ones with no common law fiduciary duty on advisers and ones with some level of fiduciary duty; Figure I plots this classification.[14] These duties

[11] See `https://www.dol.gov/agencies/ebsa/laws-and-regulations/rules-and-regulations/completed-rulemaking/1210-AB32-2`.

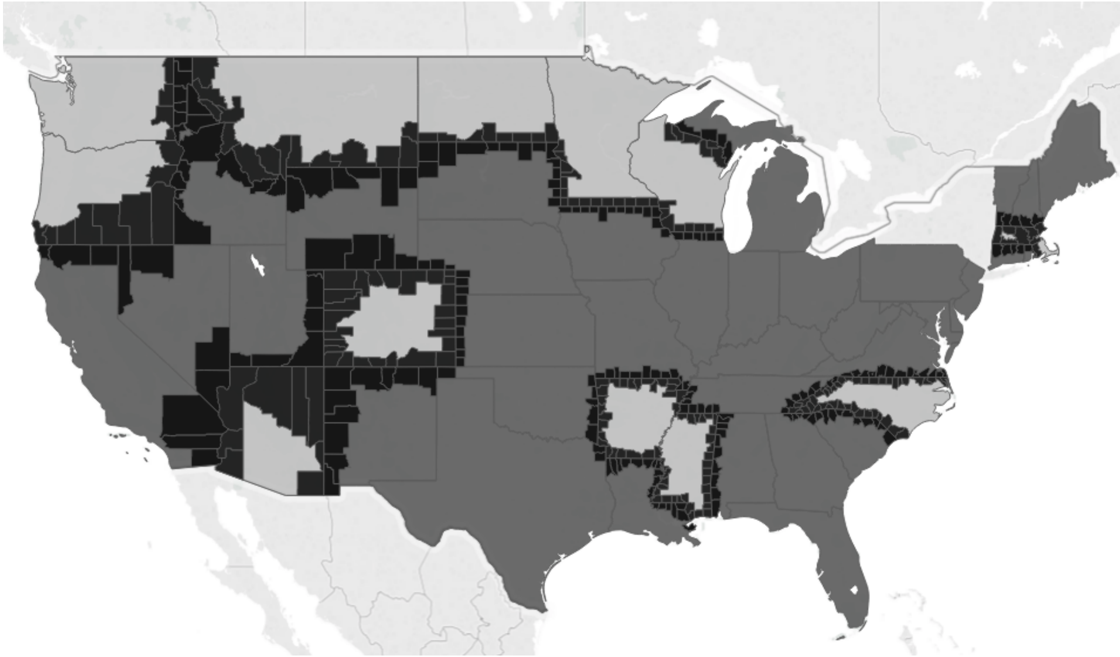
[12] See `http://www.investmentnews.com/article/20170810/FREE/170819991/dol-fiduciary-rule-compliance-costs-exceed-4-7-billion-sifma-study`.

[13] As of March 2018, the Fifth Circuit Court of Appeals vacated the DOL Rule, stating the DOL had overstepped its regulatory authority. While the case may be appealed to the Supreme Court, it currently seems unlikely the DOL Rule will be resurrected. The SEC is additionally proposing its own version of the regulation, as are states through *legislation*, rather than common law.

[14] In our analysis, we follow Finke and Langdon (2012) and say the following states have fiduciary-like duty: Alabama, California, Connecticut, Georgia, Idaho, Illinois, Iowa, Kansas, Louisiana, Michigan, Missouri, Nebraska, Nevada, New Hampshire, New Mexico, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Wyoming. The control states, with no heightened duty, are: Arizona, Arkansas, Colorado, Massachusetts, Minnesota, Mississippi, Montana, North Carolina, North Dakota, Oregon, Washington, Wisconsin.

Electronic copy available at: https://ssrn.com/abstract=3281345

Figure I: Common law fiduciary duty on broker-dealers by state



Map of states with some degree of fiduciary duty (dark grey) and none (light grey), per the classification in Finke and Langdon (2012). Counties in black are ones at borders between states with different fiduciary standards and consitute our main sample. New York, which does not impose common law fiduciary duty on its broker-dealers, and its surrounding counties are omitted from the main sample due to New York having different suites of products.

allow clients to sue their financial advisers for low quality advice.[15] Since all RIAs already comply with federal fiduciary duty standards, they provide a control against which to compare treated BDs (facing a fiduciary duty) relative to control BDs (facing only FINRA suitability rules). It is important to note that states may not always be able to enforce these duties and that common law may be less salient than legislation, suggesting that any estimate obtained by comparing state law regimes will likely be an underestimate of the impact of a federal rule.[16] Nevertheless, BDs operating under the shadow of potential state law liability may make modifications to their behavior and compliance programs to minimize potential costs, resulting in changes to their recommendations, consumer purchasing behavior, market structure and sales by competitors, and other equilibrium

[15] Advisers who lie to their clients in a way that causes them material loss can always be sued for fraud or misrepresentation, under standard principles of tort law. Additional duties of care, including fiduciary duty, allow clients to recover losses sustained even when advisers have told clients the truth. This can occur when advisers suggest risky investments, "churn" across assets to increase their commissions, and otherwise do not tailor their advice to the needs of their client. For further discussion, see the Joint SEC/NASD Report (https://www.sec.gov/news/studies/secnasdvip.htm).

[16] Most state law fiduciary duty claims are brought by private individual litigants, while statutory fiduciary duty claims could allow for more state enforcement actions and class actions

Electronic copy available at: https://ssrn.com/abstract=3281345

effects.

II.B. Fixed and Variable Annuities

To study the effect of fiduciary duty on the set of chosen investment products, we focus on annuities, which are one of the most common retirement vehicles with over $3 trillion in reserves. In addition to the size and importance of the annuity market, the DOL directly mentioned concerns about annuities as the impetus for their 2016 fiduciary duty rule.[17] The simplest annuity contract is a fixed immediate annuity (or "income annuity"), in which investors turn over a lump sum amount in exchange for a promise to receive a fixed periodic payment until death. These products constitute a very small fraction of the US annuity market. Instead, most annuity contracts sold in the US are deferred annuities. These products involve an accumulation phase, during which money is contributed to an account and invested, and a payout phase, during which payments are made from the account to the annuitant. Fixed indexed and variable annuities are the most popular deferred annuity products. They share the structure of an accumulation and a payout phase, but differ in how the account grows during the accumulation phase, in the ways money can be withdrawn during both phases, in fee structure, and in the "riders," or options, that can be added on to the contract.

Investors in fixed indexed annuities distribute their funds during the accumulation phase between a "fixed account," which offers a guaranteed interest rate for a predetermined period of time,[18] and a set of "indexed accounts," where returns are tied to the performance of an underlying index, usually the S&P 500.[19] In most cases, fees are not directly charged as part of the vehicle, but the margin comes from the gap between the realized return of the underlying index and the accrued return. The main exception to this statement are "surrender charges," which tax withdrawals taken

[17] "The quantified losses also omit losses that adviser conflicts produce in connection with IRA investments other than mutual funds. Many other products, including various annuity products, among others, involve similar or larger adviser conflicts, and these conflicts are often equally or more opaque. Many of these same products exhibit similar or greater degrees of complexity, magnifying both investors' need for good advice and their vulnerability to biased advice," from https://www.federalregister.gov/documents/2016/04/08/2016-07924/definition-of-the-term-fiduciary-conflict-of-interest-rule-retirement-investment-advice.

[18] Products differ dramatically in the length of the guaranteed interest rate period, from 1 year to 8. Regardless of length, after this period ends the fixed account has a guaranteed interest rate that varies yearly.

[19] There are three prototypical mappings from the returns of the index to the returns of the account: "point-to-point," "monthly-average," and "performance triggered." Under "point-to-point" crediting, the return of the account is the return of the underlying index between two predetermined points in time, with a cap and a floor. Under "monthly-average" crediting, each year the account is credited the average monthly return of the index. Finally, under "performance triggered" crediting, the indexed account receives a predetermined rate of return (usually between 4% and 6%) if the index has positive returns, and 0 otherwise.

Electronic copy available at: https://ssrn.com/abstract=3281345

in the first years of the accumulation period if they exceed a free withdrawal amount (typically 10% of contract value). Fixed indexed annuities are typically converted into a fixed annuity once investors are sufficiently old, transitioning the contract into the payout phase. In the case of death during the accumulation period, beneficiaries receive the contract amount.

Variable annuities replace the relatively small set of indexed accounts in fixed indexed annuities with a pool of investment funds, with a wide range of asset allocations, risk profiles, and fees. The most basic variable annuity contract resembles a fixed indexed annuity, with contract values accruing interest according to the performance of the set of funds chosen, and investors receiving an annuity upon entering the payout phase. For this contract, investors pay an annual percentage fee, the expense ratios of the funds they invest in, and surrender charges if withdrawing money in the first years of the accumulation period. Often, variable annuity contracts are sold with *living benefit riders*. These riders provide a degree of guaranteed income, at some fee. However, their structure can also incentivize excessive risk-taking in fund selection.[20] To partially mitigate these incentives, riders usually impose restrictions on the investment portfolio an annuitant can choose.[21] Furthermore, the incentive to annuitize a variable annuity is usually low, since it involves surrendering rider benefits.

Optimal execution of variable annuity contracts requires choosing appropriately from the pool of investment options, and if the contract is coupled with a living benefits rider, it further requires making correct decisions about when to take withdrawals. As a result, these contracts are more complex and difficult to price than a fixed indexed annuity. However, if executed correctly and with favorable returns, these contracts have significant upside potential. Thus, no product strictly dominates the other, and certain types of consumers will be better served by purchasing a variable annuity while others will benefit more from a fixed indexed product.

[20] As an example, the most common rider in our dataset is a "minimum withdrawal." With this rider, a fictitious account called an "income base" grows yearly by an enhacement rate, but it can increase to the contract amount if the contract amount exceeds this income base. At some age (usually 55), the annuitant can take a yearly payout from the income base. Since the income base benefits from the upside returns of the contract but is partially shielded from the downside risk, there is an incentive to both delay withdrawal (so that the contract base may benefit from positive shocks) and to invest in risky funds.

[21] See Koijen and Yogo (2018) for a study of how these incentives feed into financial fragility of life insurance companies.

Electronic copy available at: https://ssrn.com/abstract=3281345

III. Data

In Section III.A, we describe the data provided to us by the financial service provider about their transactions and the advisers that sell its products. Section III.B discusses data sources for the individual products in the dataset. Further details are in Appendix E.

III.A. Transactions, Advisers, and Clients

We have transaction-level data from a major financial services provider, which we will refer to as FSP throughout the paper. While our data use agreement prevents us from being able to disclose the identity of this company, it is representative of major companies in the financial services industry, and is within the top-five companies by market share in the market for annuities. FSP sells a mix of annuities and insurance products in all fifty states, has household name recognition, is publicly traded, and has fairly large market capitalization. Our main dataset consists of information about all transactions associated with financial products offered by FSP in the United States between 2008 and 2015. For each transaction, we observe the specific FSP product transacted, the date of the transaction, the advisor selling the product, and the dollar amount of the transaction. If a contract involves multiple transactions—such as recurring payments—then these multiple transactions can be grouped together. In these situations, the contract amount we report is the sum of the transaction amounts for all transactions linked to that contract. The only client-level information we have is the client's zipcode and age. Although clients can also be linked across contracts, clients purchasing multiple contracts is a fairly rare event, and we ignore these correlations in this analysis.

We have considerably more information about advisors in the dataset: while they cannot be identified in a way that makes it possible to match them to external datasets, they can be linked across transactions in the dataset. Moreover, FSP has also provided us data from Discovery Data, an industry data vendor, for advisors in 2015 who could potentially sell annuities or life insurance.[22] This dataset allows us to observe personal variables about the adviser, such as basic demographics, as well as regulatory information such as licensing and whether the advisor is registered as a broker-dealer representative (BD), a registered independent adviser (RIA), or both (DR). With some

[22] While not all advisers in the transaction data from FSP can be matched to Discovery, the overwhelming majority can. Moreover, the advisers who remain unmatched look very similar in terms of their transactions to those who are matched, which allays concerns about the imperfect match.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table I: Summary statistics for border counties

	N	Mean	Std.Dev.	Percentiles				
				10%	25%	50%	75%	90%
Advisor-Level Quantities								
Is Broker-Dealer								
FSP Advisors	4,016	0.205						
Contracts per FSP Advisor								
BD	822	5.7	9.2	1	1	2	6	14
RIA	3,194	5.7	9	1	1	3	6	14
Contract-Level Quantities								
Is Variable Annuity								
BD	4,706	0.789						
RIA	18,097	0.889						
Contract Amounts ($K, 2015)								
BD	4,706	119.8	140.9	24.2	42.8	80.1	148.8	251.5
RIA	18,097	152.9	179.3	34.2	54.5	100.9	188	304.1
Client Age								
BD	4,706	61.4	10.4	49	55	62	68	74
RIA	18,097	64.7	9.6	54	59	65	71	77

exceptions, advisers in this cut of Discovery Data are all broker-dealers or dually-registered advisers, and those who transact with FSP are *all* either BDs or DRs.[23] We will refer to these groups as BDs and RIAs throughout the paper. Discovery is especially beneficial for two other reasons. First, it also includes information about the firms—including the firm footprint (e.g., local or national), size (number of branch offices as well as representatives), whether the firm offers annuities and insurance products, and some information about account sizes in that firm. Second, Discovery has also entries for advisors in the market who have *not* transacted FSP products—or might not even carry FSP products—and thus provides a complete snapshot of the subset of the advising market that could potentially carry annuities. A drawback of the Discovery dataset is that since we only currently have a snapshot in 2015, we have to restrict our analysis to window of time around this period to ensure that each adviser's licensing information is likely to be accurate; we thus restrict the analysis to 2013–2015.

Table I provides summary statistics for advisers and FSP contracts sold in the relevant border

[23]Recall that any adviser selling products on behalf of a wholesaler must be affiliated with a broker-dealer.

Electronic copy available at: https://ssrn.com/abstract=3281345

counties highlighted in Figure I that we will use in our preferred specifications.[24] About 21% of advisers are broker-dealers. BDs and RIAs each sell about 5.7 FSP contracts on average over the sample period; this number is close to the 75th percentile of 6, consistent with a mass of advisers selling significantly more contracts. Conditional on selling an FSP annuity, BDs sell VAs about 79% of the time, while the proportion is somewhat larger for RIAs. Contract amounts are also larger, by about $30,000, for RIAs. Finally, the average client is around the age of retirement, with a slight difference of about 3 years between BDs and RIAs. This difference seems to persist across all quantiles of the distribution, although it may be of limited economic significance.

III.B. Product-Level Information

Since the transaction dataset from FSP contains (nearly) the exact description of the products for most transactions, we can match it to external data sources containing information about the products.[25] Variable annuities are required to file quarterly prospectuses with the SEC, along with updates to the prospectuses almost monthly. These prospectuses include detailed information about fees—including the mortality and expense fee, administrative expenses, surrender charges, etc.—along with investment options available to annuitants and detailed information about the charges associated with these investment options (e.g., expense ratios). Beacon Research, a data services company that provides disclosure software and curates product information for advisers and other financial firms, provided us with historical data for annuities in our sample. We also hand collected information about restrictions on investments, rider rules, and asset allocations from prospectuses stored in EDGAR, the SEC's online database. We finally match subaccounts to data from the Morningstar Investment Research Center to collect information about fund ratings and investment styles, and we match it to the CRSP Survivorship-Bias-Free US Mutual Fund database for historical returns.

[24] We make two main sample selection decisions. First, we exclude New York from our dataset, and thus counties that border only New York as well. New York does not impose common law fiduciary duty on its broker-dealers, but it does have a substantially different set of regulations surrounding the products that can be sold in the state. Indeed, financial services providers like FSP usually set a different suite of products in New York. Second, we only include contracts where we can identify the branch at which the adviser worked at the time of selling the contract, by cross-checking the entry in the transaction dataset with Discovery Data. This decision does not drop an especially significant number of contracts, and results are mostly unchanged.

[25] The main item missing from our dataset is whether the annuity provides a joint survivorship benefit.

Electronic copy available at: https://ssrn.com/abstract=3281345

IV. Does Fiduciary Duty Affect Choices?

We leverage comparisons across state borders for both broker-dealers and registered investment advisers to estimate the effect of fiduciary duty on the composition of products sold in the market. Section IV.A discusses our empirical strategy. We then document compositional shifts on a number of dimensions. Section IV.B documents a shift away from variable annuities induced by fiduciary duty. Then, Section IV.C presents within-variable annuity comparisons of fees, investment options, returns, and net present value calculations.

IV.A. Empirical Strategy

Simple comparisons of product sales by broker-dealers between states that impose common law fiduciary standards and those that do not are tainted by the fact that fiduciary standards are not randomly assigned. If preferences for financial instruments have influenced the adoption of fiduciary standards, for example, then differences in product sales across states confounds the effect of fiduciary standards with differences in preferences. Instead, we think of fiduciary duty as an endogenous object that is the result of each state's judicial process. We address this issue in two steps. First, we restrict the analysis to counties on either sides of a border between states that differ in fiduciary status, since we expect that—and subsequently provide corroborating evidence for the fact that—border counties are more similar to each other than the two states are. Second, we compare the difference across the border for broker-dealers to that for registered investment advisers, leading to a difference-in-differences strategy to determine whether fiduciary duty has an equilibrium impact. In particular, for a variety of characteristics Y_{ist}, we run the regression

$$\begin{aligned} Y_{ist} = \alpha_0 + \alpha_1 \cdot \mathbb{1}[\text{State has FD for BDs}]_s \cdot \mathbb{1}[\text{Advisor is a BD}]_i \\ + \alpha_2 \cdot \mathbb{1}[\text{State has FD for BDs}]_s \cdot \mathbb{1}[\text{Advisor is an RIA}]_i \\ + \alpha_3 \cdot \mathbb{1}[\text{Advisor is a BD}]_i + \text{FE} + \text{Controls} + \epsilon_{ist}, \quad (1) \end{aligned}$$

where i represents an advisor, s a state, and t a transaction. In our preferred specification, we include contract-month fixed effects to address changes in interest rates over time, and add border fixed effects to use only within-border variation. We use the classification of fiduciary status from

Electronic copy available at: https://ssrn.com/abstract=3281345

Finke and Langdon (2012).

Within specification (1), there are three objects of interest. First is the straightforward difference-in-differences estimator, which is $\alpha_1 - \alpha_2$ in this formulation. Under the null hypothesis that fiduciary duty has no equilibrium impact on market outcomes, we should estimate $\alpha_1 - \alpha_2$ to be zero. One may worry that counties on either side of a state border differ from each other in the underlying demand for financial products. However, the difference-in-differences estimator should alleviate this concern: as long as the demand break is equal for broker-dealers and registered investment advisers, we would still expect $\alpha_1 - \alpha_2$ to be 0.[26] In the results in the following subsections, we will largely reject that $\alpha_1 - \alpha_2 = 0$ for most outcomes of interest, suggesting that fiduciary duty does indeed have an equilibrium impact. Moreover, under the assumption that there are no spillover effects onto registered investment advisers, one can interpret this difference-in-difference estimate as the causal effect of fiduciary duty on broker-dealers.

We interpret two further objects of interest in the regression above: α_1 and α_2. Under the assumption that there are no demand breaks at the border, α_1 alone is the causal impact of fiduciary duty on broker-dealer sales, and α_2 can be interpreted as the spillover effect of broker-dealer fiduciary duty onto registered investment advisers. That is, interpreting α_1 and α_2 as causal effects requires no demand breaks at the border but provides the ability to accomodate spillover effects.

Overall, we find evidence in favor of significant causal impacts of fiduciary duty on broker-dealer sales, with α_1 being significantly different than zero for a variety of outcomes. However, we find no evidence of spillover effects on RIAs, with α_2 being economically and statistically close to zero for most outcomes. In Section VII, in which we analyze extreme outcomes for RIAs, we also find limited effects. Moreover, we find limited evidence throughout this paper for within-firm changes in the behavior of RIAs as well as on entry.

We also show four main arguments in favor of the assumption that there are no demand breaks at the border. First, many demographic characteristics are balanced across the border; Appendix B.1 provides the statistical tests. Second, even with covariate balance, one may be worried about differential selection of consumers to advisers as a function of the fiduciary status of the state. However, there is a considerable amount of survey evidence arguing against this critique. Extensive survey evidence discussed in SEC (2011, 2013a,b) and Hung, Clancy, Dominitz, Talley, Berrebi, and

[26]See Appendix B.4 for an explanation through the context of the model we develop in Section V.

Electronic copy available at: https://ssrn.com/abstract=3281345

Suvankulov (2008) suggests that consumers have very little information about which type of advisor they visit. Of course, there can still be selection on observables—certain consumers may choose to visit large companies, which are more likely to have dually registered advisers—but the extent of this selection would have to vary significantly across state for this to be a legitimate concern. Third, one can test for differential selection by using client and contract characteristics as outcomes in equation (1). While we have limited information about clients in our dataset, we see no significant effects on client age or incidence of cross-state shopping (i.e., whether the adviser and client are from the same state), providing more suggestive evidence against differential selection. Table B.3 in Appendix B.1 shows the results. Finally, the evidence that broker-dealer fiduciary duty has no spillover effects on RIAs also weighs in favor of no systematic breaks in demand existing across state borders. We believe that it is a priori unlikely that the demand break at the border exactly counteracts the spillover effect over a wide set of outcomes, and we thus argue that the border differences are interpretable in their own right.[27]

We apply this strategy to three categories of outcomes to highlight that fiduciary duty has a compositional effect on the types of products sold. In Section IV.B, we study the effect of fiduciary duty on the choice of a variable, rather than a fixed indexed, annuity. While we view this shift mostly as evidence about general compositional effects, it may provide some suggestive evidence on consumer welfare: regulators and the popular press have often negative views of the financial value of variable annuities. However, we should be explicit that since variable and fixed annuities have multidimensional fee structures, and these fee structures are not comparable across the types of products, this outcome does not establish whether consumers are better off under fiduciary duty.

To address this issue, we focus on comparisons within variable annuities in Section IV.C. Prospectuses filed with the SEC provide us with details about the products and their historical rates, so we can compare the choice of product characteristics across state borders. These characteristics have welfare-relevant properties and get us closer to establishing welfare effects on consumers. Then, we collapse all products into a single net present value calculation based on a model of optimal execution of the annuity by a risk-neutral individual.[28] Using the same border strategy, the

[27]The model does put structure on how RIAs would behave in the presence of a difference across the border but in the absence of any direct impact from fiduciary standards. Appendix B.4 discusses these tests and finds support for the two sides of the border being similar.

[28]Unfortunately, we are unable to conduct a similar analysis of fixed annuities due to data quality. Since fixed and indexed annuities do not have to file prospectuses with the SEC, there is no analogous archive of historical

Electronic copy available at: https://ssrn.com/abstract=3281345

difference-in-difference suggests there is an impact on these NPVs, and fiduciary status does cause broker-dealers to steer customers to higher NPV products.

IV.B. Types of Annuities Sold

A natural question to ask is whether fiduciary duty does *anything*, or whether it simply lowers adviser profits without impacting choices.[29] To address this question, we begin by comparing sales of variable versus fixed and fixed indexed annuities. This comparison is coarse, as there are dozens of variable and fixed/fixed indexed annuity products, but it allows us to establish in a parsimonious way that relevant changes are happening across markets with and without fiduciary standards. Moreover, these are two sets of products that provide similar benefits—the opportunity for growth leading to potential annuitization, with some safeguards for bequest in the case of early death—but are usually pitched as competing options in the popular literature on personal finance. Finally, variable annuities have received particular scrutiny in the popular press and by regulators.[30]

Table II presents the results from Specification (1), where the left-hand side variable is a dummy for whether the transaction is for a variable annuity. Column (1) is our baseline specification, restricting to the border and including border fixed effects. The difference-in-difference estimate, in Row 1, shows that there is a significant impact of fiduciary duty on equilibrium sales. The magnitude is large, with a drop in VA sales of nearly 11 percentage points, or 12.5% of the base mean. Breaking the effect down into the BD and RIA effect separately, we report coefficients that correspond to α_1 and α_2 in Rows 2 and 3 of the table. We estimate an economically and statistically significant drop of 8.5 pp in the proportion of VAs that are sold by broker-dealers, which amount to 10% of the base mean. The estimate on the difference for RIAs suggests they have a similar propensity to sell variable annuities on either side of the border: the point estimate is about 2.3 pp with a reasonably small standard error. This is consistent with the fact that RIAs face the same regulatory regime and with the assumption that there are no preference changes at the border. Column (2) adds firm

information for fixed annuities. We attempted to make some progress with archived versions of rate sheets for fixed annuities on FSP's website, but our dataset is missing a large portion of products—especially ones that are distribution-channel specific. We are hesitant to draw conclusions from this partial list, especially given some predictions in Section VII depend on the tails of advice.

[29] Detractors of the extension of federal fiduciary standards to broker-dealers have argued that this legislation will essentially add a set of forms for the customer to sign, without actually changing recommendations or choices.

[30] See, for example, https://www.thinkadvisor.com/2014/07/28/variable-annuities-a-top-source-of-customer-compla/?slreturn=20181123212558 or https://www.finra.org/sites/default/files/InvestorDocument/p125846.pdf.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table II: Variable vs. fixed annuities

	Border Counties		All Counties	
	(1)	(2)	(3)	(4)
DID	-0.109***	-0.043	-0.049***	-0.019
	(0.038)	(0.031)	(0.016)	(0.013)
FD on BD	-0.085**	-0.025	-0.072***	-0.035**
	(0.035)	(0.033)	(0.020)	(0.013)
FD on RIA	0.023	0.018	-0.022	-0.016***
	(0.026)	(0.012)	(0.016)	(0.005)
Firm Fixed Effects	No	Yes	No	Yes
Border Fixed Effects	Yes	Yes	No	No
Base Group Mean	0.869	0.869	0.877	0.877
N	22,803	22,781	215,967	215,925

Transaction-level regression of whether the contract is a variable annuity on a full interaction of fiduciary status and broker-dealer status as in Specification (1), with contract-month fixed effects and border fixed effects when restricting to the border in Columns (1) and (2). Standard errors are clustered at the state level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

fixed effects to the analysis to evaluate whether the effect persists even within firms. Including these fixed effects dampens the differences substantially—especially for broker-dealers—which suggests that much of the variation comes from differences across firms rather than differences in advisers within firms. We return to the issue of within-firm variation below. Appendix B.4 connects the regressions with firm fixed-effects to the model to validate the identifying assumption that both sides of the border are similar.

Columns (3) and (4) extend the analysis to the entire state and drop border fixed effects. The main difference when expanding the sample to the whole state appears to be one of magnitude, as border county differences are about twice as large as state wide differences. With firm fixed effects, the estimates are much smaller and indeed fairly close to zero. While we do not want to interpret the results in Columns (3) and (4) causally, as there are many potential confounding factors when comparing across whole states, the fact that the cross-state estimate is smaller in magnitude is reassuring since it suggests that the cross-border regression does not merely dampen unobserved differences across states. To be precise, one might worry that while counties on either side of the border are more similar than entire states, they are *still* unobservably different from each other in the same way states are different from each other. In this case, however, we would likely expect

Electronic copy available at: https://ssrn.com/abstract=3281345

that estimate off the border to have a *lower* magnitude than the cross-state effect. This concern is analogous to the concern one might have when successively including controls in a regression dampens the coefficient of interest. For the rest of this paper, we will focus mainly on regressions at the border county level.

Appendix B.2 performs several robustness checks for these results, among them adding New York transactions and focusing on advisers who only transact FSP products. Results are broadly consistent with those in Table II.

In this paper, we do not make claims about whether the shift to fixed and fixed indexed annuities is welfare-enhancing for clients. As mentioned earlier, it is not the case that one set of products strictly dominates the other. However, under the assumption of no discontinuity in preferences at the border it is quite stark to find such a large shift in the set of chosen products.[31] This leads us to delve into an analysis of other measures of product quality in Section IV.C.

IV.C. Variable Annuity Characteristics

In this section, we run the same regression as in (1), but with the left-hand side replaced by various quality metrics. Table III shows outcomes for metrics related to fees. Column (1) shows results for the mortality and expense ratio, a yearly (percentage) fee that is taken from the contract amount. Column (2) shows the minimum expense ratio among all subaccounts offered in the variable annuity sold, and Column (3) shows the average. Column (4) shows the average surrender charge, which is the percentage of assets that would be paid out as a back-end fee for early withdrawal, for the surrender period.[32]

The first row shows the difference-in-differences estimates. Broker-dealers subject to fiduciary duty sell VAs with lower minimum but higher average expense ratios. Breaking the effect down further, we find this result is driven by broker-dealers responding, not by a shift in outcomes for RIAs. The results in Row 2 of Table III shows a small decrease of 4.6 bp in the contract fee, off a mean of about 109 bp. While the minimum subaccount fee decreases by about 0.7 bp off the baseline of 50 bp, the *average* subaccount fee increases by about 6.2 bp. These opposing results

[31] Even without this assumption, we find a difference-in-differences coefficient of about the same magnitude as the border difference for broker-dealers.

[32] The surrender charge changes as a function of years since contract purchase, but for FSP contracts it always drops to 0 within 10 years. As such, we report the average of the charge over these years, filling in zeros until year 10.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table III: Variable annuity fees

		Subaccount Expense Ratios		
	M&E	Minimum	Average	Surrender Charge
	(1)	(2)	(3)	(4)
DID	-0.055	-0.006*	0.054**	0.214
	(0.038)	(0.003)	(0.022)	(0.153)
FD on BD	-0.046	-0.007**	0.062***	0.121
	(0.035)	(0.003)	(0.020)	(0.158)
FD on RIA	0.009	-0.001	0.009	-0.093
	(0.020)	(0.002)	(0.010)	(0.078)
Base Mean	1.088	0.501	1.263	3.106
N	19,808	19,808	19,808	19,808

Mortality and expense ratios, subaccount expense ratios (minimum and average across subaccounts), and average surrender charges. Contracts are restricted to borders, specifications include border fixed effects, and standard errors are clustered at the state. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

can be traced back to broker-dealers with fiduciary duty steering customers to products with more investment options. Interestingly, we see that fiduciary duty tends to increase the average surrender charge by about 0.1% off a baseline of 3.1%, although the estimate is small and noisier than the others. We should note that unlike M&E ratios and expense ratios for subaccounts, the surrender charge is not necessarily paid out, and high surrender charges may be beneficial if the client is sure to not withdraw the money, as they always also imply lower fees.[33] Finally note that for Columns (1)–(3), the estimated difference in RIAs are fairly precise zeros, and the difference-in-differences estimate agrees in sign and magnitude (approximately) with the effect on broker-dealers.

As discussed earlier, an important driver of the returns of a variable annuity is set of investment options provided to investors. A drawback of our dataset is that we have no information on which investment options a client elects upon purchasing a variable annuity. We will thus first evaluate investment options using the philosophy that more choice is better. We also use quality metrics for the underlying funds provided by Morningstar. Morningstar rates each fund on a scale of 1–5 stars based on its historical risk-adjusted return (net of expenses) relative to a peer group of funds. We consider a fund to be "high-quality" if it receives at least 4 stars and "low-quality" if it receives 2 or fewer. Second, Morningstar categorizes the "style" of both the equity and fixed-income investment

[33]The fact that higher surrender charges are tied to lower fees precludes strict domination of a subset of products.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table IV: Variable annuity investment options

	# Funds			# Equity Styles		# FI Styles		Return	
	All	≥ 4★	≤ 2★	High Quality	Only Low Quality	High Quality	Only Low Quality	Optimal	Equal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
DID	8.51*	3.83**	1.93	0.748**	-0.503*	0.274	-0.078**	0.0077*	0.0014**
	(4.25)	(1.87)	(2.06)	(0.328)	(0.249)	(0.186)	(0.034)	(0.0039)	(0.0006)
FD on BD	10.90***	3.57**	3.55	0.762***	-0.565**	0.165	-0.091***	0.0062*	0.0010*
	(3.88)	(1.56)	(2.15)	(0.260)	(0.212)	(0.171)	(0.029)	(0.0033)	(0.0005)
FD on RIA	2.38	-0.26	1.62	0.014	-0.062	-0.109	-0.013	-0.0014	-0.0003
	(2.20)	(0.85)	(1.30)	(0.147)	(0.127)	(0.091)	(0.015)	(0.001)	(0.0003)
Base Mean	96.82	32.04	31.35	7.214	0.865	4.407	3.027	0.080	0.025
N	19,808	19,808	19,808	19,808	19,808	19,808	19,808	15,785	15,785

Various investment quality metrics for the subaccounts in the variable annuities sold. Contracts are restricted to borders, specifications include border fixed effects, and standard errors are clustered at the state. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Electronic copy available at: https://ssrn.com/abstract=3281345

of each fund. Each fund has one of nine potential styles based on where it lies on two dimensions.[34] We will interpret access to high quality funds of many different styles as evidence of quality.

Columns (1)–(3) of Table IV show effects on the number of investment options, disregarding restrictions on maximum allocations placed in each option. We estimate that fiduciary duty leads BDs to sell products with about 8.5 more funds, including almost 4 more "high-quality" funds (as measured by having a Morningstar rating of at least 4 stars), relative to the difference in RIA sales. However, more choice comes with costs: just as the average expense ratio increases, so does the number of low-quality funds (as measured by a rating of 2 stars or less), albeit by a small number that is noisily estimated. Column (4) shows that products sold by BDs under fiduciary duty have on average 0.76 more equity styles in which there is at least one high-quality investment (off a baseline of 7.2); furthermore, Column (5) shows there are fewer styles in which all options are low-quality. Columns (6) and (7) repeat the analysis for fixed-income styles, but the effects are noisier and of economically smaller magnitudes.

While Columns (1)–(7) implicitly assume a desire for diversification, Columns (8) and (9) instead simply tabulate effects on mean returns. For each subaccount, we estimate the mean return using historical data from CRSP, controlling for market returns; the procedure is described in Appendix C. This return is net of expense ratio, so funds with higher expense ratios are penalized. We then compute the returns attainable by the variable annuity under two assumptions. Column (8) studies the maximum mean attainable, subject to the investment restrictions imposed by the contract. Column (9) studies the mean that would be attained if the client invested equally across funds while meeting investment restrictions, which we interpret as a naive benchmark.[35] Both columns show a positive effect on the means, increasing the mean returns by about 4–8% of the base mean.

As in previous specifications, the results in Rows 1 and 2 are similar, meaning that the difference in within-broker-dealer means is similar to the difference-in-difference estimate. The third row results are essentially zeros, meaning that there are few estimated spillovers onto RIAs for all columns.

[34]The dimensions are value vs. growth and large cap vs. small cap for equity; for fixed income, they are interest rate sensitivity and credit quality. More details about Morningstar's methodology for style boxes can be found on `http://www.morningstar.com/invglossary/morningstar_style_box.aspx`.

[35]Investment restrictions involve limiting the share of the investment that can be placed in various groups of the subaccounts. The outcomes in Column (8) are thus just solutions to a linear program. To compute the outcomes in Column (9), we minimize the share of the investment placed in the investment restriction group with the maximum required share, and then we allocate equally to each investment in the group.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table V: Returns on variable annuity products

	Optimal Portfolio Choice		Equal Portfolio Choice	
	(1)	(2)	(3)	(4)
DID	0.0051*	0.0046*	-0.0010	0.0005
	(0.0027)	(0.0026)	(0.0009)	(0.0008)
FD on BD	0.0038	0.0036	-0.0000	0.0011
	(0.0024)	(0.0026)	(0.0009)	(0.0008)
FD on RIA	-0.0014	-0.0009	0.0010**	0.0006
	(0.0017)	(0.0010)	(0.0004)	(0.0004)
Contract-Month FE	Yes	Yes	Yes	Yes
Firm FE	No	Yes	No	Yes
Border FE	Yes	Yes	Yes	Yes
Mean of Dep. Var	0.090	0.090	0.063	0.063
N	15,785	15,768	15,785	15,768

Annualized returns for variable annuities sold. Contracts are restricted to borders, specifications include border fixed effects, and standard errors are clustered at the state. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

To aggregate these differences—and indeed take into account information that is even more difficult to incorporate into regressions, such as the behavior of riders that clients may purchase, or the effect of investment restrictions—we compute a metric for the value of the financial product to the annuitant. More specifically, we compute the net present value of each variable annuity contract for a risk-neutral individual who values money left to heirs equally as her own consumption. While we observe riders purchased by clients, we do not have any information about their realized execution: thus, we formulate and solve the dynamic programming problem to determine optimal execution by risk-neutral individuals and assume that all clients follow this strategy. Furthermore, we proceed using two possible assumptions on investment allocations. In the first approach, we assume that clients are choosing investments optimally.[36] In the second, we assume that clients are following the equal-allocation strategy outlined above. Details of this procedure are in Appendix D. For each product, age, and transaction account combination, we obtain a net present value.[37] For ease of interpreting these numbers, we calculate the annualized returns necessary in a fixed account

[36] Optimal investment choice need not correspond to maximizing mean, even for a risk-neutral individual. Since many living benefit riders set floors on the income stream obtained upon retirement, even a risk-neutral individual may wish to trade off mean to increase variance. We search over points on the efficient frontier.

[37] Forward simulation of the computed policy functions would yield a distribution of values over time. The computed value function would correspond to the mean of these simulations.

Electronic copy available at: https://ssrn.com/abstract=3281345

to achieve the same net present value by age 86.[38]

Table V shows results with returns as an outcome. Under the optimal allocation rule, we find that fiduciary duty has a significant impact on broker-dealers, relative to RIAs: the difference-in-difference coefficient is 51 basis points, or about 5% of the mean return. That is, variable annuity contracts sold by broker-dealers with fiduciary duty are about 5% more valuable than the contracts sold by broker-dealers without fiduciary duty, relative to the corresponding difference in RIAs. The within-advisor difference is smaller and noisier, but has a similar magnitude. Under the equal allocation rule, we estimate no difference for broker-dealers, and find a negative point estimate for the difference-in-differences that is smaller in magnitude. Interestingly, we find that in these regressions adding firm fixed effects increases the point estimates for broker-dealers, but not appreciably for RIAs.[39]

We should be clear that a role of financial advice may well be to help clients select optimal investment portfolios, or advise clients on optimal execution of riders. Our dataset does not allow us to investigate differential prevalence of such advice by fiduciary standards. To the extent that one believes that advisers with fiduciary duty are more likely to advise clients on these matters, our estimated effect on returns will underestimate of the true effect of fiduciary duty.

In summary, results in this section largely suggest that fiduciary duty tends to steer consumers to products with slightly lower fees (other than surrender charges), more investment options, and—depending on assumptions on how investments are chosen—higher returns.

V. A Model of Fiduciary Duty

Having established that fiduciary duty shifts the set of products being purchased by consumers, a natural question to ask is whether this shift is due to the advice channel or to the fixed cost channel. This section develops a model of fiduciary duty with heterogeneous firms and the possibility of entry.

[38] That is, we find the return R such that

$$(1+\beta)^{86-A} \cdot (\text{Net Present Value}) = (1+R)^{86-A} \cdot (\text{Transaction Amount}), \tag{2}$$

where A is the annuitant's age and β is a discount rate chosen to be 0.05. Note that 85 is the oldest age that these contracts can be purchased. Furthermore, note that this metric mechanically produces high levels of R, as contacts with living benefit riders and contracts that are annuitized continue to pay out after age 86. Nevertheless, since our main interest is in differences across contracts, this is not a concern.

[39] One may speculate that the true allocations are somehow more informed than the equal allocation rule, but perhaps optimally selected. In that case, we may imagine that the true effect of fiduciary duty on net present values lies between these two estimates.

Electronic copy available at: https://ssrn.com/abstract=3281345

The model shows that improvements in mean advice quality can be rationalized by either channel, so that the results in Section IV do not allow us to identify the channel through which fiduciary duty operates. Furthermore, the model provides testable implications of the presence of an advice channel, which we can then take to the data.

V.A. Elements of the Model

Suppose initially that all firms are broker-dealer firms; we gradually relax assumptions in Appendix A.2 and formally introduce registered investment advisory firms into the analysis in Appendix A.3. Each firm j has a type $\theta_j \in [0,1]$ and can choose advice $a \in [0,1]$; the distribution of types of potential entrants is $H(\cdot)$, which we assume is continuous, and we abuse notation by letting $H(S)$ denote the mass of types in set S. We adopt the convention that higher values of a correspond to worse or more distorted advice. A firm of type θ_j has a per-consumer single-peaked profit function $\pi(a;\theta_j)$, and we define types so that θ_j is the maximizer of $\pi(\cdot;\theta_j)$. Upon entering, therefore, a firm of type θ_j will set advice $a = \theta_j$ and earn base profits $\pi^*(\theta_j) \equiv \pi(\theta_j;\theta_j)$. Firms have to pay a fixed cost K to enter the market.

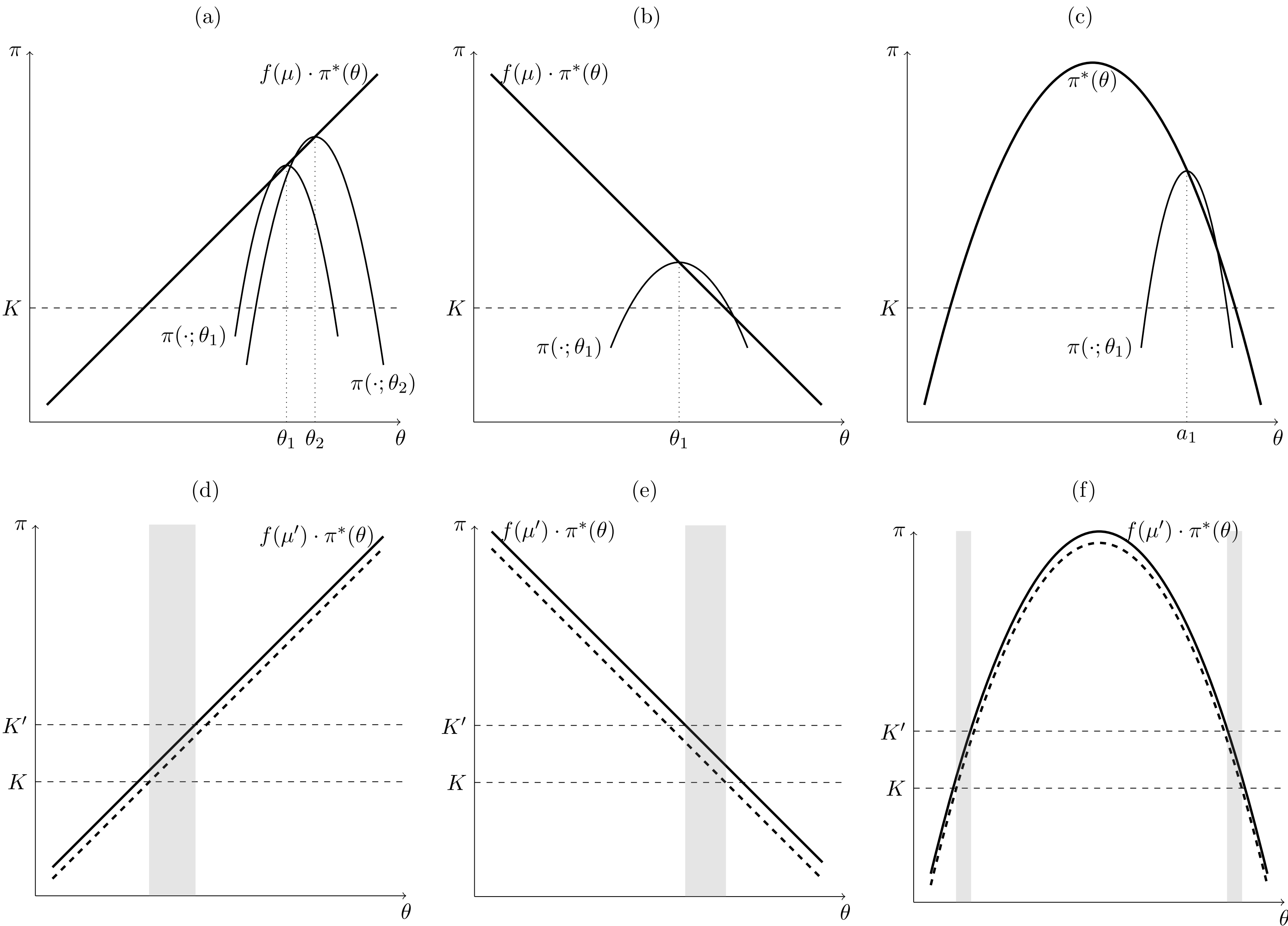
For some intuition for why the maximand of $\pi(\cdot;\cdot)$ is interior, one may think that worse advice corresponds to more profitable products for the advisory firm but increases the chance of legal recourse. We are agnostic about from where differences in θ_j arise. Firms may be differentially susceptible to legal recourse. They may have negotiated different commission schedules with wholesalers and may also provide different splits of the commissions to the individual advisers. They may also place different levels of emphasis on reputational considerations. The key aspect of this model is that in the pure fixed cost channel of fiduciary duty that we define below, shifts in K are not correlated with θ_j.[40]

Given that we do not take a stance on the source of heterogeneity, we also cannot take a stance on the behavior of $\pi(\cdot;\theta)$—and thus $\pi^*(\theta)$—with θ. Figure II(a)–(c) illustrates three possibilities for $\pi^*(\cdot)$ and sample graphs of $\pi(\cdot;\cdot)$. A natural prior is that case (a) is most plausible, with "worse" advice corresponding to the highest commissions and thus higher profits. However, it may be that higher θ firms also face a different set of consumers, or perhaps that national firms earn higher

[40] In Appendix A.2, we analyze an extension of the model where different sets of firms get different levels of increases in fixed costs.

Electronic copy available at: https://ssrn.com/abstract=3281345

Figure II: Illustration of $\pi(\cdot;\cdot)$ and $\pi^*(\cdot)$, and the effects of a pure fixed cost channel



Different possible profit envelopes $\pi^*(\cdot)$, along with plots of the underlying $\pi_i(\cdot;a)$ that generate them. The fixed cost K is presented, and the fixed cost channel involves increasing this value. Panels (d)–(f) illustrate the effects of a pure fixed cost channel, by increasing the fixed cost from K to K'. The shaded types are the ones who exit the market. Note that types map directly to advice (in the same way) in each panel, but we do not show the underlying density $H(\cdot)$ of types.

Electronic copy available at: https://ssrn.com/abstract=3281345

profits and also have reasons to distort advice less. Again, as long as these differences are not correlated with the effect of fiduciary duty on fixed cost (discussed below) they can all be subsumed in θ_j, and cases such as (b) and (c) are also plausible.

If the mass of firms who enters a market is μ, then the profit of a firm of type θ_j is

$$f(\mu) \cdot \pi^*(\theta_j) - K,$$

where $f(\cdot)$ is decreasing in μ and independent of θ. We can conceptualize $f(\cdot)$ as the number of customers a firm receives if a mass μ enters, and K is the fixed cost of entry.[41] Denote by $\mathcal{E}(\mu, K)$ the set of θ_j who would enter if they all believe that a mass μ of firms will enter and the fixed cost is K. Then, in an equilibrium a mass $\mu^*(K)$ of firms would enter such that

$$H\left(\mathcal{E}(\mu^*(K), K)\right) = \mu^*(K).$$

Let $\mathcal{E}^*(K) \equiv \mathcal{E}(\mu^*(K), K))$ be the set of types that enter in equilibrium when the entry cost is K. Appendix A provides a straightforward argument that the equilibrium exists and is unique.

V.B. The Fixed Cost Channel

Suppose fiduciary duty operates through a *pure fixed cost* channel: imposing fiduciary duty increases costs from K to K' for all θ but does not alter $\pi(\cdot;\cdot)$ (or the distribution of types of potential entrants) in any way. This increase in fixed costs could correspond to having to purchase compliance software, the increased concern of legal exposure, increase in paperwork, more overhead time required to deal with regulatory hassles, etc.[42] What predictions can we make on the set of advice given in the market? First, given the framework, increasing fixed costs does not affect the advice that would be profitable for a type θ_j, conditional on entry: this will suggest a firm-level test for the

[41] Importantly, $f(\cdot)$ is not directly a function of whether the market imposes fiduciary duty on its advisers. This assumption is consistent with survey evidence (SEC, 2011, 2013a,b) that clients are largely unaware of the fiduciary status of their adviser, much less the variation in fiduciary standards by location.

[42] In this section, we write the change in fixed costs as a change to the fixed costs of entry. In the baseline model, we can instead have a constant fixed cost of entry and say that the effect of the fixed cost channel is to change the base profit function from $\pi(\cdot;\cdot)$ to $\pi(\cdot;\cdot) - c$. This would correspond to an increased per-transaction cost due to fiduciary duty. The key similarity, as discussed later, is that c is independent of advice and the ordering of profitability of types does not change with the imposition of fiduciary duty. Essentially, one should think of the "fixed" cost as fixed across types.

Electronic copy available at: https://ssrn.com/abstract=3281345

channel through which fiduciary duty operates. Second, an important comparative static, on which our market-level tests for the channels of fiduciary duty will be based, is that if $K' \geq K$ then

$$\mu^*(K') \leq \mu^*(K) \text{ and } \mathcal{E}^*(K') \subseteq \mathcal{E}^*(K). \tag{3}$$

Intuitively, increasing the fixed cost forces the base profitability of the marginal entrant to increase. Since the set of entrants is the set of types weakly more profitable than the marginal entrant, the set of entrants weakly shrinks. The formalization of this result is in Appendix A. Let $\underline{\theta}(K) \equiv \min \mathcal{E}^*(K)$ be the minimum type that enters with a fixed cost of K and $\bar{\theta}(K) \equiv \max \mathcal{E}^*(K)$ be the maximum. An implication of (3) is that if $K' \geq K$, then $\underline{\theta}(K) \leq \underline{\theta}(K')$ and $\bar{\theta}(K) \geq \bar{\theta}(K')$. Since types are one-for-one with advice, if fiduciary duty operates through a pure fixed cost channel, imposing fiduciary duty must weakly improve the worst advice in the market and weakly reduce the best advice.

This baseline model is simple, but lacks many reasonable features of the market for financial advice. In Appendix A we allow for such extensions and show that that the inclusion in (3) continues to apply, sometimes with slight modifications. In particular, we determine that the condition continues to apply if firms have idiosyncratic shocks to their base profit functions, if firms serve heterogeneous consumers and as a result optimal advice varies, if under the fixed cost channel the magnitude of the increase in fixed costs varies by firms, and if competition improves advice quality. We also extend the model to allow for the presence of registered investment advisers who compete with broker-dealers. The key connection between these generalizations is that the inclusion holds as long as fiduciary duty does not change the *relative* profitability of different types of firms. Thus, it simply shrinks the set of types who enter rather than rearranging them, which leads to shrinking the set of advice observed in the data.

Importantly, there are no analogous predictions for how fiduciary duty affects moments such as the mean of the distribution of advice, even if it operates purely through a fixed cost channel. This can be traced back to the fact that we are not taking any stance on the shape of $\pi^*(\cdot)$ or $H(\cdot)$. Panels (d)–(f) of Figure II illustrate the dynamics of increasing the fixed cost in the settings of panels (a) through (c). In each situation, K increases to K', but the effective profit function $(f(\mu) \cdot \pi^*(\cdot))$ also increases slightly due to exit of firms, from the dashed lines to the solid ones. The

Electronic copy available at: https://ssrn.com/abstract=3281345

types that exit are the ones in the shaded areas. In panel (d), fiduciary duty operating through a fixed cost channel will increase the mean a since $\pi^*(\cdot)$ increases in θ and increasing the fixed cost simply excludes low-θ firms from the market. In panel (e), the argument is reversed. In panel (f), the effect on the mean depends on $H(\cdot)$. In all three panels, however, the extremes of advice (weakly) decrease.

V.C. The Advice Channel

Another channel through which fiduciary duty may operate is an *advice channel*, which is arguably the intended channel. The advice channel would make it differentially more costly to offer low-quality advice to clients. Thus, unlike a pure fixed cost channel, an advice channel could alter the ordering of profitability of types. To model this advice channel in the base scenario (in which firms differ along a single dimensional type), we assume that there is a cost function $c(a)$ such that the profit to type θ_j from giving advice a is $\pi(a;\theta_j) - c(a)$, where $c(a)$ is increasing in a so that worse advice is more costly.[43]

Under an advice channel of fiduciary duty, the optimal advice $a^*_{FD}(\theta_j)$ given by type θ_j weakly improves: $a^*_{FD}(\theta_j) \leq \theta_j$.[44] This leads to a firm-level prediction: if fiduciary duty is imposed on a market, firms that remain in the market must weakly improve their advice.

Our second observation is that the predictions on the extreme values of advice need not hold under an advice channel. As an illustration, suppose $c(\cdot)$ is such that fiduciary duty places a cap on advice: $c(a) = 0$ for $a \leq \bar{a}$ and $c(a)$ is infinite for $a > \bar{a}$. Figure III illustrates that firm with sufficiently moderately high values of θ_j (e.g., θ_1) will be forced to adjust their advice to $\bar{a}$, which those with especially high values of θ_j (e.g., θ_2) will be forced to exit the market. However, the exit of such firms will induce low-θ_j firms, who were otherwise not profitable enough, to enter the market. Thus, $\bar{\theta}$ decreases, and since $a^*(\theta) \leq \bar{\theta}$, the advice given by this type improves. Thus, the advice channel effectively handicaps high-θ_j firms, and the highest-quality advice can actually improve. This is impossible if fiduciary duty were to operate through a pure fixed cost channel.

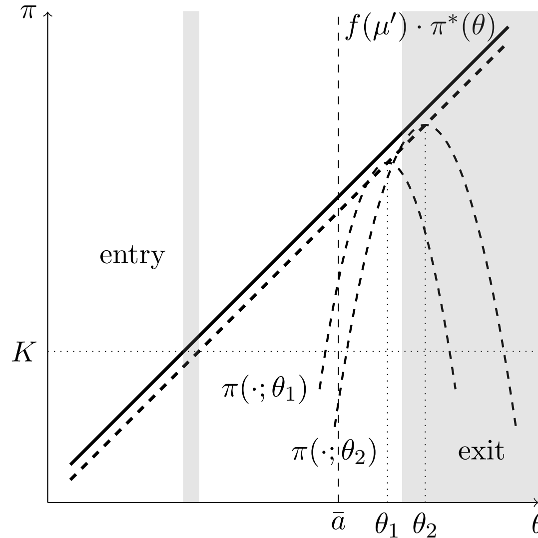
Note that it is still possible for both extremes of the advice distribution to contract, just like in

[43]Note that the predictions in the case where $c(\cdot)$ is flat are identical to those in a pure fixed cost channel, and we will thus not say an advice channel is present in such a situation.

[44]Consider the function $g(a, \lambda) = \pi(a; \theta_j) - \lambda c(a)$. Let $a^*(\lambda)$ be the maximizer of $g(a, \lambda)$. Note that $g(a, \lambda)$ has weakly decreasing differences in (a, λ) since $c(\cdot)$ is weakly increasing. Then, it must be that $a^*(\lambda)$ is decreasing in λ. The result follows from $\theta_j = a^*(0)$ and $a^*_{FD}(\theta_j) = a^*(1)$.

Electronic copy available at: https://ssrn.com/abstract=3281345

Figure III: Illustration of the advice channel



Moving from the baseline (thick, dashed lines) to a fiduciary standard in which advice can be no larger than $\bar{a}$. The shaded area to the right illustrates types who exit due to the regulation since they cannot profitably adjust their advice. The shaded area to the left illustrates types offering previously unprofitably good advice to enter since the effective profit function increases due to the exit of these types.

a pure fixed cost channel. Moreover, note that if an advice channel is present, then the worst advice *could* also worsen upon imposing fiduciary duty: in the case where firm types are multidimensional (see Appendix A.2), it is possible for the advice channel to induce entry of firms who give low a to most types of consumers but especially high a to a small set of them. The key observation, however, is that in an advice channel—unlike in a fixed cost channel—it is *not necessary* that both extremes of the advice distribution contract.

V.D. The Importance of Distinguishing These Channels

Why is it important to distinguish these channels, aside from the inherent interest in understanding how an important policy operates? We should note that from the perspective of quantifying the effects of a *particular* policy, it does not matter whether net change in advice comes from a firm that changed its behavior in response to the standard or from a different firm that was able to enter only because others could not. However, the channel is especially important from a regulatory perspective, if we would like to predict the effects of tightening fiduciary standards. In particular, extending fiduciary duty at the federal level to broker-dealers may lead to a standard of care that

Electronic copy available at: https://ssrn.com/abstract=3281345

Figure IV: Distinguishing the pure fixed cost and the advice channels

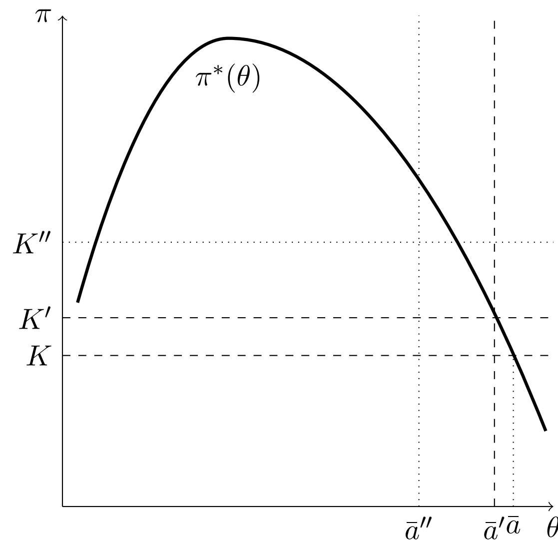


Illustration of a profit envelope under which strengthening fiduciary standards will lead to different results under a pure fixed cost channel and an advice channel (proxied by a cap)

is more stringent than that of common-law fiduciary duty.[45] Consider the situation depicted in Figure IV, and suppose that in the baseline market without any fiduciary standards, the maximum advice is given by $\bar{a}$. Imposing fiduciary standards moves the maximum advice to $\bar{a}'$. The results could be rationalized by either a fixed cost moving to K' or a cap of $\bar{a}'$ being imposed through fiduciary standards.[46] However, if the regulator wishes to make the same policy more stringent, the two channels would offer different predictions. In an advice channel, tightening the cap to $\bar{a}'' < \bar{a}'$ would push low-quality advice out of the market. Tightening a fixed cost channel to $K'' > K'$ would *also* cause especially high-quality advice to exit the market. A regulator could avoid this situation by estimating the empirical counterpart of $\pi^*(\cdot)$ or limit it by ensuring that fiduciary duty does not operate through a pure fixed cost channel.

Furthermore, this figure also highlights that one can be more confident of the external validity of the causal effect if fiduciary duty operates through the advice channel than if it operates through the fixed cost channel. In the former, every surviving firm will distort their advice weakly less, leading to an overall improvement of average advice, while in the latter, whether average advice increases or

[45] Furthermore, stringency of fiduciary duty regulations is a matter of current policy debate. Advocates of the defunct DOL Rule argue that the SEC's Best Interest Regulation does not live up the same standards. Proposed state *legislation* (rather than common law) is also anecdotally of different stringencies.

[46] The figure abstracts away from scalings of the effective profit function induced by entry, for simplicity.

Electronic copy available at: https://ssrn.com/abstract=3281345

decreases depends on whether more low-quality or high-quality advice firms are displaced. This hinges crucially on $H(\cdot)$ and on the shape of $\pi^*(\cdot)$, objects that may be quite heterogenous across markets.

V.E. Mapping the Model to Data

The model provides testable conditions under which we can reject the notion that fiduciary duty operates through a pure fixed cost channel, and conditions under which an advice channel must be present. Summarizing the discussion above, consider two identical markets, but for the fact that one does not impose fiduciary duty on broker-dealers and the other does. If fiduciary duty were to operate purely through a fixed cost channel, we would have the following two predictions:

1. If a specific broker-dealer firm enters both markets, it offers the same advice in both.
2. The highest-quality advice offered by any broker-dealer in the market with fiduciary duty is (weakly) lower than that offered in the market without. The lowest-quality advice offered by any broker-dealer in the market with fiduciary duty is (weakly) higher than that offered in the market without.

Furthermore, if fiduciary duty constrains low quality advice, we have the following predictions:

3. If a specific broker-dealer firm enters both markets, it offers weakly better advice in the market with fiduciary duty.
4. A sufficient condition for the presence of an advice effect is that the highest-quality advice offered by any broker-dealer in the market with fiduciary duty is strictly higher than that offered in the market without.

It is important to stress that these two channels are neither mutually exclusive nor exhaustive: fiduciary duty could both increase fixed costs and constrain advice, and it could be the case that it affects neither. We focus on testing the hypothesis that there is no advice channel.

As discussed earlier, in Appendix A we extend this baseline model in several directions, mostly without changes to the previous predictions. One exception to this statement occurs if one assumes that there are multiple types of broker-dealers, such as local and regional, and that the magnitude

Electronic copy available at: https://ssrn.com/abstract=3281345

of the fixed cost channel differs by type. In this case, predictions 2 and 4 only hold for broker-dealer types whose share of the market does not expand due to competitive effects. Below we show that no broker-dealer type expands with fiduciary duty, so these predictions continue to hold. A similar result emerges when competition directly improves advice. Under this extension, if we see the mass of firms decreases upon imposing fiduciary duty (which we do empirically), then it is not possible to rationalize an improvement in the best advice through a pure fixed cost channel.

However, if competition actually directly harms advice, our model predictions no longer hold. Given there is no motive to undercut competitors on price by offering a worse product—unbeknownst to the customer—we find it a priori more likely that competition will increase quality.[47] However, the literature on credence goods and information disclosure does highlight that the effect of competition on outcomes depends on the details of the model (Dulleck and Kerschbamer, 2006). Crucially, under the assumption that competition worsens advice for all adviser types, then the fact that we observe fewer firms in markets where broker-dealers have fiduciary duty implies that we should also expect to see an improvement in the *worst* advice in the market, which is a testable implication we can reject in Section VII. However, it could be the case that competition worsens advice for some adviser types, excepting those who provide the worst advice in the market. Under such a model, the above predictions fail to hold.

Moreover, it is important to stress that the model in this section is not fully general. Nevertheless, we find the core intuition robust and the model to be a useful tool to both formalize and test potential mechanisms.

VI. Does Fiduciary Duty Affect Market Structure?

In this section, we empirically evaluate the concern that fiduciary duty increases the "cost of doing business" and impacts market structure: critics of fiduciary standards often claim that the net impact of such standards may be to decrease the number of firms and advisers in the market, thus limiting access to financial products for clients. Given the absence of time series variation in common law fiduciary duty, our analysis is again cross-sectional. However, we will use a strategy similar to the previous sections of the paper to control for unobservable demand or cost shifters.

[47] Recall that payments to advisers here mostly come from financial services providers, not customers, so that prices and quality are the same object.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table VI: Composition of firms, by type

	(1) Total Firms	(2) BD Firms	(3) RIA Firms	(4) % BD Firms
$\mathbb{1}$[Fiduciary]	-0.092	-0.157**	-0.037	-0.072
	(0.069)	(0.076)	(0.068)	(0.052)
N	411	411	411	337

Columns (1)-(3) show regressions of the number of firms of each type (using the $\log(x+1)$ transformation) on a dummy for fiduciary status of the county. Column (4) shows results of an OLS regression of the proportion of BD firms on the same covariates. All specifications have border fixed effects, control for the log population, log median household income, and median age at the county level. Standard errors are clustered at the border level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Taking a market to be a county, we will compare counts of firms per county on either side of the relevant border, controlling for border-level fixed effects. We will further study whether fiduciary duty affects the types of firms who enter on either side of the border. Henceforth, we will maintain the identifying assumption that markets on either side of the border are identical but for fiduciary duty, relying on the small differences in RIA behavior at the border discussed in Section IV as the primary justification.[48]

We expand our sample beyond those advisers and firms who have transacted with FSP and use the Discovery dataset, which provides a snapshot of all registered financial advisers in 2015 able to sell annuities. We say an adviser has entered a market if the adviser is marked as actively selling financial products by Discovery. We consider a firm to have entered a market if it employs at least one adviser who has entered the market. Our main specification is a regression at the county level of the (log of one plus the) number of firms of a particular type on a dummy for the fiduciary status of the county, with fixed effects for the border and a control for the log of the population.[49] We also regress the proportion of firms that are broker-dealer firms, conditioning on the set of counties where there is at least one entrant. Table VI shows results of these regressions.

Columns (1)–(3) of Table VI show evidence of both a level and a compositional effect of fiduciary duty on market structure. The point estimate of fiduciary duty suggests that imposing fiduciary duty reduces the total number of firms in the market by about 9%, although the estimate cannot rule out a zero effect at the 10% level. Columns (2) and (3) suggest that this level effect comes

[48]Appendix B.4 provides further model-based justification for this assumption.
[49]Poisson regressions return similar results to the ones presented in this section.

Electronic copy available at: https://ssrn.com/abstract=3281345

primarily from a drop in the number of broker-dealer firms, which are affected by the regulation. The number of such firms drop by 16% in counties with fiduciary duty, a number that is significant at the 5% level. By contrast, we do not estimate a statistically (or economically) significant effect on the number of dually registered firms. Column (4) puts these results together and shows a compositional effect of fiduciary duty: we find a a modest decrease, of about 7 pp off a baseline of 31%, in the proportion of firms that are broker-dealers in states in which broker-dealer advisers have fiduciary duty.

We next study whether fiduciary duty induced a compositional shift even within broker-dealer firms, focusing on firm footprint. We use Discovery Data's classification into local, multistate, regional, and national firms. The rationale behind this investigation is two-fold. First, a natural concern is that local broker-dealers may be more susceptible to increases in costs induced by fiduciary duty—perhaps because they lack the legal and compliance departments to deal with the regulatory costs of such laws. Second, if different groups of broker-dealer firms sustain different increases in fixed costs, then even under a pure fixed cost channel we may see an expansion in advice from broker-dealers. However, Appendix A.2 shows that this expansion cannot happen without an expansion in at least of the groups. As such, the effect of fiduciary duty on entry for a natural grouping of broker-dealer firms is a relevant robustness check for the testable predictions of the model.

Table VII presents results of regressions where the left-hand side is (the log of one plus) the count of the number of firms of each footprint, and the right-hand side has the same set of variables the regressions in Table VI. The numbers presented in the table are the coefficient of the fiduciary dummy in separate regressions. The first row shows that among all firms, the ones that are affected most strongly by regulation are the ones with a local footprint, with the number of local firms dropping by about 13%. Consistent with the notion that the direct incidence falls on broker-dealers, the second row shows that local broker-dealers are affected strongly. The third row suggests no strong compostional effect among dually registered firms. We should note, however, that the compositional shift we identify among broker-dealers is due to "exit" of firms: we do not see any evidence that the decrease in the number of local broker-dealers induces *more* regional or national broker-dealers to enter.

In Appendix B.3, we study the related question of whether fiduciary status affects the probability

Electronic copy available at: https://ssrn.com/abstract=3281345

Table VII: Number of firms, by footprint

	(1) Local	(2) Multistate	(3) Regional	(4) National
All Firms	-0.133*	-0.0657	0.0036	-0.0398
	(0.0702)	(0.0495)	(0.0577)	(0.0580)
BD Firms	-0.115*	-0.0277	-0.0190	-0.0645
	(0.0681)	(0.0324)	(0.0485)	(0.0679)
DR Firms	-0.0225	-0.0483	0.0173	-0.0296
	(0.0175)	(0.0485)	(0.0483)	(0.0639)

Regressions of the number of each type of firm (using the $\log(x+1)$ transformation) on fiduciary status, county controls (log population, log median household income, and median age), border fixed effects, and standard errors clustered at the border. Each coefficent shown comes from a separate regression, and the number in the table is the coefficient on the fiduciary dummy. All regressions have $N = 411$ observations. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

of entry of different types of firms, taking a stance on who potential entrants are in each county. We find that fiduciary duty decreases the probability of entry for all broker-dealers. When splitting this difference by firm footprint, the effect is stronger for local broker-dealers than those of other footprints, although the estimates are noisy. These results are broadly consistent with the observations in Table VII. While these regressions are conducted in the absence of an explicit structural interpretation, one could think of border fixed effects as controlling for the expected number of rival firms in the market as in a standard entry model. A major difference between this specification and workhorse models such as Seim (2006) is that in our case the location of rivals over counties in the border cannot affect expected profitability of potential entrants.[50]

While fiduciary duty leads to a contraction in the number of broker-dealers and a smaller (albeit noisily measured) contraction in the total number of firms, does it cause a contraction in the market for annuities? To analyze this question, we regress measures of market size on a fiduciary dummy, county controls, and border fixed-effects. We use three measures of market size: (i) total dollar sales of variable annuities at the county, which FSP has provided us through its membership in a consortium of annuity providers;[51] (ii) total number of FSP contracts sold; and (iii) total dollar sales of FSP annuities. Table VIII provides results of these regressions, and we find limited effects

[50]One may also wonder about the number of individual advisers in the market. We can repeat the analysis using counts and proportions of advisers of each type. We find small but especially noisy *positive* effects on the number of BD and RIA advisers. This can be attributed to the fact that national firms often enter with teams of advisers, which mechanically increases the number of individual advisers.

[51]We do not have data on total annuity sales by county.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table VIII: Total sales

	All Products	FSP Products	
	VA Sales (1)	Number of Contracts (2)	Total Sales (3)
$\mathbb{1}$[Fiduciary]	0.001	-0.023	0.043
	(0.049)	(0.064)	(0.046)
Mean of Variable	$51.1 M	55.5	$8.1 M
N	411	411	411

Regression of various metrics for total sales on the fiduciary status of the county, controlling for log population, log median household income, and median age. Column (1) shows total sales of variable annuities across all firms. Columns (2) and (3) restrict to FSP and show number of annuity contracts (both fixed and variable) and total dollar sales of these contracts. All specifications use the $\log(x+1)$ transformation of the left-hand side, although means are presented without taking logs. Specifications include border fixed effects and standard errors are clustered at the border level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

on market size. Despite the proportional shift away from variable annuities (for broker-dealers), we estimate a zero effect of fiduciary status on dollar sales of variable annuities (across all providers). The standard errors allow us to rule out especially large shifts of 10% in either direction with 95% confidence. We do not have data on sales of fixed and indexed annuities outside FSP, so Columns (2) and (3) focus on total FSP sales. We estimate a small negative impact of fiduciary status on the number of annuity contracts sold by FSP and a larger positive impact on total dollar sales of FSP annuities. Both estimates, however, are statistically indistinguishable from zero.

In summary, evidence from the relevant borders suggests that fiduciary duty does reduce the number of broker-dealer firms operating in a market, with no strong effects on the number of dually registered firms. This leads to a decrease in the total number of firms in a market, although the magnitude of this decrease is estimated noisily. Moreover, we find that most of the incidence of the regulation falls on smaller, local broker-dealers. On net, however, we find limited effects of fiduciary duty on the total size of the market—both in terms of products sold and in terms of the total dollar amount of the products sold.

VII. Analysis of the Mechanism

In this final section, we first implement the tests motivated by the model in Section V for the presence of an advice channel. We then use the structure of the model to provide further evidence

Electronic copy available at: https://ssrn.com/abstract=3281345

on the validity of the border-county strategy.

VII.A. Market-Level Tests

We start with market-level tests proposed in Section V.E. These tests are based on the support of the distribution of advice given in identical markets with and without fiduciary duty. To take these predictions to the data, we first need a measure of the quality of advice: since it is most useful if the measure is continuous, we use the return on variable annuities assuming optimal allocation. Second, we make this metric comparable across borders by partialling out border fixed-effects, essentially demeaning the metric within-border. Finally, we need methods to proxy the support of the distribution of advice.

In this section, we proxy the support by (i) extreme quantiles and (ii) share of mass in the distribution above particular (extreme) levels. To formalize our decision to look at quantiles and shares of mass, suppose that we have two distributions A and B with the maximum of the support of A strictly less than the maximum of the support of B. Letting Q_T be the quantile function of $T \in \{A, B\}$, we thus know that $Q_A(1) < Q_B(1)$. As long as the quantile functions is continuous, $Q_A(\alpha) < Q_B(\alpha)$ for sufficiently high α as well. Similarly, if we let the maximum of the support of A by M_A, we know that $F_A(M_A) = 1$ and $F_B(M_A) < 1$, where F_T is the cdf of T. Thus, for sufficiently high values x, we must have $1 - F_A(x) < 1 - F_B(x)$ as well, by continuity. Of course, we do not have much guidance on which values of (normalized) advice or quantiles to pick, so we present results with a variety of such choices. All confidence intervals are constructed by bootstrapping the sample by resampling within-county.

Table IX shows the quantiles for this normalized distribution in regions with fiduciary duty, as well as the difference between the regions with and without fiduciary duty.[52] Columns (1)–(3) show results for high quantiles, corresponding to especially high-quality advice. We estimate a statistically and economically significant expansion in the provision of high-quality advice by broker-dealers when considering the 90$^{\text{th}}$ and 95$^{\text{th}}$ percentiles. As argued in Section V, this expansion cannot be consistent with fiduciary duty operating *purely* through a fixed cost channel. The point estimate on the effect on the 99$^{\text{th}}$ percentile is smaller but positive, but both the quantile and the difference are

[52] Since the entry model is at the firm level, we categorize advice by the regulatory status of the firm rather than the adviser in this section. Results are qualitatively—and usually even quantitatively—similar if using the adviser's status instead.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table IX: Differences in quantiles

	High-Quality Advice			Low-Quality Advice		
	90% (1)	95% (2)	99% (3)	1% (4)	5% (5)	10% (6)
BD Value	0.0148	0.0196	0.1057	-0.0364	-0.0310	-0.0281
	(0.0020)	(0.0020)	(0.0335)	(0.0030)	(0.0015)	(0.0012)
BD Difference	0.0078***	0.0151***	0.0025	-0.0038	-0.0045**	-0.0015
	(0.0024)	(0.0031)	(0.0590)	(0.0036)	(0.0020)	(0.0018)
RIA Value	0.0219	0.0326	0.1651	-0.0383	-0.0322	-0.0285
	(0.0004)	(0.0014)	(0.0320)	(0.0018)	(0.0005)	(0.0005)
RIA Difference	-0.0019***	-0.0012	-0.0043	0.0004	0.0004	0.0008
	(0.0007)	(0.0027)	(0.0514)	(0.0007)	(0.0006)	(0.0006)

Quantiles of the distribution of returns for broker-dealers and investment advisers without fiduciary duty, and the change in the quantiles with fiduciary duty. Standard errors are computed by bootstrapping, with resampling within county, and significance is only reported for the differences. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

estimated especially noisily. Columns (4)–(6) present the effects on low-quality advice. Here, we do estimate a small expansion in *low*-quality advice as well when looking at the 5$^{\text{th}}$ percentile, as well as a small and noisy negative number for the 1$^{\text{st}}$ percentile. First, we should note that such expansion in advice—even at the low end—is also inconsistent with a pure fixed cost channel and can be rationalized by an advice channel in which newly entering firms do occassionally offer what we classify as lower quality advice. However, we should also note that the magnitude of the effect on low-quality advice is considerably smaller than than on high-quality advice. Moreover, we do not see any appreciable effect on the 10$^{\text{th}}$ percentile.

The third and fourth rows of Table IX present the effects on advice provided by registered investment advisory firms. Recall the under either channel, we would expect a weak expansion in both high and low-quality advice provided by these firms, as fiduciary duty only impacts RIAs through entry. Results in Section VI suggest that entry by RIAs, however, is at best limited, and we accordingly see especially small effects on the support of advice provided by RIAs. While without parameters, the model does not provide any quantitative predictions on the relative changes in advice by BDs and RIAs, it is intuitively consistent that broker-dealers are affected more strongly by a regulation that has direct incidence on them.

Table X uses the share of advice above and below cutoffs as another proxy for the upper bounds

Electronic copy available at: https://ssrn.com/abstract=3281345

Table X: Differences in shares of extreme advice

	High Returns			Low Returns		
Cutoff	0.010 (1)	0.015 (2)	0.020 (3)	-0.010 (4)	-0.015 (5)	-0.020 (6)
BD Proportion	0.126	0.098	0.047	0.486	0.398	0.293
	(0.015)	(0.013)	(0.009)	(0.022)	(0.023)	(0.020)
BD Difference	0.119***	0.095***	0.076***	-0.114***	-0.078***	-0.040
	(0.019)	(0.021)	(0.016)	(0.027)	(0.025)	(0.026)
RIA Proportion	0.217	0.167	0.121	0.373	0.312	0.248
	(0.006)	(0.006)	(0.004)	(0.008)	(0.007)	(0.007)
RIA Difference	-0.010	0.014	-0.021***	0.008	-0.007	-0.015
	(0.008)	(0.009)	(0.006)	(0.011)	(0.009)	(0.010)

Returns are demeaned by the mean return in the border. The first and third rows report the proportion of returns above (for high returns) or below (for low returns) cutoffs, in the region without fiduciary duty. The difference is the change the share when moving to the region with fiduciary duty. Standard errors are computed by bootstrapping, with resampling within county, and significance is only reported for differences. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

of the supports of the distributions with and without fiduciary duty. As before, the mean return of all transactions at the border is subtracted before reporting these percentages. The results are broadly similar to the ones with quantiles. We see substantial and statistically significant increases in the proportion of advice that is above particular cutoffs for broker-dealers. We also see noticeable decreases the share of low-quality advice,[53] although we estimate a reasonably precise zero for the most extreme cutoff. For RIAs, this metric estimates mixed effects on high-quality advice and no significant effect on low-quality advice. All point estimates are much smaller than the effect on broker-dealers. Once again, these results are consistent with the advice channel on fiduciary duty being empirically relevant.

We should discuss two concerns brought up at the end of Section V.B. First, even if fiduciary duty were to operate through a pure fixed cost channel, we may well expect local, regional, and national firms to have different shocks to their fixed costs. Appendix A.2 shows that if the number of firms within the same "group" shrinks as a result of fiduciary duty, then the pure fixed cost channel would still predict an overall contraction in advice—and thus the extremes of advice as well—since

[53] As a clarification, recall that a negative number in the low-quality section in Table X corresponds to a decrease in low-quality advice while a negative number in Table IX corresponds to a decrease in the quantile and thus an expansion in low-quality advice.

Electronic copy available at: https://ssrn.com/abstract=3281345

there would be a contraction in advice within-group. Given that Table VII shows no evidence of expansion of broker-dealers of any footprint, a contraction in advice is still a valid prediction of the pure fixed cost channel. Second, one might be worried that the improvement in the highest-quality advice is due not to an advice channel induced by regulation but rather a direct effect that reduced competition directly improves advice. However, if we believe that this direct impact of competition is affects all types, then we would expect even the worst advice in the market to improve in a pure fixed cost channel: the worst types in the market would improve (due to exit), and the types that remain in the market would further improve their advice due to lessened competition. The fact that we do not see this effect in Table IX, where if anything the worst advice worsens slightly, is suggestive evidence against this concern. We also do not see a statistically significant effect in the most extreme cutoff in Table X.

VII.B. Firm-Level Tests

Another prediction of the fixed cost channel is that behavior at the firm level should not change across the border, for firms on both sides of the border. Significant changes in behavior at the border within-firm—especially ones that are consistent with restrictions on low-quality advice—would be indicative of the advice channel. Throughout the body of the paper, we have included regressions with firm fixed-effects. The strongest evidence of within-firm changes in advice comes from Column (2) of Table V, which looks at results on our baseline metric for advice. It shows a positive point estimate of 36 basis points (with a standard error of 26 bp)—about the same as the estimate without firm fixed effects—on broker-dealer firms, providing somewhat noisy evidence that products transacted adjust towards higher returns even within firm. The point estimate on RIAs is closer to zero. Comparing Columns (3) and (4) shows that the point estimate under equal portfolio choice is larger with firm fixed effects, but small and noisy as well. Interestingly, Column (2) of Table II shows that the within-firm effect for the class of product—variable or fixed indexed annuity—sold does not respond as strongly within firm as it does across the entire market. We estimate a point estimate of a decrease in 2.5 pp for selling a variable annuity, relative to 8.5 pp across firm.

However, the drop in the point effect by about 75% seems to be the exception across outcomes. Table B.6 in Appendix B.5 includes the full battery of outcomes investigated in Section IV but runs all regressions with firm fixed effects. The general observation is that while the point estimates are

Electronic copy available at: https://ssrn.com/abstract=3281345

usually dampened relative to the estimate without firm fixed effects, they are often still significant and almost always share the same sign. Indeed, a considerable portion of the net change observed is due to within-firm changes, which lends further credence to the presence of an advice channel.

VIII. Conclusion

This paper evaluates the effects of extending fiduciary duty to broker-dealers on the set of products consumers purchase, on the quality of purchased products, and on market structure. This question is motivated by the recent regulatory discussion around expanding fiduciary duty to include broker-dealers. Supporters of the expansion argue that imposing fiduciary duty on all advisers will alleviate the conflict of interest and ensure that retirees choose products that are better suited to their needs. Opponents argue that fiduciary duty does not have a noticeable impact on product choice—perhaps because competition already disciplines financial advisers or perhaps because the conflict-of-interest was overblown to begin with—but will instead simply increase the cost of doing business, which will lead to fewer advisers in the market and fewer retirees purchasing beneficial products.

We evaluate these claims empirically, by leveraging transactions-level data from a major financial services provider and a comprehensive dataset on the set of practicing financial advisers. We find that in the market for annuities fiduciary duty shifts the set of products purchased by investors away from variable annuities and towards fixed and fixed indexed annuities. We then focus on variable annuities and find that fiduciary duty leads broker-dealers to sell higher quality products. Finally, we show that fiduciary duty causes exit of broker-dealers from the market, with the incidence most heavily slanted towards local broker-dealers. These results offer a extensive picture of the different effects of fiduciary duty in the market for financial advice.

These results on the mean causal impact of fiduciary duty do not directly speak to the mechanism at play. To uncover this mechanism, we develop a simple model of firms choosing to enter a market and selecting their advice. This model provides a framework for understanding various mechanisms, and it identifies properties of the *distribution* of advice in the market that are informative of the channel. Using this model, we argue that the distribution of products sold as well as the compostion of the entrants provides evidence that the advice channel—in which fiduciary duty directly constraints low-quality advice—is empirically relevant. That is, fiduciary duty does not

Electronic copy available at: https://ssrn.com/abstract=3281345

simply increase fixed costs. These results also provide suggestive evidence that further increases in the stringency of fiduciary standards—which could be a natural conceptualization of the regulatory changes under consideration in various agencies—would continue to improve advice.

References

Agarwal, S., S. Chomsisengphet, N. Mahoney, and J. Stroebel (2014): "Regulating Consumer Financial Products: Evidence from Credit Cards," *Quarterly Journal of Economics*, 130(1), 111–164.

Anagol, S., S. Cole, and S. Sankar (2017): "Understanding the Advice of Commissions-Motivated Agents: Evidence from the Indian Life Insurance Market," *Review of Economics and Statistics*, 99(1), 1–15.

Barwick, P. J., P. A. Pathak, and M. Wong (2017): "Conflicts of Interest and Steering in Residential Brokerage," *American Economic Journal: Applied Economics*, 9(3), 191–222.

Camara, F., and N. Dupuis (2014): "Structural Estimation of Expert Strategic Bias: The Case of Movie Reviewers," *Working Paper*.

DellaVigna, S., and J. Hermle (2017): "Does Conflict of Interest Lead to Biased Coverage? Evidence from Movie Reviews," *Review of Economic Studies*, 84(4), 1510–1550.

Dickstein, M. J. (2015): "Physician vs. Patient Incentives in Prescription Drug Choice," *Working Paper*.

Dulleck, U., and R. Kerschbamer (2006): "On Doctors, Mechanics, and Computer Specialists: The Economics of Credence Goods," *Journal of Economic Literature*, 44(1), 5–42.

Egan, M. (2017): "Brokers vs. Retail Investors: Conflicting Interests and Dominated Products," *Working Paper*.

Egan, M., G. Matvos, and A. Seru (2019): "The Market for Financial Adviser Misconduct," *Journal of Political Economy*, 127(1), 233–295.

Finke, M., and T. Langdon (2012): "The Impact of the Broker-Dealer Fiduciary Standard on Financial Advice," *Working Paper*.

Foerster, S., J. T. Linnainmaa, B. T. Melzer, and A. Previtero (2017): "Retail Financial Advice: Does One Size Fit All?," *Journal of Finance*, 72(4), 1441–1482.

Guiso, L., A. Pozzi, A. Tsoy, L. Gambacorta, and P. E. Mistrulli (2017): "The Cost of Distorted Financial Advice: Evidence from the Mortgage Market," *Working Paper*.

Electronic copy available at: https://ssrn.com/abstract=3281345

HONG, S.-H. (2017): "Quantifying Conflicts of Interest Between Principal and Agent: Evidence from Dual Agency in Housing Search," *Working Paper*.

HUNG, A. A., N. CLANCY, J. DOMINITZ, E. TALLEY, C. BERREBI, AND F. SUVANKULOV (2008): "Investor and Industry Perspectives on Investment Advisers and Broker-Dealers," Discussion paper, RAND Corporation Technical Report.

INDERST, R., AND M. OTTAVIANI (2012a): "Competition Through Commissions and Kickbacks," *American Economic Review*, 102(2), 780–809.

——— (2012b): "Financial Advice," *Journal of Economic Literature*, 50(2), 494–512.

KOIJEN, R., AND M. YOGO (2018): "The Fragility of Market Risk Insurance," Discussion paper, National Bureau of Economic Research.

KOZORA, M. L. (2013): "The Effect of Regulatory Regimes on the Provision of Retail Investment Advice," *Working Paper*.

——— (2017): "Securities Recommendations and the Liabilities of Broker-Dealers," *Journal of Law, Finance, and Accounting*, 2(2), 385–428.

LABRO, E., AND J. OMARTIAN (2017): "(How) Does Regulation Affect Financial Advisor Profitability?," Presented at the Wharton Consumer Analytics Initiative Closing Symposium on June 16, 2017.

LINNAINMAA, J. T., B. T. MELZER, AND A. PREVITERO (2016): "The Misguided Beliefs of Financial Advisors," *Working Paper*.

MANKIW, N. G., AND M. D. WHINSTON (1986): "Free Entry and Social Inefficiency," *RAND Journal of Economics*, 17(1), 48–58.

MULLAINATHAN, S., M. NOETH, AND A. SCHOAR (2012): "The Market for Financial Advice: An Audit Study," Discussion paper, National Bureau of Economic Research.

SEC (2011): "Study on Investment Advisers and Broker-Dealers," Discussion paper, US Securities and Exchange Commission.

——— (2013a): "Duties of Brokers, Dealers, and Investment Advisers," Discussion paper, US Securities and Exchange Commission.

——— (2013b): "Study Regarding Financial Literacy Among Investors," Discussion paper, US Securities and Exchange Commission.

SEIM, K. (2006): "An Empirical Model of Firm Entry with Endogenous Product-Type Choices," *RAND Journal of Economics*, pp. 619–640.

Electronic copy available at: https://ssrn.com/abstract=3281345

A. Further Analysis of the Model

A.1. Only Broker-Dealers

Consider the model outlined in Section V.A. There is a continuous distribution of types $\theta_j \sim H(\cdot)$ on compact support. Each type has a base profit function $\pi(a;\theta)$ maximized at $a = \theta$, and we define $\pi^*(\theta) \equiv \max_a \pi(a;\theta) = \pi(\theta,\theta)$. The actual profit a type-θ firm earns upon entering is $f(\mu) \cdot \pi^*(\theta) - K$, where K is the entry cost and $f(\cdot)$ is a strictly decreasing function of the mass μ of entrants capturing competitive effects. While we do not place much structure on π in general, suppose that $H(\cdot)$ and $\pi(\cdot)$ are jointly such that the distribution of $\pi^*(\theta)$ does not have any mass points; in the following, we will essentially consider the distribution of $\pi^*(\theta)$.

While the ordering of θ has an interpretation in Section V, we strip it of its interpretation as the quality of advice in this appendix. Instead, relabel and rescale types $\tilde{\theta}$ be to be one-to-one with base profits $\pi^*(\theta)$ so that $\tilde{\theta}' > \tilde{\theta}$ if and only if $\tilde{\theta}'$ earns lower profits $\tilde{\pi}(\theta')$ than does $\tilde{\theta}$. Moreover, rescale types so that they are uniform on the unit interval. Let $\tilde{\Theta} : \theta \mapsto \tilde{\theta}$ be this function. Then, an equilibrium is such that $f(\mu) \cdot \tilde{\pi}(\mu) = K$, where μ is the marginal type who enters, as long as $\mu \in (0,1)$. If $f(0) \cdot \tilde{\pi}(0) < K$ then no one enters, and if $f(1) \cdot \tilde{\pi}(1) > K$ then everyone enters.

Lemma 1. *There is a unique equilibrium.*

Proof. Note that $f(\mu) \cdot \tilde{\pi}(\mu)$ is strictly decreasing in μ. Thus, either $f(0)\tilde{\pi}(0) < K$ or $f(1)\tilde{\pi}(1) > K$, or it can take on a value of K at most once in $(0,1)$. □

Lemma 2. *The set of types θ_j who enter at an entry cost of $K' > K$ is a subset of the set of types who enter at an entry cost of K.*

Proof. Let $\mu^*(K)$ be such that $f(\mu^*(K)) \cdot \tilde{\pi}(\mu^*(K)) = K$. Then, it is easy to see that $\mu^*(\cdot)$ is decreasing in its argument. The set of types who enters is simply $\tilde{\Theta}^{-1}([0,\mu^*(K)])$, where $\tilde{\Theta}^{-1}(\cdot)$ is the inverse map of the function defined above. Thus, the set of types who enters under K' is the image of a smaller set, which means it is a subset of those who enter under K. □

Note that these arguments just depend on the fact that there is a unidimensional ordering of types in terms of their base profits, and the base profits are the only component of these types that matter for who enters. This is the case when the type is (θ_i, ϵ_i) with a base profit $\epsilon_i + \max_a \pi(a;\theta_i)$, as in the first extension in Section V.B. It is also the case when the type is $\boldsymbol{\theta}_j = (\theta_{ij})$, with a base profit $\sum_i \pi(\theta_{ij};\theta_{ij})\,\nu_i$.

A.2. Extensions of the Model with Broker-Dealers

We consider three extensions of the baseline model in Section V.B. The final one considers the case where broker-dealer firms are indexed by an observable characteristic, and the level of the fixed cost change depends on this characteristic. In this final modification, a weaker but still empirically falsifiable result holds.

Electronic copy available at: https://ssrn.com/abstract=3281345

Idiosyncratic Entry Costs. Suppose that each potential entrant is now categorized by an ordered pair (θ_j, ϵ_j), where $\epsilon_j \sim G(\cdot|\theta_j)$. A firm of type (θ_j, ϵ_j) has a base profit function $\pi(a; \theta_j) + \epsilon_j$. This extension allows firms who would offer the same profit conditional on entry to be differentially profitable. As before, let $\mathcal{E}^*(K)$ denote the set of types who would enter with a fixed cost of K. Appendix A shows, using an argument analogous to the one used to derive (3), that if $K' \geq K$ then $\mathcal{E}^*(K') \subseteq \mathcal{E}^*(K)$. Then, if we define

$$\underline{\theta}(K) \equiv \min \{\theta : \text{ there exists } \epsilon \in \operatorname{supp} G(\cdot|\theta) \text{ such that } (\theta, \epsilon) \in \mathcal{E}^*(K)\}$$

and $\bar{\theta}(K)$ analogous with the min replaced by the max, we would again have $\underline{\theta}(K) \leq \underline{\theta}(K')$ and $\bar{\theta}(K) \geq \bar{\theta}(K')$. Since θ is the component of the type that is one-to-one with advice, the prediction that the extremes of advice weakly contract remains.

Heterogeneous Consumers. So far, we have allowed for one dimension of heterogeneity in advice among firms. In reality, firms face a variety of consumers and the advice that the firm offers could be specific to the type of consumer. To accomodate this possibility, let a firm's type be denoted by a vector $\boldsymbol{\theta}_j$ such that the profit of offering a consumer of type i advice a is $\pi(a; \theta_{ij})$, maximized at $a = \theta_{ij}$. Thus, firms are now categorized by the advice they give to each type of consumer. We assume *random sorting* of consumers to firms so that each consumer receives a mass ν_i of consumers of type i. Then, the profit of a type $\boldsymbol{\theta}_j$ firm if μ people enter is

$$f(\mu) \cdot \sum_i \pi(\theta_{ij}; \theta_{ij}) \nu_i - K.$$

Again, one can show that $\mathcal{E}^*(K') \subseteq \mathcal{E}^*(K)$. Denote

$$\underline{\theta}(K) \equiv \min \{\theta : \theta = \min \boldsymbol{\theta}_j \text{ such that } \boldsymbol{\theta}_j \in \mathcal{E}^*(K)\}$$

as the minimum advice given to some consumer in the market, and define $\bar{\theta}(K)$ analogously. Then, once again, $\underline{\theta}(K) \leq \underline{\theta}(K')$ and $\bar{\theta}(K) \geq \bar{\theta}(K')$ purely from the fact that the set of firms who enter shrinks if fiduciary duty operates through a pure fixed cost framework.

Multiple Broker-Dealer Types. A natural concern is that even if fiduciary duty operates through a pure fixed cost channel, national broker-dealers might experience a smaller increase in fixed cost than local broker-dealers. That is, suppose the "type" of a broker-dealer is (θ, m) where $m \in \{1, 2, \ldots, M\}$. A (θ, m) broker-dealer has a base profit function $\pi_m(a; \theta)$ maximized at $a = \theta$, and the total profit is $f_m(\boldsymbol{\mu}) \cdot \pi_m(a; \theta)$, where $f(\boldsymbol{\mu})$ is a function of the mass of each type of entrant. Importantly, the fixed cost of entry is K_m for type (θ, m), and fiduciary duty that operates through a pure fixed cost channel will increase it to $K'_m \geq K_m$. In the local-national example, we might imagine that $K'_{\text{local}} - K_{\text{local}} > K'_{\text{national}} - K_{\text{national}}$.

In this situation, it is *not* necessarily true that the advice observed in the market without

Electronic copy available at: https://ssrn.com/abstract=3281345

fiduciary duty is a superset of advice observed with. One can construct a simple example in which $K_1' > K_1$, $K_2' = K_2$, and the support of the advice provided by Type 2 firms is strictly to the right of the support of that provided by Type 1—in the absence of fiduciary duty. Under reasonable conditions on $f(\cdot)$ (such as the ones in Appendix A.3), fiduciary duty will lead to a decrease in the number of Type 1 firms in the market and an increase in the Type 2 firms. Then, the advice under fiduciary duty will not be a subset of that without.[54] By itself, this possibility poses a difficulty for the testable restrictions discussed in Section V.E, as expansion of advice could *still* be possible under a pure fixed cost channel with heterogeneous changes in fixed cost. However, note that this example required an expansion of the number of Type 2 broker-dealers. Indeed, this is a general requirement for us to see an expansion of advice upon imposing of fiduciary duty, in a pure fixed cost channel.

Let μ_m denote the equilibrium mass of type-m firms in a world without fiduciary duty, and let μ_m' denote this mass in a world with fiduciary duty operating through a pure fixed cost channel (even with potentially heterogeneous effects on entry costs). Suppose $\mu_m' < \mu_m$. Then, (θ, m) enters with fiduciary duty if $f_m(\boldsymbol{\mu}') \cdot \pi_m^*(\theta) \geq K'$, or $\pi_m^*(\theta) \geq K'/f_m(\boldsymbol{\mu}')$. Similarly, (θ, m) enters without fiduciary duty if $\pi_m^*(\theta) \geq K/f_m(\boldsymbol{\mu})$. Since $\mu_m' < \mu_m$, it must be that $K'/f_m(\boldsymbol{\mu}') > K/f_m(\boldsymbol{\mu})$, meaning if (θ, m) enters with fiduciary duty, it must enter without fiduciary duty as well. Under a pure fixed cost channel, if the mass of a particular subset of broker-dealers decreases, then the set of advice offered by that broker-dealer must shrink. If the mass of *all* M subsets of broker-dealers decreases, then the set of advice offered by broker-dealers thus must shrink as well. The key observation is that the relative profitability of types (within m) is not affected by the imposition of fiduciary duty.

This argument provides a caveat to the discussion in Section V.E. We can reject a pure fixed cost channel with potential heterogeneity in the impact on fixed costs if we observe a *decrease* in the mass of a particular type of broker-dealers with a corresponding *introduction* of previously unseen advice.

Direct Impact of Competition on Advice. Thus far, we have assume that competition only scales the per-transaction profits when affecting total profits. However, one might imagine that competition has a direct impact on advice provided. To model this phenomenon, we let μ impact the base profit function directly. That is, we say that

$$\pi(a; \theta, \mu) = \pi(a - g_\theta(\mu); \theta) - k_\theta(\mu), \tag{A.1}$$

for some functions $g_\theta(\cdot)$ and $k_\theta(\cdot)$.

First begin the analysis with the restriction $k_\theta(\mu) = 0$. In this situation, competition affects the optimal advice, so that a type θ firm offers advice $\theta + g_\theta(\mu)$ where there is a mass μ in the market. However, this firm still makes base profits $\pi^*(\theta)$. Thus, the ordering of firms' profits does

[54] One can essentially go through Appendix A.3 and label the broker-dealers as "local broker-dealers" and the invesment advisers as "national broker-dealers."

Electronic copy available at: https://ssrn.com/abstract=3281345

not change, and as K increases to K', the set of firms who enters becomes a subset of the initial set of firms.

How would the presence of $g_\theta(\mu)$ affect observed advice? If an increase from K to K' decreases μ, then the type that offers the best advice in the market would get weakly worse. However, it may be that $g_\theta(\mu)$ can compensate this reduction in the quality of the type. That is, *if* $g_\theta(\mu)$ is increasing in μ, then it might be the case that we would see an improvement in the best advice even in a pure fixed cost channel, since the competitive effect on advice would counteract the contraction in types. However, it is easy to see that if $g_\theta(\mu)$ is decreasing in μ—increased competition weakly improves advice for all types, even if it is heterogeneous by type—we would still be unable to see an improvement in the best advice in a pure fixed cost channel. The quality of the best type who enters would weakly worsen as K increases, and this type would then offer weakly worse advice.

It is easy to see that the analysis does not change if $k_\theta(\mu) = k(\mu)$ for all θ. If competition has the same effect on per-transaction profits on all types, then the ordering of profits across types does not change. Then, as long as the set of firms decreases upon imposition of fiduciary duty, the same predictions as above go through in a pure fixed cost channel.

However, if $k_\theta(\mu)$ differs by θ, these predictions need not hold. A sufficient condition for them to hold is that the ordering of types does not change as μ changes, and a sufficient condition for this is that

$$\max_a \{\pi(a - g_\theta(\mu); \theta) - k_\theta(\mu)\} \geq \max_a \{\pi(a - g_{\theta'}(\mu); \theta') - k_{\theta'}(\mu)\}$$

for some set (θ, θ', μ) means that it must hold true for all μ (and that pair (θ, θ'). Note that we can write $\max_a \pi(a - g_\theta(\mu); \theta)$ as $\pi^*(\theta)$. Then, it must be that

$$\pi^*(\theta) - k_\theta(\mu) \geq \pi^*(\theta') - k_{\theta'}(\mu)$$

for all μ. Rearranging, we have

$$\pi^*(\theta) - \pi^*(\theta') \geq k_\theta(\mu) - k_{\theta'}(\mu) \;\forall \mu,$$

so we must have

$$\pi^*(\theta) - \pi^*(\theta') \geq \max_\mu \left[k_\theta(\mu) - k_{\theta'}(\mu)\right]. \tag{A.2}$$

While it is possible to find strong conditions on π^* and $k_\theta(\cdot)$ to let this hold (e.g., $\pi^*(\theta)$ is increasing in θ and $k_\theta(\mu)$ is decreasing in θ for all μ), we have been unable to find more general primitive conditions under which (A.2) holds. Heuristically, however, the conclusion of this section is that if (i) competition improves the optimal advice and (ii) the impact on competition does not vary "much" with the type of the firm, then the best advice cannot improve if fiduciary duty operates through a pure fixed cost channel.[55]

[55]To reiterate, this statement is formal if we drop "much" from it.

Electronic copy available at: https://ssrn.com/abstract=3281345

A.3. Adding Registered Investment Advisers

Now suppose that in additional to broker-dealers, there are registered investment advisers in the market as well. Both broker-dealers and RIA firms have a type θ_j, and the latent distribution of types for broker-dealers and RIAs is given by $H_{BD}(\cdot;\theta_j)$ and $H_{IA}(\cdot;\theta_j)$ respectively. We do not take a stance on how $H_{BD}(\cdot;\cdot)$ and $H_{IA}(\cdot;\cdot)$ relate to each other. A type θ_j firm has profit function $\pi_T(\cdot;\theta_j)$ and pays entry cost K_T to enter, where $T \in \{BD, IA\}$. While we will use the notation θ_j throughout, note that type can be replaced by any of the extended types from before, e.g., (θ_j, ϵ_j) or $\boldsymbol{\theta}_j$. A firm who enters will earn profits (net of entry costs) equal to

$$f_T\left(\mu_{BD}, \mu_{IA}\right) \cdot \pi_T^*(\theta_j) - K_T,$$

where $\pi_T^*(\theta_j) = \max_a \pi_T(a;\theta_j)$ and f_T is a share function that is decreasing in both the proportion of broker-dealers who enter and the proportion of RIA firms who enter. An equilibrium is defined to be a pair (μ_{BD}^*, μ_{IA}^*) such that

$$H_T\left(\mathcal{E}_T(\mu_{BD}^*(K_{BD}, K_{IA}), \mu_{IA}^*(K_{BD}, K_{IA}), K_T)\right) = \mu_T^*(K_{BD}, K_{IA})$$

for $T \in \{BD, IA\}$, where $\mathcal{E}_T\left(\mu_{BD}, \mu_{IA}, K_T\right)$ is the set of firms of type T who would enter if they believe the share of broker-dealers who enter to be μ_{BD}, the share of RIA firms who enter is μ_{IA}, and the entry cost of type T is K_T.[56] As before, let the equilibrium set of entrants of type T be $\mathcal{E}_T^*(K_{BD}, K_{IA})$. Fiduciary duty influences neither $\pi_{IA}(\cdot;\theta_j)$ nor K_{IA}. If fiduciary duty operates through a pure fixed cost channel, then K_{BD} increases to K_{BD}'.

Rearrange the types of these firms in decreasing order of profits so that the distribution of types is $[0,1]$. Then, an equilibium consists of $(\mu_{BD}^*(K_{BD}, K_{IA}), \mu_{IA}^*(K_{BD}, K_{IA}))$ such that

$$\begin{aligned} \hat{\pi}_{BD}\left(\mu_{BD}^*, \mu_{IA}^*\right) &\equiv f_{BD}\left(\mu_{BD}^*, \mu_{IA}^*\right) \cdot \tilde{\pi}_{BD}\left(\mu_{BD}^*\right) = K_{BD} \\ \hat{\pi}_{IA}\left(\mu_{BD}^*, \mu_{IA}^*\right) &\equiv f_{IA}\left(\mu_{BD}^*, \mu_{IA}^*\right) \cdot \tilde{\pi}_{IA}\left(\mu_{IA}^*\right) = K_{IA}, \end{aligned} \tag{A.3}$$

where $f_T(\cdot;\cdot)$ is strictly decreasing in both of its terms and captures the competitive effects. Accordingly, the effective profit functions $\hat{\pi}_T(\cdot;\cdot)$ are decreasing in both its arguments.

We impose the assumption that cross-price competitive effects are not too strong.

Assumption 1. *Assume*

$$\frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} \cdot \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} > \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} \cdot \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}}. \tag{A.4}$$

The left-hand side of (A.4) is the product of the sensitivities of effective profits to the own-type competition, and the right-hand side is the sensitivity of profits to cross-type competition. The following example provides some intuition on Assumption 1.

[56] The entry decision for broker-dealers does not directly depend on the entry cost for RIA firms, say, but does indirectly depend on it in equilibrium through the entry decision of RIAs.

Electronic copy available at: https://ssrn.com/abstract=3281345

Lemma 3. *Suppose*

$$f_{BD}^{-1}(\mu_{BD}, \mu_{IA}) = \gamma_{11}\mu_{BD} + \gamma_{12}\mu_{IA} \text{ and } f_{IA}^{-1}(\mu_{BD}, \mu_{IA}) = \gamma_{21}\mu_{BD} + \gamma_{22}\mu_{IA}.$$

Then, if $\gamma_{11}\gamma_{22} > \gamma_{12}\gamma_{21}$, then Assumption 1 is satisfied.

Proof. Direct computations show that the left-hand side of (A.4) is

$$L \equiv \left[\pi'_{BD}(\gamma_{11}\mu_{BD} + \gamma_{12}\mu_{IA}) - \pi_{BD} \cdot \gamma_{11}\right] \cdot \left[\pi'_{IA}(\gamma_{21}\mu_{BD} + \gamma_{22}\mu_{IA}) - \pi_{IA} \cdot \gamma_{22}\right],$$

times a positive constant. Both terms in parentheses are negative, so we can say

$$L > \pi_{BD}\gamma_{11} \cdot \pi_{IA}\gamma_{22}.$$

The right-hand side is

$$\pi_{BD}\gamma_{12} \cdot \pi_{IA}\gamma_{21},$$

times the same positive constant. If $\gamma_{11}\gamma_{22} > \gamma_{12}\gamma_{21}$, we thus have the result. □

Similar calculations show that a sufficient condition for Assumption 1 under more general f involves replacing $\hat{\pi}_T$ by f_T in (A.4). Under Assumption 1, we can prove both uniqueness and intuitive comparative statics.

Lemma 4. *If Assumption 1 holds, then (i) there is a unique solution to* (A.3)*; (ii) holding K_{IA} fixed, the set of broker-dealers who enter under at K_{BD} is a superset of those who enter at $K'_{BD} > K_{BD}$, and (iii) holding K_{IA} fixed, the set of RIA firms who enter under at K_{BD} is a subset of those who enter at $K'_{BD} > K_{BD}$.*

Proof. According to the Gale-Nikaido Theorem, the solution to (A.3) is unique if the matrix

$$\begin{pmatrix} -\frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} & -\frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} \\ -\frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}} & -\frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} \end{pmatrix}$$

is a P-matrix. This conditions means all principal minors must be positive. Both diagonal elements are positive since the effective profit is decreasing in the number of entrants of either type. Under Assumption 1, the determinant is positive as well.

To prove (ii) and (iii), take the total derivative of (A.3) with respect to K_{BD}. Then,

$$\begin{pmatrix} \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} & \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} \\ \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}} & \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} \end{pmatrix} \begin{pmatrix} \frac{d\mu_{BD}}{dK_{BD}} \\ \frac{d\mu_{IA}}{dK_{BD}} \end{pmatrix} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}. \tag{A.5}$$

Solving (A.5) for the derivatives gives

$$\begin{pmatrix} \frac{d\mu_{BD}}{dK_{BD}} \\ \frac{d\mu_{IA}}{dK_{BD}} \end{pmatrix} = \left(\frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} \cdot \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} - \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} \cdot \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}}\right)^{-1} \begin{pmatrix} \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} & -\frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} \\ -\frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}} & \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} \end{pmatrix} \begin{pmatrix} 1 \\ 0 \end{pmatrix}. \tag{A.6}$$

Electronic copy available at: https://ssrn.com/abstract=3281345

Assumption 1 ensures the first term in (A.6) is positive. The elements of the first column are negative and positive, respectively, which completes the argument. □

Thus, we have shown that as long as cross-type competitive effects are not too strong, we have

$$\mathcal{E}^*_{BD}(K'_{BD}, K_{IA}) \subseteq \mathcal{E}^*_{BD}(K_{BD}, K_{IA}) \text{ and } \mathcal{E}^*_{IA}(K_{BD}, K_{IA}) \subseteq \mathcal{E}^*_{IA}(K'_{BD}, K_{IA}). \tag{A.7}$$

The result in (A.7) is important for two reasons. First, it shows that even in the presence of a set of firms unaffected by the regulation, the prediction that a pure fixed cost channel must shrink the set of broker-dealers remains robust—at least with a reasonable condition on how strongly these firms compete with one another. Accordingly, the predictions on the extrema of advice discussed above will still bear out. The second reason this is important is that it provides predictions about *spillover* effects onto RIAs. In particular, since the set of RIA firms expands (weakly), it must be the case that the best advice offered by them improves and the worst advice becomes worse.

An example similar to the cap from Section V.C shows that if fiduciary duty operates through an advice channel as well, then it is still possible for the best advice given by broker-dealers to improve. However, as long as the mass of broker-dealers who enters decreases, the mass of RIA firms would weakly increase. Since the base profit functions of the RIA firms do not change, we would still have an expansion in the set of RIAs, meaning that the predictions on the support of the advice will be isomorphic in both channels.

B. Additional Empirical Results

B.1. Summary Statistics and Covariate Balance

While the body of the paper focuses on relevant border counties, we provide further summary statistics on all advisers and transactions in the dataset. Table B.1 shows summary statistics for all advisers in the US between 2013 and 2015 who sell at least one FSP contract. About 19% of advisers are broker-dealers. BDs tend to sell slightly fewer FSP contracts over this time period, amounting to about 5.2 on average compared to 5.5 for RIAs. Half of advisers sell fewer than three contracts in this time period, although there is a sizable tail of advisers selling many more. Conditional on selling an FSP annuity, BDs sell VAs about 75% of the time, while the proportion is somewhat larger for RIAs. Contract amounts are indeed significantly larger for RIAs than BDs, by about $40,000 off a baseline of about $120,000 for BDs. Finally, most of the clients are nearing or slightly past retirement, as would be expected in a market for retirement products. BDs and RIAs tend to have similar clientele, although the average age of clients in RIAs is higher by about 3 years.

Comparing Tables I and B.1 suggests that imposing the restriction to the border limits us to about 10% of the sample in terms of advisers and about 11% in terms of contracts. However, somewhat surprisingly, the characteristics of financial advisors and financial transactions are rather representative of the broader US. The proportion of broker-dealers is about 2 pp lower nationally than in the border. Advisers at the border do sell a slightly larger number of contracts on average

Electronic copy available at: https://ssrn.com/abstract=3281345

Table B.1: Summary statistics for all counties

	N	Mean	Std.Dev.	Percentiles				
				10%	25%	50%	75%	90%
Advisor-Level Quantities								
Is Broker-Dealer								
FSP Advisors	39,882	0.184						
Contracts per FSP Advisor								
BD	7,338	5.2	8.7	1	1	2	6	12
RIA	32,544	5.5	8.5	1	1	3	6	13
Contract-Level Quantities								
Is Variable Annuity								
BD	38,435	0.770						
RIA	177,532	0.901						
Contract Amounts ($K, 2015)								
BD	38,435	119.2	147.1	23.4	40.3	77.8	144.6	253.0
RIA	177,532	157.9	197.9	34.4	56.2	101.4	197.8	314.9
Client Age								
BD	38,435	61.8	10.5	49	56	62	68	75
RIA	177,532	64.7	9.9	54	59	65	71	77

than the typical adviser in the US, although inspection of the quantiles of this distribution suggests that this result may be driven by a longer upper tail of advisers. The probability of a transaction corresponding to a variable rather than a fixed annuity is similar for advisers at the border relative to advisers overall. Contract amounts tend to be slightly lower at the border, a result driven once again by the tail of contracts, and the ages of the client are not appreciably different from the population of clients in the US.

Our identifying assumption rests on the argument that even though common law fiduciary status of a state may be correlated with average demand in the state, there are no demand discontinuities at the border. For corroborating evidence on this point, we run covariate balance checks for a variety of demographic and economic characteristics. To run these checks, we run regressions at the county level of the demographic quantity on a dummy for whether the county has fiduciary duty. We run specifications with and without fixed effects and sometimes dropping counties that do not have any transactions from FSP. In all specifications, we restrict to the relevant border. Standard errors are clustered at the state level.

Table B.2 shows the results of these regressions. Each row corresponds to an outcome, and each column (except for the mean columns (3) and (6)) corresponds to a regression. Columns (1) and (2) restrict to counties with at least one transaction from FSP, and run the regression with and without border fixed effects. Column (3) represents the mean of the outcome variable on this sample. Columns (4)–(6) repeat this on the set of all counties in the Discovery dataset, restricted to

Electronic copy available at: https://ssrn.com/abstract=3281345

Table B.2: Covariate balance

	Transactions			Discovery		
	No Border FE (1)	Border FE (2)	Mean (3)	No Border FE (4)	Border FE (5)	Mean (6)
Population (K)	168.36	-104.71	132.84	35.66	28.46	102.55
	(229.25)	(96.95)		(42.48)	(26.25)	
Median Age	-0.33	0.29	40.66	-0.57	-0.60	41.37
	(0.80)	(0.45)		(0.87)	(0.43)	
Pop Black (K)	27.31	-17.27	16.13	7.72	7.13**	12.57
	(38.03)	(25.09)		(5.04)	(2.92)	
Pop Hispanic (K)	130.00	0.14	21.72	15.85	12.83	16.48
	(96.85)	(20.04)		(14.57)	(9.84)	
Median HH Income (K)	0.12	0.74	45.60	1.99	1.23*	44.45
	(6.10)	(1.96)		(2.61)	(0.68)	
Mean HH Income (K)	-1.27	-0.93	59.82	2.26	1.28	58.38
	(7.64)	(2.87)		(3.04)	(0.86)	
Pct. Unemployment	0.60	-0.56***	9.35	-0.16	-0.08	9.30
	(0.81)	(0.20)		(1.06)	(0.31)	
Pct. Poverty	-0.19	-1.02	17.46	-0.68	-0.36	17.72
	(1.81)	(0.70)		(1.67)	(0.50)	
Pct. HH with less than $25k	-0.92	-1.21	28.48	-0.99	-0.52	29.14
	(2.09)	(1.10)		(1.96)	(0.52)	
Pct. HH with less than $50k	-0.98	-1.35	54.98	-1.82	-1.10*	56.11
	(4.10)	(1.48)		(2.40)	(0.64)	
Pct. HH with less than $75k	-0.33	-0.59	73.23	-1.52	-0.77	74.31
	(4.66)	(1.47)		(2.09)	(0.61)	
Pct. HH with less than $100k	0.25	-0.00	84.53	-1.26	-0.68	85.45
	(4.25)	(1.33)		(1.56)	(0.48)	
Pct. Pop less than HS	1.52	-0.44	14.58	-0.03	0.36	14.97
	(1.45)	(0.62)		(1.61)	(0.39)	
Pct. Pop HS	2.31**	1.81**	32.88	1.66	1.73***	33.68
	(0.87)	(0.87)		(1.39)	(0.52)	
Pct. Pop BA or Higher	-4.15	-1.98	19.66	-0.35	-0.71	18.65
	(3.07)	(1.42)		(1.64)	(0.57)	

Covariate balance for various economic and demographic characteristics. Each pair of columns, for each row, corresponds to the results of one regression. The first column in each pair gives the coefficient on the fiduciary duty dummy. All specifications cluster at the border level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

the border. The takeaway from Table B.2 is that on almost all covariates, we estimate fairly tight zeros on the difference between means for counties with and without fiduciary duty.

Table B.3 shows evidence that there is no differential selection at the border into broker-dealers and registered investment advisers on some limited client dimensions we do observe. In particular, we view the age of the contract holder (at the time of purchase) and whether the client is a cross-border shopper—i.e., the client state is different from the adviser's state of business. We run the same regression as in Specification (1) with these as the left-hand side varianbles. We find no evidence that there is differential selection by age induced by fiduciary duty. One may also wonder that clients would be willing to travel across the border to a state with fiduciary standards to purchase an annuity from a broker-dealer. This does have difficulties associated with it: for instance, the

Electronic copy available at: https://ssrn.com/abstract=3281345

Table B.3: Client covariates

	Age of Contract Holder		Cross-Border Shopper		Trans. Amount ($K)	
	(1)	(2)	(3)	(4)	(5)	(6)
DID	-0.174	0.744	-0.013	0.002	4.85	8.76
	(0.834)	(0.524)	(0.028)	(0.029)	(15.92)	(9.706)
FD on BD	-0.239	0.532	0.006	0.021	1.87	4.52
	(0.757)	(0.507)	(0.034)	(0.035)	(14.74)	(9.28)
FD on RIA	-0.065	-0.212	0.019	0.019	-2.98	-4.24
	(0.298)	(0.163)	(0.025)	(0.017)	(5.36)	(3.32)
Border FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	No	Yes	No	Yes	No	Yes
Mean of Dep. Var	64.0	64.0	0.320	0.320	146.1	146.1
N	22,803	22,781	22,803	22,781	22,803	22,781

Contract-level regression using Specification (1), with age of the contract holder, whether the contract is due to cross-border shopping (client state is different from adviser state), and transaction amount on the left-hand side. All specifications include border fixed effects and contract-month fixed effects, and Columns (2), (4), and (6) also include firm fixed effects. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

adviser would have to be licensed in the client's home state (although this is not an especially binding constraint in our dataset, since many advisers are licensed in all states). Columns (3) and (4) show that there is no differential cross-border shopping that induces excess shopping onto the side with fiduciary duty: even if we believe that unobservably different (on sophistication, say) shoppers are the ones engaging in cross-border shopping, this effect is the same across the border. We also see from Columns (5) and (6) that running the same regression with transaction amount of the left-hand side returns statistically insignificant, albeit slightly noisier, coefficients. To the extent that transaction amount is a proxy for consumer income or wealth, this would indicate a lack of differential selection on this consumer characteristic as well. However, we interpret this result with some caution: one might be concerned that advisers influence the transaction amount, and fiduciary duty might affect how much they try to do so.

B.2. Further Robustness Checks

In this appendix, we present three further robustness checks on the result that fiduciary duty affects the composition of products sold. The results are presented in Table B.4.

In the baseline dataset in the body of the paper, we have excluded contracts sold in the state of New York. New York has a complex system of financial regulations that, to our knowledge, differs significantly from that of other states. Indeed, it has a different suite of annuities as well: every type of annuity in our dataset has a New York-specific version that differs on some dimensions. Thus, we are hesitant to compare across borders with New York, even using RIAs as a control. Nevertheless,

Electronic copy available at: https://ssrn.com/abstract=3281345

Table B.4: Further robustness checks on purchase of variable vs. fixed indexed annuity

	Including NY (1)	Excluding Mecklenburg (2)	FSP Only Advisers (3)
DID	-0.144***	-0.101**	-0.048
	(0.025)	(0.041)	(0.053)
FD on BD	-0.160***	-0.069**	-0.070*
	(0.026)	(0.031)	(0.037)
FD on DR	-0.016	0.032	-0.022
	(0.023)	(0.028)	(0.024)
Base Group Mean	0.887	0.871	0.764
N	35,661	21,351	5,995

Main specification, with a dummy for whether the contract is a variable annuity on the left-hand side, on different samples. Column (1) includes New York (using the classification of it as a state without heightened duty, as per Finke and Langdon (2012)). Column (2) excludes Mecklenburg County, NC, which contains Charlotte. Column (3) restricts to advisers who are flagged as only carrying FSP products. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Column (1) of Table B.4 adds these contracts back into the dataset, along with relevant borders. We use the classification from Finke and Langdon (2012) that New York common law does not impose heightened fiduciary duty on its advisers. We see that including these advisers strengthens the result significantly, and we still do not see a significant difference between RIAs on each side of the border. This is despite the fact that the sample size increases considerably given the large number of contracts in this border.

The borders studied in the baseline specification mostly do not include large metropolitan areas. The key exception is that the North Carolina/South Carolina border encompasses Mecklenburg County, where Charlotte, NC is located. Given that Charlotte is a large city and a finance hub, one may wonder whether advisers are different in this city. Column (2) runs the regression excluding all advisers in Mecklenberg County and obtains similar results to the baseline.

Finally, advisers in our sample can carry financial products from not just FSP but also other financial service providers. Given that we do not observe sales of non-FSP products, a concern may be that fiduciary duty induces advisers to shift to products from other providers, and that this selection is differential by type of annuity. That is, imposing fiduciary duty causes a shift away from FSP variable annuities to other variable annuities. We find this to be unlikely a priori, since FSP is representative of the market in terms of financial health and product rates. However, we can partially address this concern by using information in Discovery about the advisers' carrier affiliations. Given we observe which financial service providers' products each adviser carries, we can restrict to advisers who are marked to only carry FSP products. Column (3) shows that the difference for broker-dealers is noisier than the baseline but around the same magnitude. The difference-in-difference coefficient has the same sign but is about half the magnitude of the baseline,

Electronic copy available at: https://ssrn.com/abstract=3281345

although the difference seems to come mostly from the noisy effect on RIAs. While the result is still broadly consistent with the baseline, we should note that restricting to advisers that only sell FSP products does lead to an especially selected sample. Advisers and clients in this sample may well be different than the baseline sample, and we should expect changes in the estimated treatment effect.

B.3. Entry Probabilities

We now wish to compute the effect of fiduciary duty on the probability of entry into a market. To do so, we need to take a stance on which firms are potential entrants in a market. While there is no precedent in the entry literature on understanding potential entrants for financial advice, we follow the parallel that firms in "nearby" markets are potential entrants. Based on the intuition that it may be difficult to open locations far away from existing ones and also difficult to open locations in different states, we assume that a firm is a potential entrant in county c if (i) it has entered a county within 50 miles of c or (ii) it is a non-local firm which has entered some other county in the same state as c. We run a sensitivity check in which we allow national firms to be potential entrants in every county in the United States.[57] Given a definition of potential entrants, we then run a linear probability model of a dummy for whether firm f enters county c, where an observation exists in the dataset if f is a potential entrant in c. The covariates include whether firm is a broker-dealer firm, the fiduciary status of the county, and the interaction of the two so that this regression has an interpretation as a difference-in-differences for the probability of entry. We control for border fixed effects; fixed effects for the firm footprint; and the population, median household income, and median age of the county. We also include a specification in which we include a triple interaction of the fiduciary dummy, the broker-dealer dummy, and dummies for firm footprint. We use two-way clustering at the firm and border levels to compute standard errors.

Table B.5 reports the results of these regressions. Columns (1) and (2) use the assumption that national firms are only potential entrants in states in which they have entered. We estimate a point estimate of -0.2 pp on the fiduciary dummy, which corresponds to the difference in entry probabilities for RIA firms in counties with and without fiduciary duty. Broker-dealers have similar probabilities of entry as RIAs (point estimate of 0.07 pp). In contrast, the coefficient on the interaction of these dummies is an economically and statistically significant 1.2 pp, off a mean of 7.4 pp, suggesting that fiduciary duty does have a significant impact on the probability of broker-dealer entry. The dummies for firm footprint indicate that firms with larger footprints do in fact have a higher entry probability, even controlling for the mechanical effect that they are potential entrants in a larger set of counties. Column (2) adds the triple interaction of fiduciary duty and broker-dealer with firm footprint. Of interest is that while the coefficient for fiduciary status for local firms is a large and negative (this is the coefficient on the interaction of fiduciary status with broker-dealer status), albeit rather noisy, decrease of 6.8 pp, the result for larger firms moves the total effect towards zero. Indeed, adding the coefficients in the final panel of the table with the point estimate of -6.8 pp

[57]We have also run other sensitivity checks, e.g., in which we constrain multistate firms to only enter counties that are within 50 miles, and results are similar. We omit these checks from the paper.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table B.5: Entry probabilities

	Nationals Enter in State		Nationals Enter Everywhere	
	(1)	(2)	(3)	(4)
$\mathbb{1}$[Fiduciary]	-0.00192	-0.00298	-0.00247	-0.00561
	(0.00652)	(0.0515)	(0.00545)	(0.0511)
$\mathbb{1}$[BD]	0.000645	0.0824	-0.00487	0.0811
	(0.00947)	(0.0992)	(0.00943)	(0.0977)
$\mathbb{1}$[Fiduciary] $\times$ $\mathbb{1}$[BD]	-0.0122*	-0.0676	-0.00979*	-0.0659
	(0.00657)	(0.102)	(0.00561)	(0.102)
Multistate	-0.0138	0.0246	-0.0202	0.0169
	(0.0450)	(0.0378)	(0.0443)	(0.0367)
Regional	0.00735	0.0490	0.000777	0.0409
	(0.0457)	(0.0397)	(0.0450)	(0.0385)
National	0.0637	0.0920**	0.0367	0.0693
	(0.0487)	(0.0453)	(0.0474)	(0.0435)
$\mathbb{1}$[Fiduciary] $\times$ $\mathbb{1}$[BD]		0.0569		0.0564
$\times$ Multistate		(0.103)		(0.102)
$\mathbb{1}$[Fiduciary] $\times$ $\mathbb{1}$[BD]		0.0586		0.0573
$\times$ Regional		(0.101)		(0.100)
$\mathbb{1}$[Fiduciary] $\times$ $\mathbb{1}$[BD]		0.0626		0.0608
$\times$ National		(0.102)		(0.101)
N	61,413	61,413	72,125	72,125
Probability of Entry	0.0735	0.0735	0.0626	0.0626

Regressions of whether a firm entered in a county in which it is a potential entrant on fiduciary status, broker-dealer status, and the interaction. All specifications include fixed effects for the footprint (with local excluded); controls for log population, log median household income, and median age; and border fixed effects. Columns (2) and (4) include a full interaction between fiduciary status, broker-dealer, and footprint, although not all coefficients are shown. Columns (3) and (4) assume national firms are potential entrants in all counties. Standard errors are computed using two-way clustering at the border and the firm levels. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Electronic copy available at: https://ssrn.com/abstract=3281345

yields point estimates that are negative but close to 0. These results are thus in line with the shift away from local broker-dealers documented in Table VI for counties with fiduciary duty, although the effects disaggregated by footprint are especially noisy. Columns (3) and (4) use the alternate assumption on potential entrants, and coefficients are largely similar.

B.4. A Model-Based Validation of the Homogeneity Across the Border

A natural concern is that the two markets we use may have unobserved differences in latent demand for financial products. While we do not believe this to be the case in our setting, as we discuss in Section II, it is still informative to discuss whether the model allows for a way to test this identifying assumption through the model. Of course to have any hope of either testing or controlling for cross-market differences, we must put some structure on how the two markets compare to each other. In this section, we impose the (admittedly strong) assumption that the two markets are different in that optimal advice is shifted everywhere by a constant term Δ. Letting Market A denote the market with fiduciary duty, and Market B the market without,

$$\pi_T^B(a;\theta_j) = \pi_T^A(a+\Delta;\theta_j)$$

for both T and all θ_j. If Markets A and B are truly identical then we would expect $\Delta = 0$. Here, we first provide two methods to test this assertion. Second, we formalize the statements made in the body of the paper that the difference-in-differences estimator would estimate the impact of fiduciary duty in the absence of spillovers, even with demand breaks.

The first method to test $\Delta = 0$ is at the firm level. Since fiduciary duty does not directly impact the RIA market except through entry, conditional on a RIA firm entering into both Markets A and B, the shift in its advice should be zero. Thus, within-RIA-firm comparisons should give an estimate of Δ. Column (2) of Table II and Columns (2) and (4) of Table VII show that the within-firm change in the products sold by RIAs—either in terms of class of product or in terms of returns—is usually smaller than the change for broker-dealers or simply small in magnitude. Table B.6 shows that for almost all the other outcomes considered in the analysis, the RIA difference is close to zero with firm fixed effects.

The second method is at the market level. Let $\underline{a}_M$ and $\bar{a}_M$ be the lowest and highest values of advice observed in market $M \in \{A, B\}$; let $\underline{\theta}_M$ and $\bar{\theta}_M$ be the lowest and highest types in the market. Normalize the profit functions so that $a^*(\theta) = \theta$ in Market A. Then, we know that $\underline{a}_A = \underline{\theta}_A$ and $\bar{a}_A = \bar{\theta}_A$, and $\underline{a}_B = \underline{\theta}_B - \Delta$ and $\bar{a}_B = \bar{\theta}_B - \Delta$. However, we know from (A.7) that $\underline{\theta}_A \geq \underline{\theta}_B$ and $\bar{\theta}_A \leq \bar{\theta}_B$. Substituting, we get the bounds

$$\bar{a}_A - \bar{a}_B \leq \Delta \leq \underline{a}_A - \underline{a}_B. \tag{B.1}$$

For some intution on (B.1), note that entry of RIA firms would force the set of *types* of entrants to expand. Advice maps to types by a shift of Δ, so Δ must be such that the set of types implied by observed advice and Δ is such that this expansion is respected. Accordingly, if the extremes of

Electronic copy available at: https://ssrn.com/abstract=3281345

advice for dually-registered advisers do not change much, then Δ could not have been especially large.

One could imagine implementing this test in our setting by comparing extreme quantiles of the distribution of advice for RIAs. These numbers are presented in Table IX. Taking the 10th and 90th percentiles as the extremes, we would estimate that $|\Delta| < 0.0019$, and using the 5th and 95th percentiles, we would estimate $|\Delta| < 0.0012$. While these numbers are not trivial, they are still smaller than the estimate of 0.0036 in Table V of the change in returns for broker-dealers due to fiduciary duty.[58]

How can we interpret the difference-in-differences estimator through the lens of the mode? First note that this model can also formalize the statement that under the null that fiduciary duty has no effect (the change in K is 0 and there is no additional cost that depends on advice given), the difference-in-differences in the mean is zero even if $\Delta \neq 0$. To see this, simply note that if fiduciary duty has no effect, then the same set of entrants—both broker-dealers and registered investment advisers—enters in Markets A and B. However, in Market B, advice for each firm is shifted to the right by Δ. Thus, the difference in mean advice provided by entrants, for both groups, is Δ. This means the difference-in-differences is 0. More generally, if the only effect on RIAs is that the demand break induces them to change their advice by Δ ("no spillovers"), then the RIA difference is Δ. All BDs would shift their advice by Δ in addition to any net effect due to entry and recomposition. Thus, the difference-in-difference estimator would subtract off Δ and provide an estimate of the effect of fiduciary duty on BDs.

B.5. Outcomes with Firm Fixed Effects

Table B.6 presents regressions of the form 1, restricting to border counties, but adding firm fixed effects. We report these regressions for all outcomes presented in Section IV. The takeaway from this analysis is that even with firm fixed effects, the differences (and the difference-in-difference) are dampened somewhat but still survive. This suggests that fiduciary duty affects choice even within-firm. In fact, the magnitude of the difference in broker-dealer outcomes is usually comparable to that without firm fixed effects—with the main exception being the regression of the dummy of whether the product is a variable annuity.[59]

Moreover, we find consistently that the RIA difference is closer to zero than without firm fixed-effects. Appendix B.4 argues that even with spillovers onto RIAs through entry, the effect on RIAs with firm fixed effects can be an estimate of Δ. Thus, this provides further evidence that $\Delta \approx 0$.

[58] Moreover, note that these bounds are actually from an implication of (B.1) that

$$|\Delta| \leq \max\{|\underline{a}_A - \underline{a}_B|, |\bar{a}_A - \bar{a}_B|\}.$$

Given that the point estimates essentially estimate an improvement in low-quality advice and a reduction in high-quality advice for RIAs, the bounds in (B.1) are inconsistent. Of course, although almost all estimates are statistically indistinguishable from zero.

[59] Even in this case, the effect has the same sign, even if it is considerably noisier and drops in magnitude by about 75%.

Electronic copy available at: https://ssrn.com/abstract=3281345

Table B.6: Summary of outcomes, with firm fixed effects

	# Funds			# Equity Styles		# FI Styles		Return	
	All (1)	$\geq 4\bigstar$ (2)	$\leq 2\bigstar$ (3)	High Qual (4)	Only Low Qual (5)	High Qual (6)	Only Low Qual (7)	Optimal (8)	Equal (9)
FD on BD	6.82**	2.14*	2.62*	0.367*	-0.332*	-0.010	-0.067***	0.0029	0.0004
	(3.25)	(1.26)	(1.33)	(0.205)	(0.193)	(0.060)	(0.018)	(0.0028)	(0.0004)
FD on RIA	1.03	-0.32	0.85	-0.028	-0.008	-0.059	-0.001	-0.0011	0.0003
	(1.63)	(0.41)	(0.93)	(0.083)	(0.100)	(0.054)	(0.009)	(0.0013)	(0.0002)
DID	5.79	2.46*	1.77	0.395*	-0.324	0.049	-0.065***	0.0040	0.0006
	(3.46)	(1.35)	(1.43)	(0.224)	(0.214)	(0.090)	(0.017)	(0.0032)	(0.0005)
Base Mean	96.82	32.04	31.35	7.214	0.865	4.407	3.027	0.080	0.025
N	19,808	19,808	19,808	19,808	19,808	19,808	19,808	15,785	15,785

		Subaccount Expense				NPV	
	M&E (10)	Minimum (11)	Average (12)	Surr. Charge (13)	$\mathbb{1}$[VA] (14)	Optimal (15)	Equal (16)
FD on BD	-0.014*	-0.004*	0.044**	-0.070	-0.025	0.0036	0.0011
	(0.008)	(0.002)	(0.018)	(0.130)	(0.033)	(0.0026)	(0.0008)
FD on RIA	0.007	-0.000	0.002	-0.054	0.018	-0.0009	0.0006
	(0.008)	(0.001)	(0.009)	(0.055)	(0.012)	(0.0010)	(0.0004)
DID	-0.021**	-0.004	0.042**	-0.016	-0.043	0.0046*	(0.0005)
	(0.010)	(0.003)	(0.019)	(0.167)	(0.031)	(0.0026)	(0.0008)
Base Mean	1.088	0.501	1.263	3.106	0.869	0.090	0.063
N	19,808	19,808	19,808	19,808	22,781	15,768	15,768

Summary of all outcomes investigated in the paper, with firm fixed effects. Contracts are restricted to borders, specifications include border fixed effects, and standard errors are clustered at the state. All estimates use a sample of variable annuities except (14), which uses the sample of all annuities. Columns (8), (9), (15) and (16) use the sample of variable annuities where rider choice could be determined unambiguously from the data. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Electronic copy available at: https://ssrn.com/abstract=3281345

C. Computation of the Investment Possibility Frontier

In this appendix, we detail how we compute investment returns and optimal portfolio allocations when computing (i) maximum returns in Section IV.C and (ii) net present values as discussed in Appendix D.

C.1. Computing Returns

For each investment option in the variable annuity dataset, we can match by name to CRSP Survivorship-Bias-Free US Mutual Fund Database. CRSP provides a permanent fund number, which is invariant to name changes, which we then track to find montly net asset values dating from January 1, 1990. We compute monthly returns from changes in this net asset value instead of using CRSP's monthly return, since variable annuity subaccounts do not reinvest dividends on behalf on the annuitants: reinvested dividends accrue to the firm. Since mutual funds are opened over different time spans, historical returns may not be comparable across funds. We thus use a CAPM-style method to impute historical returns. For each fund f, we run a regression of the form

$$r_{fm} = \alpha_f + \beta_f \cdot r_m^{\text{S\&P}} + \epsilon_{fm}, \tag{C.1}$$

where $\cdot r_m^{\text{S\&P}}$ is the return of the S&P index over the same month, and ϵ_{fm} is the abnormal return. We then say that the expected return for fund f is $e_f \equiv \hat{\alpha}_f + \hat{\beta}_f \cdot e^{\text{S\&P}}$, where $e^{\text{S\&P}}$ is the mean monthly return of the S&P index since 1990. The covariance of funds f and f' is then

$$\beta_f \cdot \beta_{f'} \cdot \text{var}(\text{S\&P}) + \text{cov}\left(\hat{\epsilon}_{fm}, \hat{\epsilon}_{f'm}\right), \tag{C.2}$$

where the first term is the empirical variance of the monthly S&P returns and the second term is the empirical covariance of the abnormal returns over the months in which they overlap.

Consider the set of investment options for a variable annuity, and denote by $\hat{V}$ the variance-covariance matrix as computed by (C.1) and (C.2). Since the covariance of the abnormal returns is computed over different time periods, $\hat{V}$ need not be positive semidefinite in finite samples (although it often is). Thus, to convert it to a valid covariance matrix, we find the closest positive semidefinite matrix to it. Letting $QUQ' \equiv \hat{V}$ denote the Schur decomposition of $\hat{V}$, we generate the matrix U^+, which replaces all negative elements of U (which will be a diagonal matrix in this case) with zeros. We then use $\hat{V}^+ \equiv QU^+Q'$ as the estimated variance-covariance matrix.[60]

We compared the investment frontiers generated through this method with ones generated using "excess returns" that impose $\beta_f \equiv 1$. We find them to be very similar. Using just the returns over the period over which the fund was active tends to give higher returns, as some funds were not available during the financial crisis.

[60]We have checked for numerical issues by using a semidefinite solver, which achieves the same solution through a different algorithm. Furthermore, the norm of $\hat{V}^+ - \hat{V}$ is usually very small, suggesting this procedure does not change the matrix appreciably—as one would hope.

Electronic copy available at: https://ssrn.com/abstract=3281345

C.2. Optimal Portfolio Allocation

Investment restrictions partition the set of funds available into groups and place minimums and maximums on the shares of assets that can be placed in each group. If s is the vector of shares of each fund, this effectively amounts to a linear restriction $Ms \geq m$. If r is the vector of estimated returns, the maximum possible return is simply the linear program

$$\max_s r \cdot s \text{ s.t. } Ms \geq m \text{ and } s \cdot \mathbb{1} = 1, \tag{C.3}$$

if $\mathbb{1}$ is a vector of ones. This program can be solved efficiently; we use Gurobi.

Maximizing the net present value might not correspond to maximizing the mean return. However, the optimal allocation must necessarily lie on an extended version of the efficent frontier. We can solve for the typical variance-minimizing portfolios as

$$\min_s s'\hat{V}^{+}s \text{ s.t. } Ms \geq m,\ r \cdot s \geq \bar{r}, \text{ and } s \cdot \mathbb{1} = 1, \tag{C.4}$$

for a fine grid of minimum returns $\bar{r}$ from the minimum possible return to the maximum one (i.e., the solution to (C.3)). This is a convex quadratic program and can also be solved efficiently by Gurobi. However, given the convexity of the contracts, a risk-neutral individual may also want *higher* risk, so we also solve the version of (C.4) with the min replaced by a max. This problem is non-convex, but we find using KNITRO's multistart that we can reliably and efficiently find a solution.

D. Computations of Net Present Values

This appendix section presents the detailed explanation of how variable and fixed income annuities are valued. It is divided into three subsections. The first introduces notation and presents relevant definitions. The second derives how to value a variable annuity contract with a minimum withdrawal living benefit and an account value death benefit, the most prevalent contract in our dataset. The third modifies this derivation for variable annuities and fixed indexed annuities without a living benefit rider.

D.1. Definitions and Contract Rules

When a variable annuity contract is signed, the invested amount becomes the contract value at period 0, c_0. Contracts with living benefit riders also generate an income base b_0, which is equal to c_0 at this moment, but will typically diverge over time. Let $c_t \in \mathbb{R}^+$ denote the contract value in period t and $b_t \in [c_0, \bar{b}]$ denote the income base in period t. Contract values are bounded below by zero, as annuitants cannot go into debt with the insurance company, and income bases are bounded above by an amount set by the insurance company (in our data, $10 million dollars) and below by the original contract value.

Let $\mathcal{I}_t$ denote the set of feasible asset allocations available to the annuitant in period t. This

Electronic copy available at: https://ssrn.com/abstract=3281345

is restricted both by the set of funds available given the chosen contract and rider, and by the investment restrictions imposed by the contract-rider combination. Let $i_t \in \mathcal{I}_t$ denote a vector of chosen allocations in period t, and let $r_{t+1}(i_t)$ denote the return of that asset allocation, which is realized in period $t+1$.

Variable annuity contracts have a fixed fee f_t, which for some contracts is waived for contract values above $\bar{f}$ and for all contracts is waived after 15 years, a variable fee v^c on the contract value, and a variable fee on the income base v^b. In what follows, let $\bar{f} = \infty$ if the contract does not waive the annual fee for high contract values, and let $f_t = 0$ after fifteen contract years.

Variable annuity contracts with a minimum withdrawal living benefit rider have two additional features that affect transitions of the income base and of the contract value. First, after a given age annuitants have the option of withdrawing the Guaranteed Annual Income (GAI) amount, which is equal to the income base times the relevant GAI rate for the period, $g_t \in \{g_1, ..., g_G\}$. We detail which GAI rate is available to the annuitant in each period below, as it is a complicated function of the sequence of choices made in the past. Let $w_t \in \{0, 1\}$ denote whether the annuitant decides to withdraw the GAI amount in period t, so that the GAI withdrawal amount is $w_t \cdot g_t \cdot b_t$. Second, for the first E years of the contract, known as the enhancement period, the income base is guaranteed to grow at least by the enhancement rate e. Moreover, if certain conditions are met, an additional E years of enhancement rate eligibility can be earned. We denote the enhancement rate in period t by $e_t \in \{0, e\}$. Typical values of the enhancement period and enhancement rate during our sample period are 10 and 5%, respectively.

Transitions of the contract value and the income base are governed by the following equations:

$$\tilde{c}_t = c_t - \left(w_t g_t + v^b\right) b_t - f_t \cdot 1[c_t < \bar{f}] \tag{D.1}$$

$$c_{t+1} = \max[(1 + r_{t+1}(i_t) - v^c(i_t))\tilde{c}_t, 0] \tag{D.2}$$

$$b_{t+1} = \begin{cases} \min\left[\max\left[(1+e_t) b_t, \tilde{c}_t\right], \bar{b}\right] \text{ if } a_t < \bar{a} \\ b_t \text{ if } a_t \geq \bar{a} \end{cases} . \tag{D.3}$$

Define $\tilde{c}_t$ as the end-of-period contract value, equal to the contract value minus the annual fee, the fee on the income base, and the GAI withdrawal amount. In an abuse of notation, we set $w_t g_t = 0$ in years where GAI withdrawals are not available. The next period contract value is equal to the end of period contract value times the net rate of return, or the difference between the realized return on investments and the contract fee. As mentioned earlier, contract value is bounded below by zero. Finally, in every period where the annuitant's age (a_t) is less than the contract's maximum purchase age, $\bar{a}$, the income base is equal to the maximum of the contract value and the enhanced income base, provided this amount is below the maximum income base. Because of this transition rule, the income base cannot fall below the initial investment amount. After the contract's maximum purchase age, the income base is locked in and cannot change. Note that GAI withdrawals decrease the contract value but do not decrease the income base, and that they continue even when contract value equals zero.

Electronic copy available at: https://ssrn.com/abstract=3281345

On a period where contract value exceeds the value of the enhanced income base and no GAI withdrawals take place, the contract is said to have "stepped up." After a step up, the contract is eligible for E more years of enhancement. Let s_t denote the number of years since the last step up. Then

$$s_0 = 0 \tag{D.4}$$

$$s_{t+1} = s_t \cdot 1\left[b_{t+1} \neq \tilde{c}_t \text{ or } w_t = 1\right] + 1 \tag{D.5}$$

$$e_t = e \cdot 1\left[s_t \leq E\right] \cdot 1\left[a_t < \bar{a}\right]. \tag{D.6}$$

The GAI rate available in period t is a function of the age at which the first GAI withdrawal occurs, a^{first}. GAI withdrawals cannot be taken before a certain age a_0, typically 55, and they are increasing in the age of first withdrawal, until either 70 or 75. The contract specifies a map $G\left(a^{first}\right) : \{a_0, ..., \bar{a}\} \rightarrow \{g_1, ..., g_G\}$ from all possible ages at first withdrawal to GAI rates. For example, a contract might specify that an annuitant who takes a GAI withdrawal for the first time at age 60 receives a 3% GAI rate, while they would receive a 5% rate if they wait until age 75. Annuitants are locked in to the GAI rate at the age of first withdrawal, unless a step up takes place at a later age with a higher GAI rate. Then the GAI rate available in period t is

$$g_t = \begin{cases} \emptyset & \text{if } a_t < a_0 \\ g_{G(a_t)} & \text{if } a_t \leq a^{first} \\ g_{G(a_{t-1})} & \text{if } a_t > a^{first} \text{ and } \tilde{b}_{t-1} = \tilde{c}_{t-1} \\ g_{t-1} & \text{if } a_t > a^{first} \text{ and } \tilde{b}_{t-1} \neq \tilde{c}_{t-1} \end{cases}. \tag{D.7}$$

In summary, the set of relevant state variables in period t is (c_t, b_t, s_t, g_t), and the annuitant's control variables are whether to take a GAI withdrawal w_t and the investment allocation i_t. Finally, annuitants can withdraw the contract value at any time, receiving $c_t \cdot (1 - d_t)$, where d_t is the surrender charge in period t, or they can annuitize the contract value, receiving an expected present discounted value of the annuity stream $z(a_t, c_t)$. Note that both full withdrawal of the contract value and annuitization induces the loss of the guaranteed annual income.

Defining μ_t as the probability of being alive in period t conditional having lived to period $t-1$, the value of a contract in period t is equal to

$$V_t\left(c_t, b_t, s_t, g_t\right) = \max\Bigg[\max_{(w_t, i_t)} w_t \cdot g_t \cdot b_t + \delta\left[\mu_{t+1} E\left[V_{t+1}\left(c_{t+1}, b_{t+1}, s_{t+1}, g_{t+1}\right)\right] + \left(1 - \mu_{t+1}\right)\beta E\left[c_{t+1}\right]\right], \\ (1 - d_t)c_t, E[PDV(z(a_t, c_t))]\Bigg].$$

Electronic copy available at: https://ssrn.com/abstract=3281345

D.2. Solving for the Value of a Variable Annuity Contract with a Minimum Withdrawal Living Benefit Rider

Assume that the probability of death in period T is 1, and that annuitants value a dollar left after their death by β. Then in period $T-1$ the continuation value of the contract is $\beta E[c_T]$. Moreover, since $a_{T-1} > \bar{a}$, the income base and GAI rate are locked in (at $b_{\bar{t}}$ and $g_{\bar{t}}$, respectively), so the years since last step up are irrelevant. Then the problem in period $T-1$ is

$$V_{T-1}\left(c_{T-1}, b_{\bar{t}}, g_{\bar{t}}\right) = \max\left[\left(\max_{(w_{T-1}, i_{T-1})} w_{T-1} \cdot g_{\bar{t}} \cdot b_{\bar{t}} + \delta \cdot \beta \cdot E\left[c_T\right]\right), z(a_{T-1}, c_{T-1}), (1-d_{T-1}) \cdot c_{T-1}\right] \tag{D.8}$$

$$\text{subject to} \qquad E\left[c_T\right] = E\left[\max\left[\left(1 + r_T\left(i_{T-1}\right) - \upsilon_T^c\right)\tilde{c}_{T-1}, 0\right]\right] \tag{D.9}$$

$$\tilde{c}_{T-1} = c_{T-1} - \left(w_{T-1} g_{\bar{t}} + \upsilon_{T-1}^b\right) b_{\bar{t}} - f_{T-1} \cdot 1[c_{T-1} < \bar{f}]. \tag{D.10}$$

In practice, we are setting T equal to 120, and contracts cannot be annuitized after age 99, so annuitization is not an option in $T-1$. Rather than introducing notation to keep track of when annuitization is available, we will always include it as an option, and implicitly set $z(a_{T-1}, c_{T-1}) = 0$ whenever it is not. Furthermore, since the maximum purchase age is 85, and surrender periods are never more than 10 years long, in practice $d_{T-1} = 0$. We will also keep surrender charges in the notation and set them to 0 when the surrender period has expired. To solve for the value of continuing with the contract, we discretize both the set of feasible investments, $\mathcal{I}_t$, and the space of $(c_{T-1}, b_{\bar{t}})$. For every element in the contract value - income base grid, (c^k, b^k), and conditional on the GAI rate, we find the asset allocation that yields the highest expected present discounted value for both the case where the annuitant decides to take GAI withdrawals and where they do not. Taking the maximum over the utilities under both withdrawal strategies and over annuitization and full surrender yields $V_{T-1}^*(c^k, b^k, g_{\bar{t}})$, the value of following the optimal withdrawal and investment strategy after arriving at period $T-1$ with contract value c^k and income base b^k. We interpolate linearly over the (c_{T-1}, b_{T-1}) space to obtain $\hat{V}_{T-1}^*(c_{T-1}, b_{\bar{t}}, g_{\bar{t}})$, the value function in period $T-1$ for all possible combinations of contract value, income base, and GAI rate. In period $T-2$, we then solve

$$\begin{aligned} V_{T-2}\left(c_{T-2}, b_{\bar{t}}, g_{\bar{t}}\right) = \max\Bigg[& \max_{(w_{T-2}, i_{T-2})} w_{T-2} \cdot g_{\bar{t}} \cdot b_{\bar{t}} + \delta\left(\mu_{T-1} \cdot E\left[\hat{V}_{T-1}^*(c_{T-1}, b_{\bar{t}}, g_{\bar{t}})\right] + (1-\mu_{T-1}) \cdot E[c_{T-1}]\right), \\ & z(a_{T-2}, c_{T-2}), (1-d_{T-2}) \cdot c_{T-2}\Bigg] \end{aligned} \tag{D.11}$$

$$\text{subject to:} \qquad E\left[c_{T-1}\right] = E\left[\max\left[\left(1 + r_{T-1}\left(i_{T-2}\right) - \upsilon_{T-1}^c\right)\tilde{c}_{T-2}, 0\right]\right] \tag{D.12}$$

$$\tilde{c}_{T-2} = c_{T-2} - \left(w_{T-2} g_{\bar{t}} + \upsilon_{T-2}^b\right) b_{\bar{t}} - f_{T-2} \cdot 1[c_{T-2} < \bar{f}]. \tag{D.13}$$

Again, discretizing over $(c_{T-1}, b_{\bar{t}})$ and over the set of feasible investments allows us to find

Electronic copy available at: https://ssrn.com/abstract=3281345

$V^*_{T-2}(c^k, b^k, g_{\bar{t}})$, the value of following the optimal withdrawal and investment strategy after arriving at period $T-2$ with contract value c^k and income base b^k, and linear interpolation yields $\hat{V}^*_{T-2}(c_{T-2}, b_{\bar{t}}, g_{\bar{t}})$. We continue this process recursively until we reach the maximum purchase age in period $\bar{t}$, where we obtain $\hat{V}^*_{\bar{t}}(c_{\bar{t}}, b_{\bar{t}}, g_{\bar{t}})$.[61]

In period $\bar{t}-1$, the annuitant can still step up or enhance the income base, and a step up increases the GAI rate to its highest possible level, if the annuitant is not there already. Moreover, having one or more remaining enhancement years is irrelevant. Then, the problem is

$$V_{\bar{t}-1}\left(c_{\bar{t}-1}, b_{\bar{t}-1}, s_{\bar{t}-1}, g_{\bar{t}-1}\right) = \max \Bigg[\max_{\left(w_{\bar{t}-1}, i_{\bar{t}-1}\right)} w_{\bar{t}-1} \cdot g_{\bar{t}-1} \cdot b_{\bar{t}-1} + \delta \cdot \left[\mu_{\bar{t}} \cdot E\left[\hat{V}^*_{\bar{t}}\left(c_{\bar{t}}, b_{\bar{t}}, g_{\bar{t}}\right)\right] + \left(1-\mu_{\bar{t}}\right) \cdot \beta \cdot E\left[c_{\bar{t}}\right]\right], z(a_{\bar{t}-1}, c_{\bar{t}-1}), (1-d_{\bar{t}-1}) \cdot c_{\bar{t}-1}) \Bigg] \tag{D.14}$$

subject to:

$$E\left[c_{\bar{t}}\right] = E\left[\max\left[\left(1 + r_{\bar{t}}\left(i_{\bar{t}}\right) - v^c_{\bar{t}}\right) \tilde{c}_{\bar{t}-1}, 0\right]\right] \tag{D.15}$$

$$\tilde{c}_{\bar{t}-1} = c_{\bar{t}-1} - \left(w_{\bar{t}-1} g_{\bar{t}-1} + v^b_{\bar{t}-1}\right) b_{\bar{t}-1} - f_{\bar{t}-1} \cdot 1[c_{\bar{t}-1} < \bar{f}] \tag{D.16}$$

$$b_{\bar{t}} = \min\left[\max\left[\left(1 + e_{\bar{t}-1}\right) b_{\bar{t}-1}, \tilde{c}_{\bar{t}}\right], \bar{b}\right] \tag{D.17}$$

$$g_{\bar{t}} = \begin{cases} g_{A\left(a_{\bar{t}-1}\right)} & \text{if } b_{\bar{t}} = \tilde{c}_{\bar{t}-1} \text{ or } a^{first} = a_{\bar{t}} \\ g_{\bar{t}-1} & \text{otherwise} \end{cases} . \tag{D.18}$$

As before, we discretize the space of contract value-income base, and solve for the optimal asset allocation for every combination of GAI rate-enhancement availability-withdrawal decision. Taking the maximum over withdrawal decisions, and comparing to the value of both annuitization and full withdrawal yields $V^*_{T-2}(c^k, b^k, s_{\bar{t}-1}, g_{\bar{t}})$, the value at each grid point for all combinations of GAI rates and years since the last step up. As argued earlier, in this period $V^*_{T-2}(c^k, b^k, 1, g_{\bar{t}}) = V^*_{T-2}(c^k, b^k, y, g_{\bar{t}}) \, \forall y \in \{2, ..., E\}$, as the income base is locked in period $\bar{t}$. Linear interpolation yields $\hat{V}^*_{\bar{t}-1}\left(c_{\bar{t}-1}, b_{\bar{t}-1}, s_{\bar{t}-1}, g_{\bar{t}-1}\right)$.

The general recursive formulation for earlier periods is

$$V_t\left(c_t, b_t, s_t, g_t\right) = \max \Bigg[\max_{(w_t, i_t)} w_t \cdot g_t \cdot b_t + \delta \cdot \left[\mu_t \cdot E\left[\hat{V}^*_{t+1}\left(c_{t+1}, b_{t+1}, g_{t+1}\right)\right] + \left(1 - \mu_{t\bar{+}1}\right) \cdot \beta \cdot E\left[c_{t+1}\right]\right], z(a_t, c_t), (1-d_t) \cdot c_t) \Bigg] \tag{D.19}$$

subject to:

$$E\left[c_{t+1}\right] = E\left[\max\left[\left(1 + r_{t+1}\left(i_t\right) - v^c_t\right) \tilde{c}_t, 0\right]\right] \tag{D.20}$$

$$\tilde{c}_t = c_t - \left(w_t g_t + v^b_t\right) b_t - f_t \cdot 1[c_t < \bar{f}] \tag{D.21}$$

[61] Note that when contract value equals zero, we can obtain the value of the problem analytically, as annuitization and withdrawal are not available and the income base is fixed. As a result, $V^*_{\bar{t}}(0, b_{\bar{t}}, g_{\bar{t}}) = g_{\bar{t}} \cdot b_{\bar{t}} \cdot \left(1 + \sum_{\tau=\bar{t}+1}^{T} \delta^{\tau-\bar{t}} \prod_{\tau'=\bar{t}+1}^{\tau} \mu_{\tau'}\right)$.

Electronic copy available at: https://ssrn.com/abstract=3281345

$$b_t = \min\left[\max\left[(1+e_t)\, b_t, \tilde{c}_t\right], \bar{b}\right] \tag{D.22}$$

$$g_{\bar{t}} = \begin{cases} g_{A(a_t)} \text{ if } b_t = \tilde{c}_t \text{ or } a^{first} = a_t \\ g_{t-1} \text{ otherwise.} \end{cases} \tag{D.23}$$

Backward induction until the initial period yields the value of the contract, $\hat{V}_0^*(c_0, c_0, E, g_0)$. Note that as the periods decrease the set of possible GAI rates decreases, as one need not solve for the value function at age 70 for GAI rates that are only available if the first withdrawal is at age 75. Moreover, the problem is initialized with 0 years since the last step up, and the annuitant is guaranteed E enhancement years, so one need not solve for the value function for infeasible values of years since last step up during the first E years of the contract.

D.3. Solving for the Value of a Variable Annuity and Fixed Indexed Annuity Contracts without a Living Benefit Rider

The problem is significantly simpler in this case, as there is no income base, no enhancement, and no step up. The problem in period $T-1$ is

$$V_{T-1}(c_{T-1}) = \max\left[\delta \cdot \beta \cdot E[c_T], z(a_{T-1}, c_{T-1}), (1-d_{T-1}) \cdot c_{T-1})\right] \tag{D.24}$$

$$\text{subject to:} \quad E[c_T] = E\left[\max\left[(1 + r_T(i_{T-1}) - v_T^c)\, \tilde{c}_{T-1}, 0\right]\right] \tag{D.25}$$

$$\tilde{c}_{T-1} = c_{T-1} - f_{T-1} \cdot 1[c_{T-1} < \bar{f}]. \tag{D.26}$$

Discretizing the space of contract value allows us to solve for the optimal asset allocation if the contract is continued, and comparing this value to that of annuitization or full withdrawal yields the optimal strategy in this period for a grid of contract values. Interpolation yields $\hat{V}_{T-1}^*(c_{T-1})$, the value of following the optimal strategy in period $T-1$ if landing on that period with contract value c_{T-1}. In this setting, the only difference between a variable annuity contract and a fixed indexed annuity contract will come from the menu of investment strategies available and the value of the fees.

The recursive formulation for previous periods is

$$V_t(c_t) = \max\left[\delta \cdot (\mu_{t+1} \cdot E[\hat{V}_{t+1}^*(c_{t+1})] + (1-\mu_{t+1}) \cdot \beta \cdot E[c_{t+1}]), z(a_t, c_t), (1-d_t) \cdot c_t)\right] \tag{D.27}$$

$$\text{s.t.} \quad E[c_{t+1}] = E\left[\max\left[(1 + r_{t+1}(i_t) - v_t^c)\, \tilde{c}_t, 0\right]\right] \tag{D.28}$$

$$\tilde{c}_t = c_t - f_t \cdot 1[c_t < \bar{f}]. \tag{D.29}$$

Solving this problem by backward induction yields the value of the contract, $\hat{V}_0^*(c_0)$.

Electronic copy available at: https://ssrn.com/abstract=3281345

E. Dataset Details

The analysis relies on six main sources of data: Transactions, Discovery, Beacon Annuity Nexus, Morningstar, CRSP, and VA prospectuses. Below, we describe the data in detail, including the collection process and methods used to map across sources.

E.1. Transactions

The Transaction dataset contains information on each of FSP's transactions of annuity, deferred-contribution, and insurance products sold between January 1, 2008 and February, 2016. We restrict attention to annuity (variable, fixed, and fixed indexed) contracts initiated between 2013 and 2015. The unit of observation is an individual payment, including lump sum and periodic payments, but we aggregate to the contract level. In our final dataset, each observation is a unique contract, and we observe the contract amount at purchase, age of the contract holder, advisor(s) associated with the sale, as well as information on the financial product, importantly the product type and share class, and codes indicating any supplemental rider purchases.

E.2. Discovery

The Discovery dataset serves two purposes. First, we rely on it to augment the Transaction dataset with detailed information about advisors. The Discovery dataset contains information on advisors and the firms with which they were employed on December 31, 2015. We observe advisor characteristics, such as an indicator of whether the advisor is a BD or DR, the advisor's age, gender, and the location of the branch office. We use this branch location to define the advisor's fiduciary standard. Additionally, the Discovery dataset provides unique identifiers of the advisor's BD firm and RIA firm (if applicable) and includes characteristics such as firm footprint, number of employees, and primary business line. We map information from the Discovery dataset to the Transaction dataset using a unique advisor ID provided by FSP and restrict to advisors and firms available in Discovery.

We also leverage the Discovery dataset for the market structure analysis. We observe the universe of registered financial advisors who are able to sell annuities as of December 31, 2015. For our main specifications, the outcomes of interest are the aggregate number of advisors and associated firm branches at the county level. We also explore heterogeneity by firm footprint. Discovery defines the firm footprints as follows:

- Local: located in no more than a few offices in one state or close proximity
- Multistate: located in multiple states but not large or concentrated enough to be categorized as a regional firm
- Regional: substantial office and advisor coverage across a region, e.g., the Midwest
- National: substantial office and advisor coverage across the U.S.

Electronic copy available at: https://ssrn.com/abstract=3281345

E.3. Beacon Research

For detailed product information, we rely on Beacon Research's Annuity Nexus. This dataset provides historical information on annuity fees and characteristics, as well as changes in availability and characteristics of supplemental riders.

We manually map product names and share classes from Beacon to the detailed descriptions provided in the Transaction dataset. This mapping is straightforward because a high level of detail is provided in the Transaction dataset. The mapping of rider selections is more difficult. The Transaction dataset provides a unique code for each rider selection but does not include a description. Instead, we rely on temporal restrictions on rider availability to match the codes with Beacon. The process is as follows:

- *Rider Availability Restrictions*: Create a crosswalk that lists each rider code combination and any potential corresponding rider name in Beacon. In this step, we rely on rider availability restrictions. Specifically, if a rider is not available for a given product, then it is eliminated as a potential mapping for all rider code combinations associated with that product in the Transaction dataset. Note that, after implementing the availability restrictions, there are certain combinations of rider codes that could only correspond to a single Beacon name, while others could correspond to more than one.

- *Temporal Restrictions*: For the rider code combinations that may correspond to more than one Beacon name, we implement temporal restrictions in an attempt to obtain a unique mapping. We compare the first and last transaction dates (from the Transaction dataset) for a given product and set of rider codes with the Beacon introduction and closing dates. We eliminate a rider as a potential Beacon mapping if the first transaction date is before the introduction date or if the last transaction date is after the closing date. Note again that temporal restrictions are only used if there are multiple potential Beacon mappings.

After implementing the above restrictions, we obtain unique rider mappings for approximately 68% of contracts issued between 2008 and 2016.

E.4. Morningstar

Morningstar provides data on the subaccounts underlying annuity products, and we use a number of measures contained in Morningstar's data, including subaccount fees, investment styles, and the number of "high quality" funds, as measures of investment quality. We manually map annuity product names from Morningstar to the product descriptions provided in the Transaction dataset.

E.5. CRSP

CRSP provides returns net of expense ratios for each subaccount. We manually match fund names in the CRSP database with those provided in VA prospectuses (described in Section VI below). The

Electronic copy available at: https://ssrn.com/abstract=3281345

fund names do change over time for the same fund, so we use CRSP's permanent fund number to aggregate historical returns for the fund.

E.6. VA Prospectuses

For the NPV calculations, we rely on data obtained from VA prospectuses stored in the SEC's EDGAR database. We manually collect information on investment restrictions that contract holders must follow when they elect supplemental riders. Additionally, we obtain the number of accumulation units in the subaccounts for each product, which measure aggregate investment choices. We map this information to the transaction dataset using the Beacon product names and riders obtained through the process described in Appendix E.3.

Electronic copy available at: https://ssrn.com/abstract=3281345

One Duty to All: The Fiduciary Duty of Impartiality and Stockholders' Conflict of Interest

Shachar Nir*

INTRODUCTION

The typical structure of corporations with multiple classes of stock consist of multiple classes of preferred stock and one or more types of common stock. These structures are most commonly used in venture capital-backed companies.[1] Venture capitalists and other "outside" investors[2] receive preferred stock whereas founders and company employees, by and large, hold common stock.

In general, common stock entitles its holder the right to vote in shareholders' meeting (i.e., voting rights) and the right to receive distributions of a company's surplus upon a distribution event, which can be either a mergers and acquisitions ("M&A") event or a dividend distribution (i.e., economic rights).[3] Preferred stock typically entitles its holder to receive all the rights of the common stock along with additional rights, contractual in nature. Such rights can be either additional voting rights (e.g., veto rights over corporate decisions)[4] or additional economic rights (e.g., the right to receive, upon a distribution event, the investment amount prior to any

---

* Master of Laws (LLM) '19, Stanford Program in Corporate Governance & Practice (CGP), Stanford Law School. I am deeply grateful to my advisor, Professor Joseph Grundfest, for his invaluable guidance and full support. I am also grateful to Professor of the Practice of Law, Michael Challahan, for his thoughtful comments and feedback, and Professor Amir Licht and Yifat Aran, who thoughts and feedback throughout this process have been invaluable. Special thanks to Professor Michael Klausner, Andrew Winden and Spencer Williams for their guidance and thoughtful feedback on earlier drafts of this Article. Thanks also to the editors of Hastings Business Law Journal, especially Kya Coletta, for outstanding editorial support. Finally, I would like to thank my family (Eli, Orgilit, Tal, and Bar) for their support and encouragement throughout this year. This Article is dedicated to my mom, Orgilit, on her 60th birthday.

1. *See* Elizabeth Pollman, *Startup Governance*, 1 U. PA. L. REV. 14-18 (forthcoming 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3352203.

2. Such as angel investors. *See id*. Angel investors are wealthy individuals who personally finance the same high-risk, high-growth start-ups as venture capitalists, at an earlier stage. *See infra* note 159 and accompanying text.

3. *See Model Amended and Restated Certificate of Incorporation*, NVCA (Jan. 2018), https://nvca.org/resources/model-legal-documents/.

4. *See id.*

Electronic copy available at: https://ssrn.com/abstract=3456340

distributions to the common stockholders). The latter right is known as liquidation preference and it is one of the most significant features of preferred stock.[5]

These additional rights are contractual in nature, and, as with any other contract, the parties negotiate the terms of such rights. The common stockholders, typically founders and company's employees, secure the required financing and receive extensive resources to professional services, such as project advisement. Research demonstrates that projects financed through venture capitalists have higher returns, higher growth, higher risk, and will be larger in size.[6] Moreover, research also shows that a legal environment supported by venture capitalists is one that strongly protects intellectual property rights,[7] which is generally considered the most significant asset in a start-up.[8]

The contributions made by the venture capitalists (the preferred stockholders) are not done for free.[9] A venture capitalist will only invest if the deal is logical, which typically means that he will receive an adequate sort of consideration, such as additional voting or economic rights. These additional rights seek to protect the high-risk investment of the preferred stockholders (normally venture capitalists) in start-ups;[10] in its early stages, a start-up success is highly uncertain—it can either become wildly successful or fail entirely.[11]

The cases discussed below suggest that enforcement of the preferred additional rights should be carried out in a different manner from enforcement of the common rights. This "different treatment" has the potential not only to diminish the utility of the preferred,[12] but also to disable

5. A liquidation preference provision entitles a venture capitalist to receive a fixed amount (usually the amount of the original investment, or a multiple thereof) for each share of preferred stock; in certain events, this fixed amount is received before payments are made to other stockholders. *See* Gordon D. Smith, *The Exit Structure of Venture Capital*, 53 UCLA L. REV. 315, 347 (2005).

6. *See* Masako Ueda, *Banks Versus Venture Capital: Project Evaluation, Screening, and Expropriation*, 59 J. FIN. 601, 601-02 (2004).

7. *See id*.

8. *See*, *e.g.*, *Using IP for Development: Success Stories from Around the World*, WORLD INTELLECTUAL PROPERTY ORGANIZATION ("WIPO") (2017), https://www.wipo.int/edocs/pubdocs/en/wipo_pub_using_ip_dev.pdf. WIPO's white paper suggests that intellectual property is the basis for a significant portion of venture capital investments; *see also* David Hsu & Rosemarie Ziedonis, *Patents as Quality Signals for Entrepreneurial Ventures*, 1 ACAD. OF MGMT. PROCEEDINGS (2008).

9. *See* William W. Bratton & Michael L. Wachter, *A Theory of Preferred Stock*, 161 U. PA. L. REV. 1815, 1874 (2013).

10. *See id*.

11. *See* Leo E. Strine, Jr., *Poor Pitiful or Potently Powerful Preferred?*, 161 U. PA. L. REV. 2025, 2037 (2013); *see also* Pollman, *supra* note 1, at 16.

12. *See* discussion *infra* page 10, Part I.B.

Electronic copy available at: https://ssrn.com/abstract=3456340

that productive mode of financing,[13] which would not otherwise be received by alternate sources (such as banks).[14] Thus, one who considers whether these additional (preferred) rights should be enforced in the same manner as common rights should ask this: "whether the [common] shareholders would have been better or worse off without the preferred financing."[15]

The first major case to suggest this 'different treatment' was decided in 2013. That year, the venture capital community was rocked by a decision of the Delaware Chancery Court in *In re Trados Shareholder Litigation*.[16] In *Trados*, the corporation faced financial difficulties when a potential buyer emerged and the board saw to sell the corporation at a deal price almost equal to the preferred liquidation preference. In other words, the preferred stockholders received almost all of their liquidation preference, and the common stockholders received nothing. Before finding that the common stock was actually worth nothing, the court held that when a board of directors considers whether to take corporate action, it should consider solely the interests of its common stockholders as "residual claimants," and the interests of preferred stockholders should be taken into account only to the extent that they do not invoke their special contractual rights and rely on a right shared equally with the common stockholders.[17]

In 2017, the Delaware Chancery Court again ruled in *Fredrick Hsu Living Trust v. ODN Holding Corp. et al*.[18] In *ODN*, the court refused to dismiss claims against the board of *ODN*, stating that it breached its fiduciary duties to common stockholders by selling certain corporation business lines and assets to fund a mandatory redemption of preferred stock that had vested after five years. Although the mandatory redemption was a contractual obligation to the preferred stockholders, the court held that such a contractual right is subject to the board's fiduciary duty; the board has the right/duty to decide whether it is in the best interests of the common stockholders (i.e., not the enterprise as a whole) to commit an "efficient breach" of the corporation's obligation to the preferred stockholders.[19]

---

13. *See* Bratton & Wachter, *supra* note 9, at 1874.
14. *See* Pollman, *supra* note 1, at 15.
15. *See* Simone M. Sepe, *Intruders in the Boardroom: The Case of Constituency Directors*, 91 WASH. U. L. REV. 309, 357-58 (2013).
16. 73 A.3d 17 (Del. Ch. 2013) [hereinafter *Trados* or *Trados II*, as applicable]. I would like to note that there are subsequent decisions by the Delaware Chancery Court affirming *Trados*. *See* In re Nine Sys. Corp. Shareholders Litigation, 2014 WL 4383127 (Del. Ch. Sept. 4, 2014), aff'd sub nom Fuchs v. Wren Holdings, LLC, 129 A.3d 882 (Del. 2015); In re PLX Technology Inc. Stockholders Litigation, 2018 WL 5018535 (Del. Ch. Oct. 16, 2018); Mehta v. Mobile Posse, Inc., 2019 WL 2025231 (Del. Ch. May 8, 2019).
17. *See* In re Trados Shareholder Litigation, 73 A.3d 17, 36-37 (Del. Ch. 2013).
18. 2017 WL 1437308 (Del. Ch. Apr. 14, 2017) [hereinafter *ODN*].
19. *See* ODN Holding Corp., 2017 WL 1437308, at *53-54.

Electronic copy available at: https://ssrn.com/abstract=3456340

Fiduciary duties serve as one of the most important and fundamental corporate governance mechanisms in monitoring the behavior of directors[20] and, in so doing, reducing agency costs.[21] The court's decisions in the *Trados* and *ODN* cases established that fiduciary duties are owed to the holders of "permanent capital" as residual claimants, and, in most cases, this will be the holders of the common stock, with fiduciary duties owed to the holders of preferred stock only to the extent their interests overlap with the interests of the common stockholders.[22] After those decisions were rendered, many corporate law scholars came forward to praise and support the Delaware Chancery Court's unequivocal stand.[23]

This Article, however, takes a more skeptical view and raises the following questions:

Should preferred stockholders (in all cases) be considered residual claimants? Should conflicts between common and preferred stockholders always be resolved in a way that maximizes value for the common stockholders, or should conflict be resolved in a way that would maximize the value of the enterprise as a whole? Should the court use different legal rules for different types of conflicts? How should interclass preference conflicts be resolved in both privately held and publicly traded corporations?

To answer the above questions, this Article analyzes stockholders' conflicts of interest on two levels:

First, Part I of this Article analyzes the common-preferred conflict in light of the *Trados* and *ODN* cases. The analysis argues that due to:

---

20. *See* Arthur R. Pinto, *Corporate Governance: Monitoring the Board of Directors in American Corporations*, 46 AM. J. COMP. L. SUPP. 317, 330 (1998); FRANK H. EASTERBROOK & DANIEL R. FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW (1991).

21. *See* Frank H. Easterbrook & Daniel R. Fischel, *The Corporate Contract*, 89 COLUM L. REV. 1416 (1989).

22. *See Trados*, 73 A.3d at 40-42.

23. *See, e.g*., Juliet P. Kostritsky, O*ne Size Does Not Fit All: A Contextual Approach to Fiduciary Duties Owed to Preferred Stockholders from Venture Capital to Public Preferred to Family Business*, 70 RUTGERS. U. L. REV. 43 (2017) (discussing whether corporations should owe fiduciary duties to its preferred stockholders and suggesting a limited fiduciary obligation to preferred stockholders in two specific contexts. The first is when non-working children are given preferred stock in a family business. The second is when a corporation takes on a new unfamiliar product line, allowing common stockholders to wipe out the value of publicly traded preferred stock); Abraham J.B. Cable, *Opportunity-Cost Conflicts in Corporate Law*, 66 CASE WESTERN RESERVE L. REV. 51 (2015) (discussing the opportunity-cost conflict raised in *Trados* and arguing that courts should invoke the doctrine sparingly to avoid upsetting the law's current balance between policing managerial abuse and litigation abuse); Charles R. Korsmo, *Venture Capital and Preferred Stock*, 78 BROOK L. REV. 1163 (2013) (suggesting that VC holders of preferred stock should never be afforded fiduciary protections and should always be required to rely on the protections of their contract); Strine, *supra* note 11, at 2039 (discussing *Trados* in response to a critique by Bratton & Wachter, *supra* note 9).

Electronic copy available at: https://ssrn.com/abstract=3456340

1. the equity features of non-redeemable preferred stock;[24]
2. the questionable enforcement of preferred stockholders' rights on the contractual level;[25] and
3. the implications of the court's view in *Trados* and *ODN* with respect to an increase in agency costs,[26] transaction costs,[27] and value-maximization issues,[28] enforcement of preferred stockholders' rights should be undertaken via the board of directors' fiduciary duties to all stockholders, without prejudice.

Second, Part II of this Article analyzes potential interclass preference conflicts between and among different types of preferred and common stockholders, in both privately held and publicly traded corporations. This Article argues that the current approach the Delaware Chancery Court takes lacks a solution with respect to interclass preference conflicts both for privately held and publicly traded corporations.[29]

Third, Part III of this Article concludes with a proposed framework for resolving stockholders' conflicts of interest that were previously discussed. This Article proposes the fiduciary duty of impartiality—an extension of the duty of loyalty—as an analytical framework to resolve conflicts of interest between and among holders of common stock and multiple classes of preferred stock.

I. FIDUCIARY DUTIES AND COMMON-PREFERRED CONFLICT OF INTERESTS

In general, a corporate board of directors has fiduciary duties that require it to make business decisions that are in the best interests of its stockholders.[30] This aspect of fiduciary duty is known as the "shareholder primacy norm,"[31] or "shareholder wealth maximization norm," under which directors have a duty to maximize the value of the corporation for the benefit of its stockholders.[32]

24. *See infra* page 14, Part I.B.i.1.
25. *See id.*; *see also infra* page 18, Part I.B.i.2.
26. *See infra* page 21, Part I.B.2.ii.
27. *See id.*
28. *See infra* page 22, Part I.B.iii.
29. *See infra* page 24, Part II.
30. *See*, *e.g*., Dodge v. Ford Motor Company, 170 N.W. 668, 684 (Mich. 1919).
31. *See* Gordon, D. Smith, *The Shareholder Primacy Norm*, 23 J. CORP. L. 277 (1998).
32. *See Dodge*, 170 N.W. at 684; *see also* eBay Domestic Holdings, Inc. v. Newmark, 16 A.3d 1, 34 (Del. Ch. 2010).

Electronic copy available at: https://ssrn.com/abstract=3456340

A. *TRADOS* AND *ODN* CASES

In *Trados* and *ODN*, the Delaware Chancery Court faced the dilemma of settling a common-preferred conflict of interest with respect to the allocation of the merger consideration.[33] Citing earlier Delaware case law on the matter,[34] the court embraced the view that where directors can exercise discretion, they should generally prefer the interests of common stockholders to those of preferred stockholders.[35] In other words, fiduciary duties are owed to the holders of "permanent capital" as residual claimants and, in most cases, such holders will be the holders of common stock, with fiduciary duties owed to holders of preferred stock only to the extent that their interests overlap.[36]

The basic stance of the court's decisions is that holders of preferred stock obtain their rights and protections by contract (i.e., by the terms of the preferred). However, in reaching its decisions, the court failed to make an important distinction among different rights tied to stock ownership[37] and to address enforcement of the preferred stockholders' rights at the contractual level.[38]

The Delaware Chancery Court's decisions also failed to address a broad range of complex, but commonly occurring, potential conflicts between and among holders of common stock and multiple classes of preferred stock.[39] Finally, the court's decisions also have a negative impact on agency costs,[40] transaction costs,[41] and value-maximization issues.[42]

i. Trados *Case (2013)*

In *Trados*, the board of directors' decision to sell the corporation was challenged by a stockholder who owned 5% of the corporation's common stock.[43] At and before the time of sale, the corporation faced financial difficulties and its mixed performance during the three years preceding the

33. *See* In re Trados Shareholder Litigation, 73 A.3d 17 (Del. Ch. 2013).
34. *See id*. at 37-41; Fredrick Hsu Living Trust v. ODN Holding Corp. et al., 2017 WL 1437308, at *50-51 (Del. Ch. Apr. 14, 2017).
35. *See Trados*, 73 A.3d at 37-41; *ODN Holding Corp*., 2017 WL 1437308, at *50-51.
36. *See Trados*, 73 A.3d at 37-41; *ODN Holding Corp*., 2017 WL 1437308, at *50-51.
37. *See* discussion *infra* page 14, Part I.B.i.1.
38. *See id*.; *see also infra* page 18, Part I.B.i.2.
39. *See infra* page 24, Part II.
40. *See infra* page 21, Part I.B.2.ii.
41. *See id*.
42. *See infra* page 22, Part I.B.iii.
43. *See* In re Trados Shareholder Litigation, 73 A.3d 17 (Del. Ch. 2013).

Electronic copy available at: https://ssrn.com/abstract=3456340

merger led its board of directors to search for exit opportunities.[44] The board of directors considered two major exit opportunities with three different buyers, ultimately accepting the one that would likely to result in higher value and lower risk at that time.[45]

The merger consideration satisfied nearly all the preferred liquidation preference and left no proceeds for the common stock. Although the court found that the common stock was worth nothing, it emphasized that a board of directors does not owe fiduciary duties to preferred stockholders when considering whether to take corporate action that might trigger or circumvent the preferred stockholders' contractual rights.[46] In other words, pursuant to the court's view, rights that are enjoyed solely by the preferred class do not give rise to fiduciary duties, because such rights are purely contractual in nature.[47]

The court's rationale was that preferred stockholders protect their rights via their contractual arrangements (e.g., liquidation preference, veto rights, drag-along provisions), and the fiduciary obligation should generally be saved for holders of common stock.[48] However, as we shall see in the following Part,[49] preferred rights, whether entitled as contractual or equity rights, are, as a practical matter, enforced via corporate actions, and are subject to fiduciary duties obligations. For that reason, the dichotomic separation between contract and equity rights, with respect to holders of preferred stock, creates a situation where the rights of the preferred cannot in fact be enforced in many situations.

In its *Trados II* holding, the Delaware Chancery Court cited numerous Delaware cases to support its decision.[50] Among others, the following citations illustrate the court's dramatic shift toward a dichotomic approach in resolving common-preferred conflicts:

In *Wolfensohn v. Madison Fund, Inc.*,[51] the preferred stockholders received both debentures and a share of common stock. The court held that such preferred stockholders were not owed fiduciary duties in their capacity as debenture holders and only had their contractual rights as creditors.[52] Similarly, in *Simons v. Cogan*,[53] the court held that a "convertible debenture

44. *See id*. at 8-10, 18-20.
45. *See id*. at 23-24.
46. *See id*. at 36-37.
47. *See id*.
48. *See id*. at 40-41.
49. *See infra* page 10, Part I.B.
50. *See Trados*, 73 A.3d at 36-41.
51. 253 A.2d 72 (Del. 1969).
52. *See id*. at 75.
53. 549 A.2d 300 (Del. 1988).

Electronic copy available at: https://ssrn.com/abstract=3456340

represents a contractual entitlement to the repayment of a debt and does not represent an equitable interest in the issuing corporation necessary for the imposition of a trust relationship with concomitant fiduciary duties."[54]

These cases are significantly different from the situation in *Trados*. In *Trados*, the preferred stockholders were not considered creditors because their preferred stock was considered an equity instrument rather than a debt instrument.[55] Therefore, their contractual rights were different from those of creditors, as preferred rights are generally enforced via corporate action directly affecting all stockholders, and, thus, created a direct conflict between common and preferred stockholders.

By not distinguishing between holders of equity instruments (e.g., preferred stockholders) and holders of debt instruments (e.g., creditors) with respect to the fiduciary duty obligation,[56] the court opened the door to possible situations in which preferred stockholders could be left without adequate protection of their rights. This conclusion is reinforced in cases of redeemable preferred stock, such as in *ODN*[57] and cases in which the board of directors is controlled by common stockholders; it would be difficult, if not impossible, to impugn the board's entitlement to the business judgment rule[58] (i.e., a rebuttable presumption that a court will not second-guess a board of directors' decision).[59] This presumption may be rebutted in cases of fraud, illegality, or conflict of interest transactions.[60]

Another case cited by the *Trados II* court is *LC Capital Master Fund, Ltd. v. James*.[61] In that case, the preferred stockholders claimed that the board of directors' decision to allocate the merger consideration on an as-converted basis, rather than in accordance with the liquidation preference (specified in

---

54. *See id*. at 303.

55. *See Trados*, 73 A.3d at 38.

56. *See id*. at 41. ("This principle is not unique to preferred stock; it applies equally to other holders of contract rights against the corporation.").

57. *See infra* page 10, Part I.A.ii; *see also* discussion *in*fra page 18, Part I.B.i.2

58. *See* LC Capital Master Fund, Ltd. v. James, 990 A.2d 435, 453 (Del. Ch. 2010). For arguments supporting the proposition that a board elected by common stock owners owes fiduciary duties to the common stockholders, but not the preferred stockholders, *compare* Jesse M. Fried & Mira Ganor, *Agency Costs of Venture Capitalist Control in Startups*, 81 N.Y.U. L. REV. 967, 990-93 (2006) (interpreting Orban v. Field, 1997 WL 153831 (Del. Ch. Apr. 1, 1997) as supporting a "control-contingent approach," in which a board elected by the common stock owes fiduciary duties to the common stockholders, but not the preferred stockholders; however, a board elected by the preferred stockholders can promote the interests of the preferred stock at the expense of the common stock) *with Trados*, 73 A.3d at 43 ("The control-contingent interpretation does not comport with how I understand the role of fiduciary duties or the ruling in *Orban*, which I read as a case in which the common stock had no economic value such that a transaction in which the common stockholders received nothing was fair to them.").

59. *See* Gimbel v. Signal Cos., 316 A.2d 599, 608 (Del. Ch. 1974).

60. *See* Shlensky v. Wrigley, 237 NE 2d 776 (Ill. App. 1968).

61. 990 A.2d 435 (Del. Ch. 2010) [hereinafter *LC Capital*].

Electronic copy available at: https://ssrn.com/abstract=3456340

the certificate of incorporation)[62] was not a breach of their fiduciary duties. Citing *Equity-Linked Investors, L.P. v. Adams*,[63] *In re Trados Shareholder Litigation*,[64] *Jedwab v. MGM Grand Hotels, Inc.*,[65] and *In re FLS Holdings, Inc. Shareholder Litigation*,[66] the *LC Capital* court noted that once preferred contractual rights are articulated in corporate documents, the board must first respect such rights and then, to the extent there is no contractual basis as to a specific corporate resolution, must act as a "gap-filling agency and do its best to fairly reconcile the competing interests of the common and preferred."[67]

In taking a corporate action pursuant to *LC Capital*,[68] a board should consider both preferred and common stockholders' rights.[69] The *Trados II* court, however, established a more extreme approach: a board of directors should only seek to maximize the value of a corporation for the benefit of the common stockholders.[70] Thus, the *Trados II* decision significantly tipped the balance in favor of common stockholders' interests per se and has led to a series of problems whenever there is a gap-filling situation.[71]

A recent, and more extreme, application of the *Trados* decision can be found in the opinion from Vice Chancellor Katie McCormick in *Mehta v. Mobile Posse, Inc*.[72] Similar to *Trados*, in *Mobile Posse*, a preferred-controlled board of directors approved the sale of a corporation at a price that would leave the common stockholders with nothing.[73]

During the three years preceding the merger, the corporation worked with two investment bankers who contacted more than 100 potential buyers and entered into two negotiation processes that ultimately failed due to

62. Note that in LC Capital Master Fund, Ltd. v. James, the liquidation preference specified in the certificate of incorporation was not, by its terms, triggered by the merger.

63. 705 A.2d 1040, 1042 (Del. Ch. 1997).

64. In re Trados Shareholder Litigation, 2009 WL 2225958, at *1 (Del. Ch. July 24, 2009) [hereinafter *Trados I*].

65. Jedwab v. MGM Grand Hotels, Inc., 509 A.2d 584 (Del. Ch. 1986).

66. In re FLS Holdings, Inc. Shareholder Litigation, 1993 WL 104562, at *5 (Del. Ch. Apr. 2, 1993).

67. *See* LC Capital Master Fund, Ltd. v. James, 990 A.2d 435, 438-39, 449 (Del. Ch. 2010).

68. This will further be addressed in the discussion regarding the *ODN* case, as it is not clear whether the board of directors would honor the contractual rights of the preferred stock class in all cases.

69. *See supra* note 62; *see also LC Capital Master Fund, Ltd.*, 990 A.2d at 446.

70. *See* In re Trados Shareholder Litigation, 73 A.3d 17, 40-43 (Del. Ch. 2013).

71. *See infra* page 10, Part I.B.

72. 2019 WL 2025231 (Del. Ch. May 8, 2019) [hereinafter *Mobile Posse*].

73. The ultimate deal price was $33,800,000 in cash and $1,000,000 in rollover equity, which was lower than the total obligation to the preferred (i.e., $44,678,801 in liquidation preference and $17,003,591 in accrued, but unpaid dividends). The ultimate deal negotiated involved senior preferred stockholders forgoing a portion of their liquidation preference to enable lower classes of preferred stock (but not common stockholders) to receive some consideration. *See id*. at *5-7.

Electronic copy available at: https://ssrn.com/abstract=3456340

concerns that the corporation depended on just a single customer.[74] Despite that fact, the court held that although the defendants had argued that the common stock was worth nothing[75] (as was the case in *Trados*), the merger was not altogether fair due to an unfair sale process.[76]

Assuming the sale process was flawed, the fact that two previous potential buyers walked away from the deal due to exactly the same business risk (i.e., the corporation depended on a single customer) makes it difficult to see how even an unflawed sale process could have resulted in a deal price that would have been high enough for common stockholders to have received payment.[77]

ii. ODN *Case (2017)*

Continuing with the line of *Trados* and prior case law on mandatory redemption,[78] the *ODN* court held that the board of directors breached its fiduciary duties to the common stockholders by selling certain business lines and assets to fund a mandatory redemption of preferred stock that vested after five years.[79] The mandatory redemption resulted in an asset sales that shrunk the corporation significantly and impaired its ability to generate long-term value to the remaining stockholders.[80]

Notwithstanding the fact that the court recognized the mandatory redemption provision as a contractual obligation toward the preferred, it emphasized that the preferred right to redeem their stock once the mandatory redemption right vested was subject to the board's fiduciary duty to decide whether it was in the best interests of the common stockholders (i.e., not the enterprise as a whole) to commit an "efficient breach" of the corporation's obligation toward the preferred. In *ODN*, the best interest of the common

---

74. *See id*. Both the first negotiation, for a sale at a deal price of $45,000,000, with another $17,000,000 as part of a potential earn-out (common stockholders could have potentially received only part of the earn-out consideration; $0.38 per share), and the second negotiation, for a sale at a deal price between $31,000,000 and $37,000,000 (i.e., the offer would not have satisfied the corporation's preferred stock), ultimately failed due to concerns that the corporation's business depended on a single customer.

75. Defendants claimed that the price at which common stockholders would receive consideration was $53,189,000, as compared with the $33,800,000 merger price alleged by plaintiff. *See id*. at *28.

76. *See id*. at *26-29.

77. *See id*. at *28-29.

78. *See generally* Carsanaro v. Bloodhound Tech., Inc., 65 A.3d 618 (Del. Ch. 2013); SV Inv. Partners, LLC v. ThoughtWorks, Inc., 37 A3d 205 (Del. 2011); SV Inv. Partners, LLC v. Thoughtworks, Inc., 7 A.3d 973 (Del. Ch. 2010), aff'd, 37 A.3d 205 (Del. 2011); Harbinger Capital Partners Master Fund I, Ltd. v. Granite Broad. Corp., 906 A.2d 218 (Del. Ch. 2006).

79. *See* Fredrick Hsu Living Trust v. ODN Holding Corp. et al., 2017 WL 1437308 (Del. Ch. Apr. 14, 2017).

80. *Id*.

Electronic copy available at: https://ssrn.com/abstract=3456340

stockholders was not to take actions to fund the redemption, because doing so diminished the long-term upside potential of the business.[81]

B. ISSUES POST-*TRADOS* AND *ODN*

Following the Delaware Chancery Court's holdings in *Trados* and *ODN*, scholars took different views with respect to these decisions. Some praised or otherwise supported the court's view,[82] whereas others criticized it to a large extent.[83] Additionally, law firms have focused on the practical implications of these cases to provide guidelines for their clients.[84]

The current criticism of conflicts among stockholders has yet to result in a comprehensive and unified resolution. This Article takes a closer look at the legal reasoning and foundations of the court's rationale in *Trados* and *ODN*, and critiques the court's underlying assumptions in these cases.[85] It also discusses potential interclass preference conflicts and argues that the court's approach lacks a solution with respect to interclass preference conflicts, for both privately held and publicly traded corporations.[86]

---

81. *See id*. at *53-54. For prior case law recognizing the "efficient breach" doctrine, see, e.g., Bhole, Inc. v. Shore Invs., Inc., 67 A.3d 444, 453 n.39 (Del. 2013); E.I. DuPont de Nemours & Co. v. Pressman, 679 A.2d 436, 445–46 (Del. 1996); NAMA Hldgs., LLC v. Related WMC LLC, 2014 WL 6436647, at *30 (Del. Ch. Nov. 17, 2014).

82. *See supra* note 23.

83. *See* Bratton & Wachter, *supra* note 9 (arguing that enterprise value maximization works better as the default when the interests of two classes of equity are in conflict); Pollman, *supra* note 1, at 54 (arguing that the *Trados* court took a formalistic approach to applying fiduciary duties without sensitivity to startup dynamics); Michal Barzuza & Eric Talley, *Long-Term Bias*, (ECGI Law, Working Paper No. 449, 2019) (discussing long-term bias in light of recent Delaware case law and suggesting that long-termism can impose substantial costs on investors that are every bit as damaging as short-termism); Robert P. Bartlett, *Shareholder Wealth Maximization as Means to an End*, 38 SEATTLE U. L. REV. 255, 295 (2015) (suggesting that *Trados* "undermin[ed] the utility of the corporate form as a vehicle for maximizing firm value, [and] potentially induc[ed] investors and entrepreneurs to turn to noncorporate entities to finance new business enterprises or deter[ed] investment altogether"); Sepe, *supra* note 15, at 351-59 (suggesting that the *Trados* decision could violate investor's participation constraints). Some scholars criticized the *Trados* court for concluding that the common stockholders were unharmed by the unfair dealing of the controlling preferred boards. *See* Adam M. Katz, Comment, *Addressing the Harm to Common Stockholders in Trados and Nine Systems*, 118 COLUM. L. REV. ONLINE 234 (2018); Ethan J. Leib & Stephen R. Galoob, *Fiduciary Political Theory: A Critique*, 125 YALE L.J. 1820 (2016); Ben Walther, *The Peril and Promise of Preferred Stock*, 39 DEL. J. CORP. L. 161 (2014).

84. *See, e.g.,* M&A Update, *Just How Preferred is Your Preferred?*, KIRKLAND & ELLIS (May 9, 2017), https://www.kirkland.com/publications/kirkland-manda-update/2017/05/just-how-preferred-is-your-preferred; Steven E. Boschner & Amy L. Simmerman, *The Venture Capital Board Member's Survival Guide: Handling Conflicts Effectively While Wearing Two Hats*, 41 DEL. J. CORP. L. 1 (2016); *Delaware Court of Chancery Upholds Trados Transaction as Entirely Fair*, WILSON SONSINI GOODRICH & ROSATI (Aug. 20, 2013), https://www.wsgr.com/publications/PDFSearch/wsgralert-trados.pdf.

85. *See infra* page 10, Part I.B.

86. *See infra* page 24, Part II.

Electronic copy available at: https://ssrn.com/abstract=3456340

This Article concludes with an alternative analytic consistent framework to resolve conflicts of interest between and among common-preferred and interclass preferences.[87]

i. Preferred Stockholders as Residual Claimants

To initiate the critiques about the Delaware Chancery Court's decisions, one of the first questions is: are the rights of the preferred contractual rights debt-like or equity rights? This question asks whether preferred stock is a debt or an equity instrument. Said more elaborately, do the preferred stockholders gain liquidity via their contractual rights (i.e., similar to creditors), or are they locked into their investment like other equity holders (i.e., common shareholders)?[88]

The court's position is that preferred stock, whether redeemable or not, is an equity rather than a debt instrument.[89] However, the court has missed an important distinction: when analyzing equity and debt features of preferred stock, one should differentiate between redeemable preferred stock and non-redeemable preferred stock. This distinction is important for two principal reasons: First, it explains why, in the case of non-redeemable preferred stock, holders of preferred shares should be considered 'residual claimants.' Second, it sheds light on the expectations and goals of an investor when making an investment decision. Such expectations driving investor's investments are important for analyzing the potential conflicts of interest between common and preferred stockholders.

This Article will first lay out the core differences between redeemable and non-redeemable preferred stock from an accounting perspective and will then analyze the legal characteristics of each.

Figure 1 below describes the main differences between non-redeemable and redeemable preferred stock:

87. *See infra* page 33, Part III.

88. For an interesting discussion regarding the paradox of preferred stock and its dual function as a debt and equity instrument, see, e.g., Lawrence E. Mitchell, *The Puzzling Paradox of Preferred Stock (and Why We Should Care About It)*, 51 BUS. LAW. 443, 445 (1996).

89. *See* In re Trados Shareholder Litigation, 73 A.3d 17, 38 (Del. Ch. 2013); Fredrick Hsu Living Trust v. ODN Holding Corp. et al., 2017 WL 1437308, at *33-34 (Del. Ch. Apr. 14, 2017).

Electronic copy available at: https://ssrn.com/abstract=3456340

Figure 1

Characteristic	Non-Redeemable Preferred (Equity)	Redeemable Preferred (Debt)	Redeemable Preferred (Equity/Debt) (?)
Redeemable by investor	No	Yes	Conditional redemption – instrument becomes debt once event occurs/condition is resolved/the event becomes certain to occur
Mandatory Redemption by corporation	No	Yes	No

Under Generally Accepted Accounting Principles ("GAAP"),[90] an investment in preferred stock that must be redeemed by the issuing entity, or is redeemable at the investor's option, is considered a debt security, despite its legal form. This is the case regardless of how the issuer classified the instrument.[91]

If the preferred stock is not mandatorily redeemable (i.e., there is no stated redemption date), and the investor does not have the unilateral right to ultimately redeem it, it is considered an equity security subject to the provisions of ASC 321, Investments—Equity Securities.[92]

---

90. *See Investments-Debt and Equity Securities*, ASC 320, https://asc.fasb.org/subtopic&trid=75115025; *Financial Reporting Developments, A Comprehensive Guide: Certain Investments in Debt and Equity Securities*, EY (June 2018), https://www.ey.com/publication/vwluassetsdld/financialreportingdevelopments_03623-181us_debtandequitysecurities_14june2018-v2/$file/financialreportingdevelopments_03623-181us_debtandequitysecurities_14june2018-v2.pdf. For simplicity of the discussion, I will focus on US GAAP, although there are some similarities to IFRS in this context. For differences in classification between debt and equity instruments between IFRS and U.S. GAPP, see *A Comparison of IFRS Standards and U.S. GAAP: Bridging the Differences*, DELOITTE (Feb. 4, 2019), https://www.iasplus.com/en/publications/us/ifrs-gaap-comparison; *US GAAP Versus IFRS: The Basics*, EY (Feb. 2018), https://www.ey.com/Publication/vwLUAssets/IFRSBasics_00901-181US_23February218/$FILE/IFRSBasics_00901-181US_23February2018.pdf; *IFRS and US GAAP: Similarities and Differences*, PWC (Oct. 2019), https://www.pwc.com/us/en/cfodirect/assets/pdf/accounting-guides/pwc-ifrs-us-gaap-similarities-and-differences.pdf; *IFRS Compared to US GAAP*, KPMG (Dec. 2017), https://frv.kpmg.us/content/dam/frv/en/pdfs/2017/ifrs-us-gaap-2017.pdf.

91. *See* EY, *supra* note 90, at 6-7.

92. *Accounting Standards Codification*, FINANCIAL ACCOUNTING STANDARDS BOARD, https://asc.fasb.org/subtopic&trid=2196929; *see also id*.

Electronic copy available at: https://ssrn.com/abstract=3456340

In complex situations in which the terms of a redeemable preferred stock allow the investor the option to redeem it only in certain circumstances (e.g., when an event occurs that is not certain to occur or when a certain percentage (e.g., majority, two-third) of investors elect to redeem their preferred shares), this conditional redemption becomes a liability (for the corporation) if that event occurs, the condition is resolved, or the event becomes certain to occur.[93]

To simplify the following legal discussion, we focus on the pure non-redeemable/redeemable preferred stock.

From Figure 1, we can see that in the pure case of redeemable preferred stock (the second column), such an instrument is classified for, accounting purposes, as a debt rather than as an equity instrument. Under Delaware law, however, there is no distinction between redeemable preferred stock and non-redeemable preferred stock; both are considered equity instruments.[94] The rationale behind the court's view is that each redemption right is subject to statutory, common law, and contractual limitations, including § 160 of the Delaware General Corporation Law ("DGCL") which requires that a repurchase be made in an amount not to exceed the corporation's "surplus."[95] Therefore, the redemption right will always be conditioned upon the fulfilment of § 160 of the DGCL,[96] and will be subordinated to the rights of the corporation's creditors.[97]

In the following subsections, this Article first discuss the legal characteristics of the nonredeemable preferred stock and will then continue with a separate discussion of the legal characteristics of the redeemable preferred stock. The analysis will show that, with respect to nonredeemable

---

93. For useful illustrations and additional information as to whether the preferred stock is classified as debt or equity security in complex situations, see *Certain Financial Instruments with Characteristics of Both Liabilities and Equity*, KPMG, 26-27 (Nov. 2017), https://frv.kpmg.us/content/dam/frv/en/pdfs/2017/handbook-distinguishing-liabilities-asc480.pdf; EY, *supra* note 83, at 6-7.

94. *See* Fredrick Hsu Living Trust v. ODN Holding Corp. et al., 2017 WL 1437308, at *33-34 (Del. Ch. Apr. 14, 2017) (rejecting the idea that a preferred stockholder who holds a redemption right should be considered a "creditor").

95. *Id*.

96. *Id*.; *see* Carsanaro v. Bloodhound Tech., Inc., 65 A.3d 618, 645 (Del. Ch. 2013).

97. *See ODN Holding Corp.*, 2017 WL 1437308, at *33-34; *accord* 11 WILLIAM MEADE FLETCHER ET AL., FLETCHER'S CYCLOPEDIA OF THE LAW OF PRIVATE CORPORATIONS § 5297 (perm. ed., rev. vol. 2019) ("As against creditors of the corporation, preferred shareholders have no greater rights than common shareholders. They have no preference over them, either in respect to dividends or capital, and have no lien upon the property of the corporation, except if a statute provides otherwise. On the contrary, their rights, both in respect to dividends and capital are subordinate to the rights of such creditors, and consequently they are not entitled to any part of the corporate assets until the corporate debts are fully paid.") (citations omitted); 11 WILLIAM MEADE FLETCHER ET AL., FLETCHER'S CYCLOPEDIA OF THE LAW OF PRIVATE CORPORATIONS § 5310 (perm. ed. rev. vol. 2019) ("As a general rule, the shareholder's right to compel a redemption is subordinate to the rights of creditors.").

Electronic copy available at: https://ssrn.com/abstract=3456340

preferred stock, the preferred stockholders should be considered "residual claimants," thus, fiduciary duties are also owed to them. With respect to redeemable preferred stock, the "efficient breach" doctrine leaves the preferred stockholders without adequate protection of their rights and, therefore, even if they are not purely considered as "residual claimants," the fiduciary duties should also be owed to them to protect their rights as stockholders.

The conclusion that, both in the case of nonredeemable preferred stock and redeemable preferred stock, fiduciary duties are also owed to preferred stockholders raises the need for an alternative mechanism to resolve stockholders' conflict of interest. This alternative mechanism will be discussed in Part III.

1. Nonredeemable Preferred Stock

Nonredeemable preferred stock typically contains liquidation preference, dividend rights, special voting rights, and anti-dilution rights.[98]

As discussed above, the Delaware Chancery Court does recognize these rights as equity rights,[99] but, due to their contractual nature, the court's view is that such rights should be protected by their specific contractual terms and their holders should not be considered "residual claimants."[100] Therefore, fiduciary duties are not owed to preferred stockholders. However, by taking a closer look at the legal characteristics of the non-redeemable stock, this Article argues that the nonredeemable preferred stockholders should be considered "residual claimants" and should too be entitled to fiduciary protection.

First, to initiate our discussion about nonredeemable preferred stock, the questions to be asked are as follows: what are preferred rights and what do they entail?

The rights of preferred stock are typically listed in a corporation's certificate of incorporation ("COI").[101] The COI is a binding contract between corporation stockholders and the corporation, governing the rights of each type of corporation's stock. A COI is limited only to stockholders of the corporation; no other stakeholders' rights are listed therein. This limitation draws the boundary between stockholders and other stakeholders

98. *See* NVCA, *supra* note 3.

99. *See* In re Trados Shareholder Litigation, 73 A.3d 17, 38 (Del. Ch. 2013); *ODN Holding Corp.*, 2017 WL 1437308, at *33-34.

100. *See Trados*, 73 A.3d at 41; *ODN Holding Corp.*, 2017 WL 1437308, at *50-51.

101. There are additional rights of the preferred stock that are listed in other contracts, such as voting agreements and investor rights agreements.

Electronic copy available at: https://ssrn.com/abstract=3456340

of the corporation, which, pursuant to the Delaware court's point-of-view, the latter are not per se entitled to fiduciary duties.[102] This puts the preferred stockholders in a similar position as common stockholders and different from other corporation's stakeholders. Therefore, the rights and interests of the preferred listed in the COI, and agreed upon by the parties, should be considered and enforced, similar to common stockholders, at the equity level via the board of directors' fiduciary duties.

It bears noting that preferred stockholders receive additional rights, favorable to common stockholders' rights. First, as explained above, the COI reflects an agreement between the corporation's stockholders and the corporation. Just like common rights, preferred rights should be honored and the interests of the preferred should be considered at the equity level. Second, these additional rights aim to protect preferred stockholders' (typically venture capitalists') high-risk investment in start-ups and enable a productive mode of financing,[103] which would otherwise not be received by alternate sources, such as banks.[104]

Further, the additional rights do not convert the preferred rights into debt-like rights.[105] These non-mandatory financial preferences are pure equity rights. Although their existence may create a misalignment with the common preferences and interests, this does not mean that they are debt-like rights or that, consequently, preferred stockholders should be considered creditors. Rather, it means that anytime the board of directors is considering taking a corporate action that is likely to result in a conflict of interest between the common and preferred, the board of directors should resolve the conflict at the equity level via its fiduciary duties to both common and preferred stockholders. The way in which the board of directors could resolve such conflict is through the fiduciary duty of impartiality, which this Article will discuss further in Part III.

Second, just like any corporate decision, most of the preferred rights[106] are enforced de facto through a board of director's fiduciary duty to take corporate action. For example, liquidation rights are primarily triggered after

102. *See* Dodge v. Ford Motor Company, 170 N.W. 668, 683 (Mich. 1919); MELVIN A. EISENBERG, AM. LAW. INST., PRINCIPLES OF CORPORATE GOVERNANCE: ANALYSIS AND RECOMMENDATIONS § 2.01 (1994).

103. *See* Bratton & Wachter, *supra* note 9, at 1874; Sepe, *supra* note 15, at 357-58 ("Thus, the question in *Trados* should not have been whether the common shareholders would have been better or worse off had the merger not occurred, as the court assumed. Instead, it should have been whether the shareholders would have been better or worse off without the preferred financing…") (citations omitted).

104. *See* Pollman, *supra* note 1, at 15.

105. By debt-like, I mean mandatory redemption or dividend rights. *See* Fletcher, *supra* note 97.

106. Some rights are not subject to corporate action, such as drag-along rights that empower the controlling stockholder to sell the company and force other stockholders to join in that sale.

Electronic copy available at: https://ssrn.com/abstract=3456340

a board of directors has approved the sale of the corporation. The same goes for dividend rights—the board of directors must declare a dividend distribution. This means that (almost) every time preferred stockholders enforce their rights, doing so will likely trigger a direct conflict with the common stockholders.

This trigger is different from a situation in which a third party (e.g., a creditor) enforces its contractual rights because presumably the interests of the common and preferred in such a case will align; meaning that the board of directors would not have to address a conflict among the stockholders and will take corporate action that serves the best interests of all stockholders. Therefore, recognizing that preferred rights should be enforced only at the contractual level and not at the equity level, as a practical matter, means that preferred stockholders de facto do not enjoy the same contractual protection as third parties do. Whenever preferred stockholder interests do not align with the interests of the common stockholders, preferred will be at risk that their interests might not be considered because, per *Trados*, the directors will have the duty to maximize the value of the common stock.

Third, the rights of preferred stockholders, although likely superior to the rights of common stockholders pursuant to the provisions of the COI, are subordinated to the rights of other stakeholders of the corporation (e.g., creditors).[107] Furthermore, unlike other stakeholders of the corporation, the preferred stockholders are not entitled to enforce their rights as creditors,[108] including cashing out their investment.[109]

For the aforementioned reasons stated in this sub-section, ". . . the duty to maximize enterprise value should encompass certain contract rights (those of preferred) but not others (those of creditors, employees, pensioners, customers, etc.)."[110]

Finally, the Delaware Chancery Court's current view does not enable consideration of different types of preferred stockholders.[111] For example, the interests of preferred stockholders with a non-capped, 1X participating liquidation preference are more likely to align with those of the common stockholders. On the other extreme, if preferred liquidation preference is 3X nonparticipating, then it is more likely that the interests of the preferred stockholders will not be aligned with those of the common stockholders. There can be very different common-preferred conflicts of interest, each of

107. *See ODN Holding Corp.*, 2017 WL 1437308, at *33-34; *supra* note 90.

108. *See* In re Trados Shareholder Litigation, 73 A.3d 17, 38 (Del. Ch. 2013); *see* Fredrick Hsu Living Trust v. ODN Holding Corp. et al., 2017 WL 1437308, at *33-34 (Del. Ch. Apr. 14, 2017).

109. *See ODN*, 2017 WL 1437308, at *33-34.

110. *See Trados*, 73 A.3d at 43.

111. *See id.* at 53.

Electronic copy available at: https://ssrn.com/abstract=3456340

which may result in different incentives as to the exit strategy of the preferred stockholders versus that of the common stockholders.[112]

Another example of an impediment caused by the Delaware Chancery Court's current view is an investment by a strategic investor or a corporate venture capital ("CVC") investor.[113] These types of investors have goals that may differ from traditional venture capitalists.[114] Unlike the pure venture capitalist, in some cases, strategic/CVC investors are interested in investing in start-ups that fit their business models.[115] In these cases, they will likely finance start-ups that have technologies that are complementary,[116] in hopes of partnering for the long haul.[117] Strategic/CVC investors' involvement in a corporation's business can be significant. They often provide channels to media, public relations, packages for customers, accelerate programs, product development, and so on.[118] Lastly, they also maintain a tight investor-founder relationship.[119]

Thus, due to their high involvement in a corporation's business and long-term financial and business objectives, strategic/CVC investors may be less conflicted vis-à-vis the interests of the common stockholders (e.g., founders) than other preferred stockholders (e.g., venture capitalists). That said, some CVC investors, such as Google Ventures or Capital G, look far afield at interesting markets that do not necessarily relate at the time to their core business. Therefore, these types of CVC investors could have short investment horizons that diverge from those of the founders. In this context, the *Trados* dichotomic approach seems to make less sense, as it does not encompass the interests of the strategic investors/CVCs that may be more aligned with the interests of the common stockholders, or at the very least, differ from the interests of the traditional venture capitalists.

112. *See* Smith, *supra* note 5, at 348.

113. *See* Thomas Hellmann, *A Theory of Strategic Venture Investing*, 64(2) J. FINANC. ECON. 285, 287, 304 (2002).

114. *See id.*; *see also* Song Ma, *The Life Cycle of Corporate Venture Capital*, REV. OF FIN. STUD. (forthcoming), (manuscript at 1) (https://ssrn.com/abstract=2691210).

115. Symposium Notes, *Case Studies: Creative Ways CVCs Move the Needle for Portfolio Companies*, STANFORD & NVCA VENTURE CAPITAL (Mar. 27, 2019).

116. *See* Hellmann, *supra* note 113, at 304; *see also* Chemmanur, Thomas J., Elena Loutskina, & Xuan Tian, *Corporate Venture Capital, Value Creation, and Innovation*, 27(8) THE REV. OF FIN. STUD. 2434, 2440 (2014).

117. *See supra* note 115.

118. *See supra* note 108; *see* also Cassie Ann Hodges, *Building Better: Qualcomm Ventures & Brain Corp*, NVCA BLOG (Apr. 19, 2019), https://nvca.org/blog/building-better-qualcomm-ventures-brain-corp/.

119. *See supra* note 108.

Electronic copy available at: https://ssrn.com/abstract=3456340

2. Redeemable Preferred Stock

Redeemable preferred stock typically contains all of the features of nonredeemable preferred stock and, in addition, includes a redemption right.[120] Such a redemption right can be limited in time and may also be conditioned upon an event not certain to occur.[121] For simplicity's sake, this Article will assume that the redemption right is either mandatory or redeemable by the investor.

As discussed in Part I above, under Delaware law, redeemable preferred stock is considered an equity instrument and is subject to statutory, common law, and contractual limitations.[122] Under statutory law, § 160 of the DGCL requires that a repurchase be made in an amount not to exceed the corporation's "surplus."[123]

Under common law requirements, a corporation cannot be forced to redeem preferred shares when it does not have "funds legally available" to make the redemption.[124] As a general rule, the preferred rights to compel a redemption are subordinate to the rights of a corporation's creditors.[125]

An analysis of *ODN* and prior case law[126] on redeemable preferred shares seems to put the preferred in a position where their redemption rights could be meaningless. Recall that in *ODN,* the Delaware Chancery Court held that preferred shareholders' right to redeem their stock, once the mandatory redemption right had vested, is subject to the board's fiduciary duty to decide whether it is in the best interests of the common stockholders (i.e., not the enterprise as a whole) to commit an "efficient breach" of the corporation's obligation to the preferred.[127]

Combining the "efficient breach" doctrine with preferred stockholders not being entitled to the protection of their contractual rights as creditors,[128] leads this Article to conclude that, with respect to their redemption right, the

---

120. *See* NVCA, *supra* note 3.

121. *See id*.

122. *See* Frederick Hsu Living Trust v. ODN Holding Corp., 2017 WL 1437308, at *33-34 (Del. Ch. Apr. 14, 2017).

123. *See id*.

124. *See id*.

125. *See ODN Holding Corp.*, 2017 WL 1437308, at *33-34; *supra* note 97.

126. *See* Carsanaro v. Bloodhound Tech., Inc., 65 A.3d 618 (Del. Ch. 2013); SV Inv. Partners, LLC v. ThoughtWorks, Inc., 37 A3d 205 (Del. 2011); SV Inv. Partners, LLC v. Thoughtworks, Inc., 7 A.3d 973 (Del. Ch. 2010), aff'd, 37 A.3d 205 (Del. 2011); Harbinger Capital Partners Master Fund I, Ltd. v. Granite Broad. Corp., 906 A.2d 218 (Del. Ch. 2006).

127. *See ODN Holding Corp.*, 2017 WL 1437308, at *53-54 (Del. Ch. Apr. 14, 2017). For prior case law recognizing the "efficient breach" doctrine, see, e.g., Bhole, Inc. v. Shore Invs., Inc., 67 A.3d 444, 453 n.39 (Del. 2013); E.I. DuPont de Nemours & Co. v. Pressman, 679 A.2d 436, 445–46 (Del. 1996); NAMA Hldgs., LLC v. Related WMC LLC, 2014 WL 6436647, at *30 (Del. Ch. Nov. 17, 2014).

128. *See supra* note 101.

Electronic copy available at: https://ssrn.com/abstract=3456340

interests and rights of the preferred stockholders are likely not to be taken into account by the board of directors when taking a corporate action.

There is a significant concern that due to its lack of a fiduciary duty to preferred stockholders, the board of directors will likely justify its refusal to commence the redemption as a perfectly reasonable business decision because it is only required to consider the common stockholders' interests.[129] This conclusion is reinforced in light of the Delaware Chancery Court's approach that the board of directors should favor an investment that generates higher net returns for the common stockholders in lieu of complying with the corporation's obligation to preferred stockholders.[130]

Unlike contracts with third parties, each time the board of directors considers whether to commence an "efficient breach," the only interests it will take into account in its decision-making process are those of the common stockholders.

In light of the above, it is not surprising that there has been a significant decline in the use of redemption rights in financing rounds between 2018 and 2017,[131] which might suggest that venture capitalists are reluctant to invest in this instrument due to the uncertainty of enforcing such rights.

Moreover, in *ODN*, because the amount of the redemption right was fixed due to a lack of a cumulative dividend, the Delaware Chancery Court argued that the directors should have used this fact as leverage for the benefit of the corporation and its common stockholders. In other words, the working premise should have been to commence an "efficient breach" instead of complying with the obligation to the preferred.[132]

The National Venture Capital Association ("NVCA") added an interest provision to its Model Amended and Restated Certificate of Incorporation for investors wanting to address the *ODN* court's ruling and prior case law.[133] The interest provision was designed as an economic inducement for a corporation to affect redemption, or, at least, to provide compensation to preferred stockholders for a corporation's failure to redeem.[134]

129. For a similar argument, *see* Robert P. Bartlett & Eric L. Talley, *Law and Corporate Governance*, 39, n. 106 (suggesting that the preferred stock redemption cannot be in the best interests of the residual claimants "since, by definition, liquidating will extinguish the common stockholder's option value in favor of distributing the company's remaining value to preferred stockholders").

130. *See* Frederick Hsu Living Trust v. ODN Holding Corp., 2017 WL 1437308, at *55-56 (Del. Ch. Apr. 14, 2017).

131. The use of redemption rights decreased from 19% of all financing rounds in 2017 to 9% of all financing rounds in 2018; *see The Entrepreneurs Report: Private Company Financing Trend*, WILSON SONSINI GOODRICH & ROSATI (2019), https://www.wsgr.com/publications/PDFSearch/entreport/Q42018/EntrepreneursReport-Q4-2018.pdf.

132. *See ODN Holding Corp.*, 2017 WL 1437308, at *89.

133. *See* NVCA, *supra* note 3.

134. *See id.*

Electronic copy available at: https://ssrn.com/abstract=3456340

However, the inclusion of an interest provision does not guarantee that the redemption right will be enforce because presumably it could be relatively easy for a board of directors to justify its long-term plan (for the benefit of the common stockholders) such that a delay of the redemption fee would be more efficient under the "efficient breach" doctrine. This leaves preferred stockholders without adequate protection of their rights. Such a decision by the board of directors would be protected by the business judgment rule.[135]

Additionally, due the uncertainty in the enforcement of the redemption right, preferred stockholders could include specific terms of the preferred stock to protect their rights (such as the terms of the interest provision described above), resulting in an increase in transaction costs.[136] That said, one may argue that in the case of redeemable stock, stockholders cannot be considered "residual claimants" as, by definition, they have not locked in their investment.[137] Unlike nonredeemable preferred stockholders, after exercising their redemption right, preferred will cease to be stockholders.

Indeed, the similarity of the redemption right to a debt instrument—including that after the redemption, the stockholders would cease being stockholders of the corporation and, therefore, would not pursue any long-term business goals that would generate long-term income—should be given a certain weight. But this weight should be considered and balanced in light of the specific set of circumstances.

The analytical framework proposed in Part III below considers the interests of preferred stockholders in addition to the interests of common stockholders, without automatically favoring common stockholders' interests. Pursuant to this proposed approach, the board of directors would consider the interests of all stockholders without prejudice. No benefit of one stockholder should be per se favored over the other, and the board of directors would resolve a conflict of interest via the duty of impartiality. The benefit of this test is that it does not restrict the board of directors to the "efficient breach" doctrine and allows it to take other considerations into account when reaching its decision—one that would best maximize the value of the corporation as a whole.

---

135. *See ODN Holding Corp.*, 2017 WL 1437308, at *55.

136. *See infra*, page 21, Part I.B.2.ii.

137. *See* In re Trados Shareholder Litigation, 73 A.3d 17, 34 (Del. Ch. 2013); *ODN Holding Corp.*, 2017 WL 1437308, at *47.

Electronic copy available at: https://ssrn.com/abstract=3456340

ii. Agency and Transaction Costs

Recall that in both *Trados* and *ODN,* the Delaware Chancery Court held that the fiduciary duties of a corporation's board of directors are owed to the common stockholders as residual claimants, with fiduciary duties owed to the holders of preferred stockholders only to the extent that both their interests overlap.[138]

In the Introduction Part, this Article argued that by analyzing equity features from a legal perspective of nonredeemable preferred stock, holders of nonredeemable preferred stock should be considered "residual claimants." Additionally, this Article argued that both in the case of nonredeemable and redeemable preferred stock, the enforcement of their rights, in many cases, is questionable and leaves preferred stockholders without adequate protection of their rights.

In Part I.B.ii., this Article pointed out another problematic aspect of the dichotomic approach that the Delaware Chancery Court has taken: due to the uncertainty with respect to the enforcement of the preferred rights, a preferred stockholder who wishes to protect his or her rights would need to include specific terms of the preferred stock that would otherwise be protected through fiduciary duties.[139] A lack of specific terms would be interpreted by the court as a waiver of the preferred right.[140] The inclusion of such terms would likely increase transaction costs. An example of such a protection of preferred rights via inclusion of specific terms of the preferred stock was discussed in *Trados II*. There, the court pointed out the lack of a drag-along right that empowers venture capital funds to sell a corporation and force the other stockholders to sell their shares.[141]

As a response to such a requirement, the NVCA revised its Model Voting Agreement to provide a put option for the benefit of the investor to redeem its investment, particularly in a case where board approval is needed and later refused.[142] However, in this situation, if such put option was exercised by the preferred stockholder, it would be identical to *ODN*. The repurchase of preferred stock by the corporation (i.e., redemption right) requires a corporate action and would again result in an uncertainty for preferred stockholders as to the enforcement of their rights.[143] This situation, indeed, requires preferred stockholders to devise creative contractual

138. *See Trados*, 73 A.3d at 40-42; *ODN Holding Corp.*, 2017 WL 1437308, at *44.

139. *See Trados*, 73 A.3d at 71.

140. *Id*.

141. *Id*.

142. *See Model Voting Agreement*, NVCA (Jan. 2018), https://nvca.org/resources/model-legal-documents/.

143. *See* Bratton & Wachter, *supra* note 9, at 1890-93.

Electronic copy available at: https://ssrn.com/abstract=3456340

solutions to mitigate the likelihood that their rights or interests will be reserved and, consequently, will increases transaction costs.[144]

Additionally, as a response to the Delaware Chancery Court's view, preferred stockholders will also likely invest additional funds to monitor the directors' activities, resulting in an increase in agency costs. Monitoring the directors' activities could be accomplished up to a certain degree for two reasons. First, express contracts may be too costly because the agent's decision-making will depend on information not available at the time of the engagement.[145] Second, the contractual arrangements could mitigate the agency problem only to a limited extent.[146] Therefore, the fiduciary obligation to the preferred stockholders serves to fill a gap in situations where there are no express contractual rights.

iii. Value-Maximizing Issues

One of the primary questions in *Trados* was whether a board of directors' duty is to maximize the value of the common stock or the value of the enterprise as a whole whenever a conflict arises between the common and the preferred stockholders. The Delaware Chancery Court's view in *Trados I* (and affirmed in *Trados II*) is that the duty to maximize the value of the corporation is to its common stockholders, as residual claimants.[147]

The Bratton and Wachter article, published immediately prior to the court's decision in *Trados II*, provided an example of a scenario in which *Trados* can lead to decisions that are not value maximizing. The example given in the Bratton and Wachter article is as follows:

144. For additional examples of such protection of rights via inclusion of specific terms of the preferred stock, see Frederick Hsu Living Trust v. ODN Holding Corp., 2017 WL 1437308, at *88-89 (Del. Ch. Apr. 14, 2017). The *ODN* court noted that absent an increasing redemption obligation, the holders of redeemable stock are in a relatively weak contractual position to force the corporation to redeem its shares. This concern was addressed by the NVCA by adding an interest provision to the Model Amended and Restated Certificate of Incorporation designed as an economic inducement for the corporation to effect the redemption, or, at least, to provide compensation to the preferred stockholder for the company's failure to redeem; *see* NVCA, *supra* note 3; *see also* Kirkland & Ellis, *supra* note 84 ("[I]nvestors may want to consider including in the specific terms of the preferred stock automatic disincentives to fail to satisfy those obligations …").

145. *See* Kostritsky, *supra* note 23, at 57.

146. *See id.* at 55 ("So while, theoretically, the parties could control agency costs through contract, financial economics suggests that '[c]ontracts can be designed to enable a principal to mitigate agency problems, but agency problems can never be fully eliminated.'") (quoting DOUGLAS J. CUMMING & SOFIA A. JOHAN, VENTURE CAPITAL AND PRIVATE EQUITY CONTRACTING: AN INTERNATIONAL PERSPECTIVE 44 (2d ed. 2014)).

147. *See* In re Trados Shareholder Litigation, 2009 WL 2225958, at *7 (Del. Ch. July 24, 2009); In re Trados Inc. Shareholder Litigation, 73 A.3d 17, 40 (Del. Ch. 2013).

Electronic copy available at: https://ssrn.com/abstract=3456340

> [A]ssume that the $60 million offer is on the table and that there are two possible outcomes if the offer is not accepted. There is a 25% chance that a $70 million offer can be realized in the intermediate term and a 75% chance that the markets will turn down and $50 million will be the best offer available. The expected value of delay is $55 million ($70 million x .25 + $50 million x .75). Delay thus sacrifices $5 million of enterprise value in exchange for a chance to realize an expected $750,000 ($3 million × .25) for the common.[148]

In the above scenario, maximizing value for the common stock sacrifices maximizing enterprise value.[149] The court in *Trados II* criticized the enterprise value maximization approach and noted that scholars' support of the enterprise value maximization approach "does not explain why the duty to maximize enterprise value should encompass certain contract rights (those of preferred) but not others (those of creditors, employees, pensioners, customers, etc.)."[150]

As discussed in Part I, the rights of the preferred stockholders, although superior to the rights of the common stockholders, are not superior to the rights of other stakeholders of the corporation. Unlike other stakeholders of the corporation, preferred stockholders are not entitled to enforce their rights as creditors, including cashing out their investment. Therefore, the duty to maximize enterprise value should also encompass preferred stockholders' rights and interests.

II. FIDUCIARY DUTIES AND INTERCLASS PREFERENCE CONFLICT OF INTERESTS

Trados and *ODN*, discussed in Part I, focused on horizontal conflict of interests between preferred and common stockholders. In addition to the common-preferred conflict of interest, there are also interclass preference conflicts between and among different types of preferred and common stockholders.[151] The current approach taken by the Delaware Chancery Court

---

148. *See* Bratton & Wachter, *supra* note 9, at 1886 (citations omitted).

149. For an additional scenario in which maximizing value for the common sacrifices maximizing enterprise value, see, e.g., Bartlett, *supra* note 83, at 255-256; *see also* Pollman, *supra* note 1, at 8 (suggesting that a better approach to value maximization "recognizes the corporation itself as the beneficiary of the fiduciary duties, representing the firm value and the interests of all startup participants").

150. *See Trados*, 73 A.3d at 43.

151. *See, e.g.,* Pollman, *supra* note 1, at 22, 30-37 (analyzing the different horizontal conflicts that arise in privately held startups: preferred versus. common, preferred versus preferred, and common versus

Electronic copy available at: https://ssrn.com/abstract=3456340

lacks a solution with respect to interclass preference conflicts both for privately held and publicly traded corporations.

In Part II, this Article will discuss potential interclass preference conflicts between and among different types of preferred and common stockholders. The discussion will show that such conflicts do exist and, thus, creates a need for a consistent analytical framework to resolve such conflicts. This framework will be discussed in Part III.

A. POTENTIAL CONFLICTS IN PRIVATE CORPORATIONS

In recent years, in the context of privately held corporations, there has been an entrance into late-stage start-ups of different types of investors, such as mutual funds, pension funds, hedge funds, and sovereign wealth funds.[152] Each investor could have different dividend, liquidation, control, voting rights, and other various protective terms.[153] Adding to this complex capital structure, a recent trend has arisen of using proceeds from financing rounds to do share buybacks or to facilitate third party buyers. Examples include large institutional investors making secondary tender offers and allowing stockholders to sell some of their holdings and bring new investors into the corporation, but not necessarily under the same contractual terms of the previous investor.[154]

Among others, one of the issues with a secondary transaction is that, unlike the initial investor (presumably the venture capitalist), the subsequent purchaser who typically buys the preferred stock in a mutual fund does not have an opportunity to bargain for contractual protection against the loss of certain contractual protections that were available to the initial purchaser.[155]

---

common); Bartlett & Talley, *supra* note 129, at 42-43 (suggesting that interclass preference conflicts have "long characterized private companies" and "now inform debates about public company governance, requiring close attention to the legal tools used to wage and resolve these conflicts;" such interclass preference conflicts "may force a reconsideration of whether the legal governance 'tools' … are effective in resolving them" and "rais[e] profound questions about whether fiduciary duties should rescale themselves"); Robert P. Bartlett, III, *Venture Capital, Agency Costs, and the False Dichotomy of the Corporation*, 54 UCLA L. REV. 37, 40, 63, 108-09 (2006) (suggesting that horizontal conflict exists among venture capitalists themselves and expending its model to both private and public corporations).

152. *See* Pollman, *supra* note 1, at 18; Sergey Chernenko, Josh Lerner & Yao Zeng, *Mutual Funds as Venture Capitalists? Evidence from Unicorns* 2 (Harvard Business School, Working Paper No. 18-037, 2017); Bartlett & Talley, *supra* note 129, at 37.

153. *See* Pollman, *supra* note 1, at 18-19; Will Gornall & Ilya A. Strebulaev, *Squaring Venture Capital Valuations with Reality* (NBER Working Paper No. 23895, 2017); Bartlett & Talley, *supra* note 129, at 37.

154. *See* Pollman, *supra* note 1, at 19; *see also* Lizanne Thomas, Robert A. Profusek & Lyle G. Ganske, *Share Buybacks Under Fire*, HARV. L. SCH. F. ON CORP. GOV'T AND FIN. REG. (May 21, 2019), https://corpgov.law.harvard.edu/2019/05/21/share-buybacks-under-fire/.

155. Some rights, such as those included in shareholders agreements, will not transfer to the

Electronic copy available at: https://ssrn.com/abstract=3456340

In addition to the entrance of new types of investors, 'existing' investors, both preferred (e.g., venture capitalists, angels, and CVCs) and common (e.g., founders and employees) may have conflicting interests in taking certain actions due to the different types of equity interest they hold that vary in their terms and preferences. For example, different venture capitalists, depending on the time they invest in a corporation, have varying financial interests.[156]

Figures 2 and 3 below demonstrate a potential conflict of interest that can arise among different types of venture capitalist with respect to an IPO and selling a corporation.

Figure 2

Stock	Pre-Money Valuation	Investment	Number of Shares	Participation
Common	—	$400K	4M (PPS: $0.1)	—
Series A	$400K	$100K	1M (PPS: $0.1)	Max: 3X Cap
Series B	$4M	$1M	1.25M (PPS: $0.8)	Max: 5X Cap
Series C	$40M	$15M	2.34M (PPS: $6.4)	Max: 5X Cap
Series D	$60M	$70M	5M (PPS $14.0)	Full
Total	—	$86.5M	13.59M	—

Figure 3

Stockholders Proceeds	IPO – $120M	M&A – $120M
Common	$35.32M	$10.26M
Series A	$8.83M	$2.56M
Series B	$11.03M	$4.08M
Series C	$20.66M	$20.76M
Series D	$44.15M	$82.32M

subsequent purchaser of the preferred. Further, the subsequent purchaser will likely not pay a lower price for the lack of such contractual protection due to difficulty with pricing the fall-off, or absence of such protections, that make the absence of fiduciary protection more critical. *See* Kostritsky, *supra* note 23, at 102-09.

156. *See* Robert P. Bartlett, III, *Venture Capital, Agency Costs, and the False Dichotomy of the Corporation*, 54 UCLA L. REV. 100 (2006).

Electronic copy available at: https://ssrn.com/abstract=3456340

If a corporation is considering an exit event and begins a dual-track process (i.e., IPO and M&A search), what potential conflicts between the different series of preferred listed in Figure 2 might arise?

Assuming that upon an IPO all stocks are converted into common stock, the common stockholders and early stage investors (Series A and Series B) are far better off with an IPO than a sale at $120M (see Figure 3 above). This creates a conflict between the common stockholders and Series A and Series B investors versus the Series C and Series D investors.

The stockholders are likely to anticipate these potential conflicts and include contractual protections in their investment documents, such as special veto rights, special liquidation preference, and automatic conversion provisions.[157] However, the ability to predict such conflicts is not always easy to discern and incomplete contracts are inevitable. Thus, the misalignment cannot be entirely eliminated.[158]

Conflicts can also arise among common stockholders, such as among angel investors, founders, and management. Angel investors are wealthy individuals who personally finance the same high-risk, high-growth start-ups as venture capitalists, but at an earlier stage.[159] They typically receive common stock[160] but their interests can diverge from those of founders and management with respect to everyday corporate decision-making.[161] Further, there could also be a misalignment among the angel investors themselves.[162]

Indeed, the start-up complex capital structure involves serving different types of stockholders with different contractual terms, rights, and interests. It is likely to create conflicts not only between the preferred and common stockholders, but also between and among these diverse types of stockholders.

Under the current Delaware Chancery Court's view in *Trados* and *ODN*, the board of directors would resolve common-preferred conflicts under the common maximization value doctrine and would, thus, lack the required framework to resolve interclass preference conflicts of interest, such as those described above.

Although scholars have articulated interclass preference conflicts between and among preferred and common stockholders,[163] they have yet to

157. *See* Bartlett, *supra* note 156, at 74-77.

158. *See* Pollman, *supra* note 1, at 16, 34; Bartlett, *supra* note 156, at 75-76.

159. *See* Darian M. Ibrahim, *The (Not So) Puzzling Behavior of Angel Investors*, 61 VAND. L. REV. 1405, 1406 (2008).

160. *See id*. at 1422.

161. *See* Pollman, *supra* note 1, at 35.

162. *See* Ibrahim, *supra* note 159, at 1425.

163. *See supra* note 151.

Electronic copy available at: https://ssrn.com/abstract=3456340

provide a comprehensive framework to resolve such conflicts. These scholars provide an enormous contribution to the understanding of the various conflicts. Scholars have argued that due to the complexity of the start-up capital structure, stockholders are heterogeneous in their preferences.[164] They have also suggested that with the increase of the number and types of investors, with diverging interests over time, it is even more important to reach a suboptimal outcome that would encompass the interests of the corporation as a whole.[165]

This Article builds on these findings and aims to fill the gap of conflict resolution by providing a comprehensive framework to resolve stockholders' conflict of interest. This framework will be discussed in Part III.

Before discussing the proposed framework and completing the discussion regarding potential stockholders' conflicts, this Article will discuss the potential implications of horizontal conflicts of interest in the public corporation context.

B. Potential Conflicts in Public Corporations

In general, once a corporation goes public, all shares of preferred stock are automatically converted into shares of common stock, immediately prior to complementing the IPO.[166]

Recall that the Delaware Chancery Court's holdings in *Trados* and *ODN* applies only where there is a conflict of interest between the preferred and the common stockholders.[167] Once the corporation is public, *Trados* and *ODN* would not apply because there are no longer preferred shares and common stock has the same cash-flow rights (though not necessarily the same voting rights, as discussed below).

Yet, as mentioned above, potential horizontal conflicts among interclasses preferences exist in the private corporation context. In recent years, such conflicts have also arisen in the public corporation context. For example, "horizontal governance disputes have also begun to permeate public corporation governance disputes as well,"[168] raising profound questions about whether fiduciary duties should rescale themselves.[169]

In a public corporation context, potential horizontal conflict of interest can take place primarily in two forms: shareholders activism or dual-class

164. *See id*.
165. *See* Pollman, *supra* note 1, at 56.
166. *See* Bartlett, *supra* note 156, at 75.
167. *See supra* page 5, Part I.
168. *See* Bartlett & Talley, *supra* note 129, at 39.
169. *Id*. at 42-43.

Electronic copy available at: https://ssrn.com/abstract=3456340

capital structure. Both of these forms have recently arisen in the context of public corporations' disputes and "may force a reconsideration of whether the legal governance 'tools' . . . are effective in resolving them" and "raising profound questions about whether fiduciary duties should rescale themselves."[170]

i. Shareholder Activism

Shareholder activism is a way in which shareholders influence a corporation's behavior by exercising their rights as shareholders. Two types of activism primarily exist. First, economic activism focuses primarily on steps seeking to increase stock price (e.g., demanding a sale of the company, spin-off, strategic and governance changes, share repurchases/dividends, and M&A related demands). Second, governance activism focuses primarily on issues and principles and augmenting economic activism (e.g., takeover defenses, board structural issues, director election issues, compensation, and risk management).[171]

Shareholder activism is one of the most predominant governance disputes in public corporations today. In its extreme form, activism is claimed to weaken corporations by imposing a short-term perspective on managers[172] over more durable, but less liquid, investments in long-term value.[173] In that sense, activists take on a functional role analogous to that of preferred stockholders.[174] For example, according to the Lazard's 1Q 2019 Activism Review, 46% of activist campaigns launched in Q1 2019 were M&A-driven, with 'pushing for a sale' being the most common M&A objective.[175]

Similar to preferred stockholders, it has been argued that activists pursue short-term gain, running in sharp contrast with long-term investors' interests, such as index funds, pension funds, insurance corporations, and many individual investors who often hold their stock for years.[176] Critics argue that shareholder activism has "very serious adverse effects on the

---

170. *Id*. at 43.

171. *See generally* CLAIRE HILL, BRIAN JM QUINN & STEVEN DAVIDOFF SOLOMON, MERGERS AND ACQUISITIONS LAW, THEORY, AND PRACTICE 707-28, 735-51, 761-68 (2016).

172. *See* Ed deHaan, David Larcker & Charles McClure, *Long-Term Economic Consequences of Hedge Fund Activist Interventions* 1 (ECGI Finance, Working Paper No. 577, 2018).

173. *See* Bartlett & Talley, *supra* note 129, at 40.

174. *See id*.

175. *See Review of Shareholder Activism - Q1 2019*, Lazard's Shareholder Advisory Group (Apr. 2019), https://www.lazard.com/media/450943/lazards-q1-2019-review-of-shareholder-activism.pdf.

176. *See* Iman Anabtawi & Lynn Stout, *Fiduciary Duties for Activist Shareholders*, 60 STAN. L. REV. 1255, 1290-1291 (2010); *see* also J. Travis Laster & John Mark Zeberkiewicz, *The Rights and Duties of Blockholder Directors*, 70 BUS. LAW. 33, 50 (2014-15).

Electronic copy available at: https://ssrn.com/abstract=3456340

corporations, their long-term shareholders, and the American economy."[177] In contrast, proponents argue that shareholder activism improves operating performance and long-term returns.[178]

Leo Strine, the former Chief Justice of the Delaware Supreme Court, laid out a few suggestions to address this concern, but his suggestions focused on the duty of the asset managers to pursue the interests of the long-term investor. His suggestions do not include the horizontal conflict between short-term and long-term investors, and the way in which corporations' boards of directors should resolve such conflict.[179]

Recent studies show that management, incentivized by short-horizon investors through short-term pay, takes actions that increase the short-term speculative component in stock prices, at the expense of long-term firm value.[180] Further stating that there is no evidence that activist attacks result in long-term improvements in accounting performance measures.[181] In contrast, a recent study shows that long-term projects are systematically susceptible to overestimation by managers, creating a long-term bias that can impose substantial costs on investors that are just as damaging as short-termism.[182]

As scholars, courts, and regulators continue to debate the implications and economic consequences of shareholder activism, such debates reflect horizontal conflict between stockholders with different investment horizons. Indeed, public corporations' stockholders have heterogeneous preferences, and often find themselves at economic odds with each other, with the sources of conflict increasing.[183]

---

177. *See* Martin Lipton, *Empiricism and Experience; Activism and Short-Termism; the Real World of Business*, HARV. L. SCH. F. ON CORP. GOV'T & FIN. REG. (Oct. 28, 2013), https://corpgov.law.harvard.edu/2013/10/28/empiricism-and-experience-activism-and-short-termism-the-real-world-of-business/.

178. *See* Lucian A. Bebchuk, Alon Brav & Wei Jiang, *The Long-Term Effects of Hedge Fund Activism*, 115 COLUM. L. REV. 1085 (2015); Lucian Bebchuk, *The Myth of Hedge Funds as 'Myopic Activists'*, WALL ST. J. (Aug. 6, 2013).

179. *See* Leo E. Strine, *Can We Do Better by Ordinary Investors? A Pragmatic Reaction to the Dueling Ideological Mythologists of Corporate Law*, 114 COLUM. L. REV. 449 (2014).

180. *See* Martijn Cremers, Ankur Pareek & Zacharias Sautner, *Short-Term Investors, Long-Term Investments, and Firm Value: Evidence from Russell 2000 Index Inclusions*, MGMT. SCI. (forthcoming 2019) (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2720248).

181. *See* deHaan, Larcker & McClure, *supra* note 172.

182. *See* Barzuza & Talley, *supra* note 83.

183. *See* Anabtawi & Stout, *supra* note 176, at 1284. *See also* Caleb Griffin, *We Three Kings: Disintermediating Voting at the Index Fund Giants*, MD. L. REV. (forthcoming 2019) (manuscript at 13-14) (https://ssrn.com/abstract=3365222) (discussing the diversity of individual index fund investors and suggesting that, if given the option, some of them would assuredly sacrifice financial gains for environmental or social benefits, while others would not choose to do so); Lynn A. Stout, *Why We Should Stop Teaching Dodge v. Ford*, 3 VA. L. & BUS. REV. 163, 174 (2008) (noting that shareholders have differing interests).

Electronic copy available at: https://ssrn.com/abstract=3456340

Consequently, perhaps one of the most obvious questions is: what are the implications of this long-short termism debate on directors' fiduciary duties?

In *Trados*, Vice Chancellor Laster took the view that directors should maximize the long-term value of the common stockholders as residual claimants.[184] Laster's "long-term rule" was further extended to other situations in which directors represented activist stockholders having a short-term horizon.[185] This approach, however, seems far-reaching because the predominate view gives directors discretion to determine the time horizon over which they seek to maximize stockholder value.[186] Further, it is in contrast to the prior Delaware Supreme Court decision in *Paramount Communications Inc. v. Time Inc.*[187] that explicitly held that directors have discretion in managing the affairs of the corporation, including time horizon. The court stated that ". . .the question of 'long-term' versus 'short-term' value is largely irrelevant because directors, generally, are obliged to chart a course for a corporation which is in its best interests without regard to a fixed investment horizon."[188]

Among the suggestions of Leo Strine,[189] there was no suggestion with respect to the way in which corporations' boards of directors should resolve conflicts of interest between long-term versus short-term investors.[190] Additionally, the refusal of Chancellor Strine in *In re Synthes, Inc. Shareholder Litigation* to recognize that there is an inherent conflict of interest whenever there is a controlling stockholder with a short-term horizon[191] suggests that the "long-term rule" has yet been accepted by the Supreme Court of Delaware. Instead, it suggests that the predominate view today is that, according to DGCL § 141, directors have discretion in taking corporate action, including setting a time horizon that would maximize the value of the corporation as a whole.[192]

The above line of cases and literature leaves us at a point where there is no clear framework for corporations' boards of directors to apply in their decision-making process when weighing different corporate opportunities

184. *See* In re Trados Inc. Shareholder Litigation, 73 A.3d 17, 34 (Del. Ch. 2013); *see also* In re Rural/Metro Corporation Shareholders Litigation, 102 A.3D 205, 253 (Del. Ch. 2014).

185. *See* Laster & Zeberkiewicz, *supra* note 176, at 50.

186. *See* Jack Bodne, Leonard Chazen & Donald Ross, *VC Laster, Fiduciary Duties and the Long-Term Rule*, LAW 360 (Mar. 11, 2015), https://www.cov.com/-/media/files/corporate/publications/2015/03/vc_laster_fiduciary_duties_and_the_long_term_rule.pdf.

187. 571 A.2d 1140 (Del. 1989).

188. *See id*. at 1150.

189. *See* Strine, *supra* note 179 and accompanying text.

190. *See id*.

191. 50A.3d 1022, 1039 fn. 81 (Del. Ch. 2012).

192. *See Paramount*, 571 A.2d at 1150; *see also* Bodne, Chazen & Ross, *supra* note 186.

Electronic copy available at: https://ssrn.com/abstract=3456340

with short- and/or long-term implications for a corporation's stockholders as a whole. This conclusion calls for a legal framework that could encompass these different preferences and conflicting interests that public stockholders have and balance them to reach an outcome that maximizes the value of the enterprise as a whole.

The proposed framework in Part III will, among other things, address situations where a board of directors faces a corporate decision that could result in different consequences for a certain group of stockholders, but nonetheless would be in the best interests of the stockholders as a whole.

The additional effects of the above line of cases and literature concerning the standard of review and the vertical conflicts of interest that directors appointed by venture capitalists or activists face, will be discussed in Part III in conjunction with the discussion on the standard of review.[193]

ii. Dual/Multi-Class Stock

Horizontal conflicts among stockholders may arise also in corporations with dual-class capital structure, wherein the voting rights are not equal among all stockholders.[194] Founders and early investors will typically reserve a significant amount of voting power to maintain control over the board of directors and strategic decisions.[195]

Take Dropbox, Inc. ("Dropbox") for example. Dropbox has three types of common stock, all with the same cash-flow rights[196] but different voting rights. Class A common stock has one vote per share, Class B common stock has ten votes per share, and Class C common stock has no voting rights.[197] Class C common stock is to be issued to Dropbox employees under an equity-based plan.[198] Class B common stock is held by the two co-founders, two officers, one independent director, and the venture capital Sequoia Capital (including its affiliates).[199]

The two co-founders jointly hold approximately 55.3% of the total voting power[200] and, therefore, are able to control all corporate matters submitted to stockholders for approval, including a sale of the corporation.[201]

193. *See infra* page 40, Part III.C.
194. *See* Pollman, *supra* note 1, at 25.
195. *See id*.
196. IPO price was $21 per share. *See* Dropbox, Inc., Prospectus (Form 424B4) (Mar. 23, 2018).
197. *See* Dropbox, Inc., Annual Report (Form 10-K) 33 (Feb. 25, 2019).
198. As of February 19, 2019, no Class C common stock have been issued. *See id*.
199. *See* Dropbox, Inc., Proxy Statement (Form DEF 14A), 51-2, (Apr. 9, 2019).
200. The co-founders' voting power as with respect to all shares of Class A common stock and Class B common stock, as a single class. *See id*.
201. *See* Dropbox, Inc., Annual Report (Form 10-K), 33, (Feb. 25, 2019).

Electronic copy available at: https://ssrn.com/abstract=3456340

Class A common stock is held by the public, the co-founders, and the executive officers and directors. Due to the relatively small number of outstanding shares of Class A common stock after the Dropbox IPO and the number of shares of Class A common stock held by the co-founders as a result of their RSAs (having full voting rights), the co-founders maintain significant influence over any vote of the Class A common stock when voting as a separate class.[202]

One can see that there is a potential conflict of interest between the co-founders and the other holders of Class A common stock, in addition to a potential conflict of interest between Sequoia Capital and the two co-founders. Each of these groups largely have their own investment agendas. For example, Sequoia Capital, as a venture capitalist, may or may not share the same investment horizon as the co-founders. Likewise, the co-founders may or may not share the same investment horizon as the other holders of Class A common stock—specifically when comparing the co-founders' interests and preferences, which are typically long-term as compared to those of the venture capitalists, who typically have a short-term investment horizon.[203]

Interestingly, out of the major three investors who received the IPO Class B common stock,[204] two (T. Rowe Price and Accel) chose to convert all their Class B common stock to Class A common stock,[205] which suggests that they prefer short-term liquidity over long-term investment horizon because they can sell the Class A common stock on the market.

In light of the fact that horizontal conflicts of interest exist, what should the board of directors of a public corporation consider when taking a corporate action? Presumably it should consider the best interests of the stockholders as a whole, but what happens when the board of directors faces a significant conflict of interest? How should the board of directors resolve it? Should it surrender to the whims of the founder who presumably plays by the "long-term rule," or is there a risk that the founder might actually behave in an opportunistic way that harms other stockholders?

Next, take Facebook, Inc. ("Facebook") as an example. Last year, a major pension fund sued the directors of Facebook for being too accommodating to co-founder and controlling stockholder Mark Zuckerberg's proposal to issue non-voting stock so that he could continue to pursue his personal philanthropic agenda without having to sell the vast majority of his Facebook stock and,

---

202. *See id.*

203. *See* Korsmo, *supra* note 23, at 1169 ("[A] time horizon ranging from a year or two to as long as ten years, followed by 'exit' through an initial public offering ("IPO") or sale of the entire enterprise.").

204. Sequoia Capital, T. Rowe Price and Accel.

205. *Compare* Dropbox, Inc., Prospectus (Form 424B4), 166, (Mar. 23, 2018) *with supra* note 199.

Electronic copy available at: https://ssrn.com/abstract=3456340

consequently, lose control over Facebook.[206]

Similar to Dropbox, Facebook has a dual-class capital structure wherein Class B stock carries ten votes per share and Class A stock carries only one vote per share. Zuckerberg's proposal was to issue a new class of publicly listed non-voting Class C stock.[207] According to Zuckerberg's reclassification plan, Facebook would issue two Class C stocks as a one-time dividend to each outstanding Class A and Class B stock, thereby tripling the total number of Facebook outstanding stock.[208] The effect would further tilt control in Zuckerberg's favor, reflating the voting weight of his Class B stock holdings and allowing Zuckerberg to liquidate stock for his personal goals without surrendering his hold on Facebook voting power.[209]

Unlike Dropbox, the plan to issue the non-voting shares came after the IPO and was clearly not part of Facebook registration statement back in 2012.[210] Thus, such reclassification would, at the very least, require a legitimate business purpose and to bring some value to Facebook public stockholders. No such value or legitimate business purpose was found in this case.[211] The members of the special committee who approved the reclassification plan were found in breach of their fiduciary duties. The Delaware Chancery Court found that they were "hopelessly biased, or otherwise woefully disregarded their Facebook fiduciary duties" to Facebook's Class A stockholders and the corporation[212] "by favoring Zuckerberg's interests at the expense of the public Class A stockholders' economic and voting rights."[213]

Indeed, this is an extreme case in which it is obvious that the opportunistic behavior of Zuckerberg harmed Facebook's public stockholders. Nevertheless, it is clear that due to heterogeneous time horizons and agendas of investors,[214] a horizontal conflict of interest does exist[215] and is likely to

206. *See* United Food and Commercial Workers Union and Participating Employers Tri-State Pension Fund v. Zuckerberg, 2018-0671, 2 (Del. Ch. Sept. 12, 2018).

207. *See id*. at 4.

208. *See id*.

209. *See id*. at 3.

210. *See* Facebook, Inc., Registration Statement (Form S-1) (Feb. 1, 2012).

211. *See Zuckerberg*, 2018-0671, at 2.

212. *See id*. at 2-3.

213. *See id*. at 39.

214. *See* Barzuza & Talley, *supra* note 83, at 52 ("[T]he founder might simply place idiosyncratic value on maintaining control, and is willing to incur the costs of doing so in the form of the price discount that outside investors will no doubt impose on the sale (particularly if they are short-term oriented."). The argument with respect to the founder's potential "long-term bias" was made in connection with the adoption of the dual class structure but can also be made in regard to decisions made by the founder following the IPO.

215. This is in spite of the equality in cash-flow rights.

Electronic copy available at: https://ssrn.com/abstract=3456340

increase in the future with the sophistication of capital markets.[216]

The exercise outlined above is not to critique the multi-/dual-class capital structure of corporations, as scholars and regulators currently continue to debate.[217] It is merely to recognize that such potential horizontal conflicts of interest exists and to further suggest in Part III a framework to resolve such interclass preferences conflicts.[218]

III. THE FIDUCIARY DUTY OF IMPARTIALITY

In Part I above, this Article analyzed the Delaware Chancery Court's view in *Trados* and *ODN* regarding the resolution of common-preferred conflict of interest and laid out arguments as to why the enforcement of preferred stockholders' rights should be undertaken through the board of directors' fiduciary duties to all stockholders without prejudice.

In Part II above, this Article discussed the interclass preference conflicts between and among different types of preferred and common stock. It argued that the current approach taken by the court fails to provide a solution with respect to interclass preference conflicts, both for privately held and publicly traded corporations. This Part will propose the duty of impartiality as an alternative analytic-consistent framework for the analysis and resolution of common-preferred and interclass preference conflicts of interest.

A. OVERVIEW AND RATIONALE

The fiduciary duty of impartiality, along with the duty of loyalty and duty of prudence, is one of the three fundamental fiduciary duties of a trustee.[219] It is the trustee's duty to administer the trust in an impartial manner

216. *See* Bartlett & Talley, *supra* note 129, at 39, 42; *see also* Thomas Franck, *SEC Approves New Silicon Valley Stock Exchange Backed by Marc Andreessen, Other Tech Heavyweights*, CNBC (May 10, 2019), https://www.cnbc.com/2019/05/10/sec-approves-new-silicon-valley-stock-exchange-backed-by-marc-andreessen-other-tech-heavyweights.html. Listing standards have not been set yet, but presumably may contain a "scaled voting" mechanism, in which the voting power of shares grows the longer the shares are held.

217. *See, e.g*., Commissioner Robert J. Jackson, Jr., *Perpetual Dual-Class Stock: The Case Against Corporate Royalty*, SEC (Feb. 15, 2018), https://www.sec.gov/news/speech/perpetual-dual-class-stock-case-against-corporate-royalty; Lucian A. Bebchuk & Kobi Kastiel, *The Untenable Case for Perpetual Dual-Class Stock*, 101 VA. L. REV. 585 (2017); Zohar Goshen & Assaf Hamdani, *Idiosyncratic Vision and Corporate Control*, 125 YALE L.J. 560 (2016); Letter from the Council of Institutional Investors to Edward S. Knight, Executive Vice President and General Counsel, NASDAQ OMX GROUP (Mar. 27, 2014), https://www.cii.org/files/issues_and_advocacy/correspondence/2014/03_27_14_CII_letter_to_nasdaq_one_share_one_vote.pdf; Daniel R. Fischel, *Organized Exchanges and the Regulation of Dual Class Common Stock*, 54 U. CHI. L. REV. 119, 137–38 (1987).

218. *See* proposed framework *infra* page 34, Part III.

219. *See* RESTATEMENT (THIRD) OF TRUSTS, Ch. 15, Intro (AM. LAW INST. 2007).

Electronic copy available at: https://ssrn.com/abstract=3456340

with respect to the various beneficiaries of the trust.[220]

In the United States, the fiduciary duty of impartiality is anchored in § 79 of the Restatement (Third) of Trusts,[221] reflected in § 103 of the Uniform Principle and Income Act,[222] § 803 of the Uniform Trust Code,[223] and § 6 of the Uniform Prudent Investor Act[224] that were enacted in most of the states.[225]

Corporate law has long recognized the principal-agent relationship between directors (agents) and stockholders (principals), where directors must maximize stockholders' wealth via their fiduciary duties to the corporate entity.[226] Conversely, trustees owe their fiduciary duties directly to the trust beneficiaries[227] and, consequently, will be personally liable to the trust beneficiaries in case of a breach of trust.[228]

Because corporate law is primarily derived from agency law,[229] the duty of impartiality of directors to a corporation's stockholders, which is not an explicit part of the agent fiduciary duties,[230] has been rarely analyzed or applied by courts in an intra-corporate context.[231] Although this Article is not suggesting that directors should be viewed as occupying a trustee-like

---

220. *See* RESTATEMENT (THIRD) OF TRUSTS § 79 (AM. LAW INST. 2007).

221. *See id*. Although there is no explicit fiduciary duty of impartiality under the Employees' Retirement Income Security Act, 29 USC §18.1104, the United States Supreme Court in Tibble v. Edison Int'l clarified that "[i]n determining the contours of an ERISA fiduciary's duty, courts often must look to the law of trusts." 135 U.S. 1823, 1828 (2015). And, consequently, applied the Restatement (Third) of Trusts.

222. *See* UNIFORM PRINCIPLE AND INCOME ACT (UNIF. LAW COMM'N 2000).

223. *See* UNIFORM TRUST CODE (UNIF. LAW COMM'N 2000).

224. *See* UNIFORM PRUDENT INVESTOR ACT (UNIF. LAW COMM'N 1994).

225. *See* Uniform Law Commission, https://www.uniformlaws.org/home (last visited May 16, 2019).

226. *See, e.g*., Eugene F. Fama, *Agency Problems and the Theory of the Firm*, 88 J. POL. ECON. 288 (1980); Eugene F. Fama & Michael C. Jensen, *Separation of Ownership and Control*, 26 J.L. & ECON. 301 (1983); Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305 (1976); FRANK H. EASTERBROOK & DANIEL R. FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW (1991); *see also* Dodge v. Ford Motor Company, 170 N.W. 668, 683 (Mich. 1919); MELVIN A. EISENBERG, AM. LAW. INST., PRINCIPLES OF CORPORATE GOVERNANCE: ANALYSIS AND RECOMMENDATIONS § 2.01 (1994).

227. *See* RESTATEMENT (THIRD) OF TRUSTS, Ch. 15, Intro (AM. LAW INST. 2007).

228. *See* RESTATEMENT (THIRD) OF TRUSTS, Ch. 18, Intro (AM. LAW INST. 2007).

229. *See supra* note 226 and accompanying text.

230. *See* RESTATEMENT (THIRD) OF AGENCY § 1 (AM. LAW INST. 2006). *See also id*. at § 8.

231. Citations of impartiality by Delaware courts in an intracorporate context typically address the impartiality of a board of directors (or a special litigation committee) facing a plaintiff's demand to initiate, or refrain from entering, litigation on behalf of the corporation. *See, e.g.,* Sandys v. Pincus, 152 A.3d 124, 126 (Del. 2016); In re Oracle Corp. Derivative Litigation, 824 A.2d 917, 939-40 (Del. Ch. 2003). For proposals to implement impartiality analysis with regard to various beneficiaries, *see* AMIR LICHT, FIDUCIARY LAW: THE DUTY OF LOYALTY IN THE CORPORATION AND IN THE GENERAL LAW 225 (2013).

Electronic copy available at: https://ssrn.com/abstract=3456340

position,[232] it proposes the duty of impartiality as an analytic framework that allows a board of directors to analyze and resolve conflicts of interest between and among the corporation's stockholders to best fulfill its fiduciary duties.

As discussed in Part I, the fiduciary duties of a board of directors requires it to make business decisions that are in the best interest of corporation's stockholders (i.e., the "shareholder primacy norm" or the "shareholder wealth maximization norm").[233] However, the way in which the board of directors should fulfill this duty is quite ambiguous, and its decisions will enjoy deference under the business judgment rule unless there is a credible allegation of a breach of duty of care, loyalty (including conflict of interest), or waste.[234]

Thus, whenever facing a horizontal conflict of interest between and among the corporation's stockholders,[235] the board of directors has no clear and consistent framework to apply in its decision-making process when resolving such conflicts.

Although some of this ambiguity was presumably mitigated by the Delaware Chancery Court in *Trados* and *ODN* by favoring the "common stockholder maximization value"[236] (and by doing so resolved the common-preferred conflict), for the reasons outlined in Part I above, this Article argues that the duty to maximize enterprise value should also encompass the preferred stockholders' rights.

Consequently, when facing a corporate decision that triggers a horizontal conflict of interest, whether such conflict arises among the common-preferred stockholders[237] or the common-common stockholders[238] or any other potential inter-class preference conflict, the board of directors should resolve these conflicts in a way that would best reflect the interests of the corporation's stockholders as a whole.[239]

---

232. *See, e.g.*, Deborah A. DeMott, *Beyond Metaphor: An Analysis of Fiduciary Obligation*, 37 DUKE L.J. 879, 880 (1988) (suggesting that a corporation's directors occupy a trustee-*like* position); Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85(2) VA. L. REV., 248, 291 (1999) (suggesting that corporate directors resemble trustees). *See also* the decision of the Supreme Court of Texas in Yeaman v. Galveston City Co., 167 S.W. 710, 723 (Tex. 1914) (holding that the relationship between a corporation and its stockholders are akin to one of trust).

233. *See* Dodge v. Ford Motor Company, 170 N.W. 668, 684 (Mich. 1919); Smith, *supra* note 31; *see also* eBay Domestic Holdings, Inc. v. Newmark, 16 A.3d 1, 34 (Del Ch. 2010).

234. *See, e.g.*, Brehm v. Eisner, 746 A.2d 244, 263 (Del. 2000) (explaining justifications for the business judgment rule).

235. *See* discussion *supra* page 5, Part I and page 24, II.

236. *See* discussion *supra* page 5, Part I.

237. *Id*.

238. *See* discussion *supra* page 24, Part II.

239. *See* Dodge v. Ford Motor Company, 170 N.W. 668, 684 (Mich. 1919); Smith, *supra* note 31; *see also* eBay Domestic Holdings, Inc. v. Newmark, 16 A.3d 1, 34 (Del Ch. 2010).

Electronic copy available at: https://ssrn.com/abstract=3456340

B. RESOLVING STOCKHOLDERS' CONFLICTS VIA THE FIDUCIARY DUTY OF IMPARTIALITY

The proposed framework for resolving conflicts of interest between and among holders of common stock and multiple classes of preferred stock is through the fiduciary duty of impartiality.

The duty of impartiality is the duty to administer the corporation's affairs in a manner that is impartial with respect to the various beneficiaries (stockholders) of the corporation.[240] It is an extension of the duty of loyalty.[241] The duty of impartiality requires a fiduciary to act in the best interests of the beneficiaries, but recognizes that beneficiaries have competing economic interests[242] and, therefore, it allows a fiduciary to exercise discretion while having a duty to act bona fide in the best interests of the beneficiaries as a whole.[243]

Due to the duty's recognition that beneficiaries may have competing economic interests, it provides a few guidelines to the fiduciary that can be applied by her or him in its decision-making process:

First, impartiality does not mean that a fiduciary must treat each beneficiary equally. The fiduciary may give priority to the interests of certain beneficiaries or decide to give different weight to the interests of certain beneficiaries when balancing those interests, as long as the fiduciary treatment of the beneficiaries' interests or conduct in administrating a trust (corporation) is not influenced by the fiduciary's own personal agenda or favoritism toward individual beneficiaries.[244]

Moreover, it is within the fiduciary duty to balance the beneficiaries' competing interests in a reasonable way to "reflect any preferences and priorities that are discernible from the terms, purposes and circumstances of the trust and from the nature and terms of the beneficial interests."[245] In other words, the fiduciary must take into account any special terms, agreements and understandings that reflect the beneficiaries' priorities, rights, and interests arising from the trust's terms and circumstances.

For example, applying the duty of impartiality on the classic common-preferred stock conflict would require a board of directors to take into

---

240. *See* RESTATEMENT (THIRD) OF TRUSTS § 79 (AM. LAW INST. 2007).

241. *See id*. at cmt. b.

242. *See id*.; *see also* Susan N. Gary, *Best Interests in the Long Term: Fiduciary Duties and ESG Integration*, 90 U. OF COLO. L. REV. 731, 794 (2019).

243. *See, e.g*., Forbes Trustee Services Ltd v. Jackson [2004] EWHC 2448 (Ch) [36]; Edward C. Halbach, Jr., *Uniform Acts, Restatements, and Trends in American Trust Law at Century's End*, 88 CALIF. L. REV. 1877, 1913 (2000).

244. *See* RESTATEMENT (THIRD) OF TRUSTS § 79 cmt. b. (AM. LAW INST. 2007); *see also* Forbes Trustee Services Ltd v. Jackson [2004] EWHC 2448 (Ch)[36].

245. *See* RESTATEMENT (THIRD) OF TRUSTS § 79 cmt. b. (AM. LAW INST. 2007).

Electronic copy available at: https://ssrn.com/abstract=3456340

account the preferred rights and interests as contracted under the corporation's certificate of incorporation and give such rights and interests the applicable weight in its decision-making process. Depending on the specific set of circumstances surrounding a specific business decision and the specific contractual rights of the preferred, the board of directors would give different weight to the preferred rights.

Under another example, a board of directors considering a sale of the corporation to a third party may give more weight to the rights of the preferred stockholders, with full participation liquidation preference, than it would give to preferred stockholders, with 3X non-participating liquidation preference, because presumably the interests of the preferred stockholders in the first case would be more aligned with those of the common stockholders. Thus, the board of directors is likely to better represent the interest of the stockholders as a whole. Of course, there are additional considerations to be considered in this case, such as whether the corporation was highly successful or facing financial difficulties. Each fact should be given a certain weight in the board of directors' decision-making process.

Second, the duty of impartiality does not require an equal balance of diverse interests, but rather a balance of those interests in a manner that is consistent with the beneficial interests and the terms and purposes of the trust (corporation).[246] The fiduciary should take into account the various needs, objectives, and tax positions that lead to different preferences of beneficiaries.[247] This also includes taking into account different time horizons of different beneficiaries.[248] As a practical matter, a board of directors should consider the interests of both short-term investors (e.g., activist investors) and long-term investors (e.g., founders, pension funds) when balancing these competing interests to reach a suboptimal business decision.[249]

For example, if an activist stockholder proposes a business strategy that is likely to produce short-term returns (but the likelihood for long-term returns is low) and the founder (also the CEO and corporation's stockholder) proposes a long-term strategy that will likely to result in a long-term return, a board of directors would be required to consider each of these investment strategies in an impartial way. That means that the board of directors may give significant weight to the founder's proposal if it believes that such proposal would reflect

246. *See id*. at cmt. c.

247. *See id*.

248. *See* Gary, supra note 242, at 794-96.

249. *See* James Hawley, Keith Johnson & Ed Waitze, *Reclaiming Fiduciary Duty Balance*, 4(2) ROTMAN INT'L J. OF PENSION MGMT. 4, 8 (2011); *see also* the decision of the United States Supreme Court in Varity Corp. v. Howe, 516 U.S. 489, 514 (1996) ("The common law of trusts recognizes the need to preserve assets to satisfy future, as well as present, claims and requires a trustee to take impartial account of the interests of all beneficiaries.").

Electronic copy available at: https://ssrn.com/abstract=3456340

the best interests of the corporation's stockholders as a whole. On the other hand, the board of directors may also adopt the activist's proposal if it believes that the founder's proposal is too optimistic[250] or driven by her or his own personal agenda[251] or that the activist proposal is likely to result in a higher return (even if the likelihood for long-term return is low). Of course, for such suboptimal outcome to be practically feasible, the board of directors would need to communicate with the stockholders in order to fully understand the effects of each of these investment strategies.

Third, whenever necessary, the fiduciary duty of impartiality requires a fiduciary to obtain information from the beneficiaries concerning their financial needs, circumstances and preferences.[252] The fiduciary typically does need not to consult with all existing beneficiaries, but should select beneficiaries who would reasonably be expected to reflect the diverse beneficial interests that are likely to be affected.[253] The fiduciary should avoid arbitrary discrimination among persons similarly situated with respect to the matter involved.[254] Additionally, in matters that can be expected to affect the trust beneficiaries generally, such as a change of business, the fiduciary might need to consult with all types of beneficiaries.[255]

As a practical matter, such communication is done through stockholders' resolutions, allowing stockholders to express their preferences for certain corporate actions.[256] Although this process has been shown to successfully influence corporate actions,[257] it is important to note that under both the Restatement (Third) of Trusts [258] and Delaware case law,[259] the board of directors may take discretionary corporate actions that it believes are in the best interests of the stockholders, even if it believes that the stockholders would disagree with such decisions.[260]

250. *See* Barzuza & Talley, *supra* note 83, at 7 ("Optimism bias—the proclivity of corporate managers to overestimate the success probability of their own projects—has already been documented extensively in the economics and finance literature.").

251. *See* discussion regarding the Facebook case *supra* page 31, Part II.B.ii.

252. *See* RESTATEMENT (THIRD) OF TRUSTS § 79 cmt. d. (AM. LAW INST. 2007).

253. *See id*.

254. *See id*.

255. *See id*.

256. *See* Scott Hirst, *Social Responsibility Resolutions*, 43 J. CORP. L. 217, 218-19 (2018).

257. *Id*.

258. *See* RESTATEMENT (THIRD) OF TRUSTS § 80 cmt. b. (AM. LAW INST. 2007) (referring to § 79 cmt. D which stated that "[a]fter obtaining advice or consultation, the trustee can properly take the information or suggestions into account but then, unlike delegation, must exercise independent, prudent, and impartial fiduciary judgment on the matters involved").

259. *See, e.g*., the decision of then-Vice Chancellor Strine in In re Lear Corp. Shareholder Litigation, 967 A.2d 640, 655 (Del. Ch. 2008) ("[D]irectors may take good faith actions that they believe will benefit stockholders, even if they realize that the stockholders do not agree with them.").

260. *See id*. For an interesting discussion on whether directors should act in what they think are the

Electronic copy available at: https://ssrn.com/abstract=3456340

In conclusion, the fiduciary duty of impartiality provides an analytic framework for the consistent resolution of stockholders' conflicts of interest. It is a balancing test that provides a corporation's board of directors a flexible tool with which to weigh various, and often conflicting, interests of stockholders to reach a resolution that maximizes the value of the enterprise as a whole. This framework is a proposed way of resolving stockholders' conflicts of interest and, because it is mostly derived from the U.S. common law of trusts, it should be further shaped and developed by courts to be adequately applied in an intra-corporate context.

C. STANDARD OF REVIEW

The proposed framework outlined above is with respect to the standard of conduct, i.e., the considerations a board of directors should consider when considering taking a corporate action.[261] In the context of common-preferred conflict,[262] and in the context of interclass preference conflicts,[263] this Article argues that the board of directors should consider both the interests of the common stockholders and the preferred stockholders, and balance their competing interests through the fiduciary duty of impartiality to reach a decision that would reflect the best interests of the corporation's stockholders as a whole.[264]

One may wonder how a director who, for example, was appointed by a venture capital firm could be impartial? Indeed, such a director may be conflicted if the interests of the preferred stockholders diverge from those of the common stockholders.[265] Such a situation is not a given one[266] and, therefore, is generally considered on a case-by-case basis.[267] In case the majority of directors are found to be conflicted, the decision of the board of directors would generally not enjoy deference under the business judgment rule, and the Delaware court would review the directors' decision under the

---

best interests of stockholders, or what stockholders think are in the best interests of stockholders, *see* Hirst, *supra* note 256, at 232-34.

261. *See supra* page 34, Part III.

262. *See supra* page 5, Part I.

263. *See supra* page 24, Part II.

264. *See supra* page 37, Part III.B.

265. *See* In re Trados Inc. Shareholder Litigation, 73 A.3d 17, 52 (Del. Ch. 2013).

266. *See* Boschner & Simmerman, *supra* note 84, at 7. On that note, there is an emerging jurisprudence in Delaware case law that directors who represent venture capital investors and activists with short-term investment horizons face an inherent conflict of interest. *See* Bodne, Chazen & Ross, *supra* note 186. However, it seems that the predominant view today remains that, absent special circumstances, directors "have discretion to determine the time horizon over which they seek to maximize stockholder value." *See id.*; *see also* In re Synthes Shareholder Litigation, 50A.3d 1022 (Del. Ch. 2012); *supra* page 28, Part II.B.i.

267. *See* Boschner & Simmerman, *supra* note 84, at 8-9.

Electronic copy available at: https://ssrn.com/abstract=3456340

strict "entire fairness" standard of review.[268]

Recall that the fiduciary duty of impartiality is an extension of the duty of loyalty.[269] As such, a director who would be found conflicted by the Delaware court could not be considered impartial. Alternatively, a director not found to be conflicted by the Delaware court should enjoy the deference under the business judgment rule, including the presumption that her or his decisions were made in an impartial way, because there would presumably be no concern that the director would favor per se the preferred stockholders' interests over those of the common stockholders.[270]

CONCLUSION

Horizontal conflicts of interest have been increasing in the past few years, both in privately held and publicly traded corporations. As a result, they have raised profound questions about whether fiduciary duties should rescale themselves.[271]

This Article analyzed stockholders' conflicts of interest on two levels. First, this Article analyzed the common-preferred conflict in light of *Trados* and *ODN* and pointed out the problematic issues that arose vis-à-vis the Delaware Chancery Court's decisions.[272] The conclusion of this analysis was that the enforcement of preferred stockholders' rights should be undertaken through the board of directors' fiduciary duties to all stockholders, without prejudice. Second, this Article analyzed the potential interclass preference conflict between and among different types of preferred and common stockholders and argued that the current approach the court takes lacks a solution both for privately held and publicly traded corporations.[273]

The Article concluded with a proposed framework for resolving these conflicts of interest. The Article proposed the fiduciary duty of impartiality as an analytic framework to resolve conflicts of interest between and among holders of common stock and multiple classes of preferred shares.[274]

---

268. The business judgment rule presumption may be reinstated in case a board majority composed of disinterested and independent directors, who can also be a special committee, approved the transaction. *See Trados*, 73 A.3d at 1.

269. *See* RESTATEMENT (THIRD) OF TRUSTS § 79 cmt. b. (AM. LAW INST. 2007).

270. *See* LC Capital Master Fund, Ltd. v. James, 990 A.2d 435, 453 (Del. Ch. 2010) (holding that the impartiality of directors holding common stock should not be impugned solely because of their ownership of common stock, and not preferred stock, without presenting facts that the directors were materially self-interested).

271. *See* Bartlett & Talley, *supra* note 129, at 42-43.

272. *See supra* page 5, Part I.

273. *See supra* page 24, Part II.

274. *See supra* page 34, Part III.

Electronic copy available at: https://ssrn.com/abstract=3456340

November 2019

McKinsey Quarterly

Five ways that ESG creates value

Getting your environmental, social, and governance (ESG) proposition right links to higher value creation. Here's why.

by Witold Henisz, Tim Koller, and Robin Nuttall

Your business, like every business, is deeply intertwined with environmental, social, and governance (ESG) concerns. It makes sense, therefore, that a strong ESG proposition can create value—and in this article, we provide a framework for understanding the five key ways it can do so. But first, let's briefly consider the individual elements of ESG:

- The *E* in ESG, *environmental criteria*, includes the energy your company takes in and the waste it discharges, the resources it needs, and the consequences for living beings as a result. Not least, *E* encompasses carbon emissions and climate change. Every company uses energy and resources; every company affects, and is affected by, the environment.

- *S*, *social criteria*, addresses the relationships your company has and the reputation it fosters with people and institutions in the communities where you do business. *S* includes labor relations and diversity and inclusion. Every company operates within a broader, diverse society.

- *G*, *governance*, is the internal system of practices, controls, and procedures your company adopts in order to govern itself, make effective decisions, comply with the law, and meet the needs of external stakeholders. Every company, which is itself a legal creation, requires governance.

Just as ESG is an inextricable part of how you do business, its individual elements are themselves intertwined. For example, social criteria overlaps with environmental criteria and governance when companies seek to comply with environmental laws and broader concerns about sustainability. Our focus is mostly on environmental and social criteria, but, as every leader knows, governance can never be hermetically separate. Indeed, excelling in governance calls for mastering not just the letter of laws but also their spirit—such as getting in front of violations before they occur, or ensuring transparency and dialogue with regulators instead of formalistically submitting a report and letting the results speak for themselves.

Thinking and acting on ESG in a proactive way has lately become even more pressing. The US Business Roundtable released a new statement in August 2019 strongly affirming business's commitment to a broad range of stakeholders, including customers, employees, suppliers, communities, and, of course, shareholders.[1] Of a piece with that emerging zeitgeist, ESG-oriented investing has experienced a meteoric rise. Global sustainable investment now tops $30 trillion—up 68 percent since 2014 and tenfold since 2004.[2] The acceleration has been driven by heightened social, governmental, and consumer attention on the broader impact of corporations, as well as by the investors and executives who realize that a strong ESG proposition can safeguard a company's long-term success. The magnitude of investment flow suggests that ESG is much more than a fad or a feel-good exercise.

So does the level of business performance. The overwhelming weight of accumulated research finds that companies that pay attention to environmental, social, and governance concerns do not experience a drag on value creation—in fact, quite the opposite (Exhibit 1). A strong ESG proposition correlates with higher equity returns, from both a tilt and momentum perspective.[3] Better performance in ESG also corresponds with a reduction in downside risk, as evidenced, among other ways, by lower loan and credit default swap spreads and higher credit ratings.[4]

---

[1] See "Statement on the purpose of a corporation," Business Roundtable, 2019, opportunity.businessroundtable.org. The stakeholder approach is elaborated upon in Witold J. Henisz, *Corporate Diplomacy: Why Firms Need to Build Ties with External Stakeholders* (Routledge, November 2016); John Browne, Robin Nuttall, and Tommy Stadlen, *Connect: How Companies Succeed by Engaging Radically with Society* (PublicAffairs, March 2016); and Colin Mayer, *Prosperity: Better Business Makes the Greater Good* (Oxford University Press, January 2019).

[2] *Global Sustainable Investment Review 2018*, Global Sustainable Investment Alliance, 2018, gsi-alliance.org.

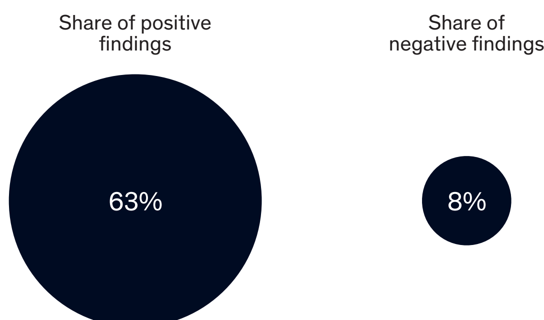
[3] Mozaffar Khan, George Serafeim, and Aaron Yoon, "Corporate sustainability: First evidence on materiality," *The Accounting Review*, November 2016, Volume 91, Number 6, pp. 1697–724, ssrn.com; Zoltán Nagy, Altaf Kassam, and Linda-Eling Lee, "Can ESG add alpha? An analysis of ESG tilt and momentum strategies," *Journal of Investing*, Summer 2015, Volume 25, Number 2, pp. 113–24, joi.pm-research.com.

[4] See, for example, Witold J. Henisz and James McGlinch, "ESG, material credit events, and credit risk," *Journal of Applied Corporate Finance*, July 2019, Volume 31, pp. 105–17, onlinelibrary.wiley.com; Sara A. Lundqvist and Anders Vilhelmsson, "Enterprise risk management and default risk: Evidence from the banking industry," *Journal of Risk and Insurance*, March 2018, Volume 85, Number 1, pp. 127–57, onlinelibrary.wiley.com; Erik Landry, Mariana Lazaro, and Anna Lee, "Connecting ESG and corporate bond performance," MIT Management Sloan School and Breckinridge Capital Advisors, 2017, mitsloan.mit.edu; and Mitch Reznick and Michael Viehs, "Pricing ESG risk in credit markets," Hermes Credit and Hermes EOS, 2017, hermes-investment.com. Similar benefits are found in yield spreads attached to loans; see Allen Goss and Gordon S. Roberts, "The impact of corporate social responsibility on the cost of bank loans," *Journal of Banking and Finance*, July 2011, Volume 35, Number 7, pp. 1794–810, sciencedirect.com; Sudheer Chava, "Environmental externalities and cost of capital," *Management Science*, September 2014, Volume 60, Number 9, pp. 2111–380, pubsonline.informs.org; Sung C. Bae, Kiyoung Chang, and Ha-Chin Yi, "The impact of corporate social responsibility activities on corporate financing: A case of bank loan covenants," *Applied Economics Letters*, February 2016, Volume 23, Number 17, pp. 1234–37, tandfonline.com; and Sung C. Bae, Kiyoung Chang, and Ha-Chin Yi, "Corporate social responsibility, credit rating, and private debt contracting: New evidence from syndicated loan market," *Review of Quantitative Finance and Accounting*, January 2018, Volume 50, Number 1, pp. 261–99, econpapers.repec.org.

Exhibit 1

Paying attention to environmental, social, and governance (ESG) concerns does not compromise returns—rather, the opposite.

Results of >2,000 studies on the impact of ESG propositions on equity returns



Source: Gunnar Friede et al., "ESG and financial performance: Aggregated evidence from more than 2000 empirical studies," *Journal of Sustainable Finance & Investment*, October 2015, Volume 5, Number 4, pp. 210–33; Deutsche Asset & Wealth Management Investment; McKinsey analysis

But even as the case for a strong ESG proposition becomes more compelling, an understanding of why these criteria link to value creation is less comprehensive. How exactly does a strong ESG proposition make financial sense? From our experience and research, ESG links to cash flow in five important ways: (1) facilitating top-line growth, (2) reducing costs, (3) minimizing regulatory and legal interventions, (4) increasing employee productivity, and (5) optimizing investment and capital expenditures (Exhibit 2). Each of these five levers should be part of a leader's mental checklist when approaching ESG opportunities—and so should be an understanding of the "softer," more personal dynamics needed for the levers to accomplish their heaviest lifting.

Five links to value creation

The five links are a way to think of ESG systematically, not an assurance that each link will apply, or apply to the same degree, in every instance. Some are more likely to arise in certain industries or sectors; others will be more frequent in given geographies. Still, all five should be considered regardless of a company's business model or location. The potential for value creation is too great to leave any of them unexplored.

1. Top-line growth

A strong ESG proposition helps companies tap new markets and expand into existing ones. When governing authorities trust corporate actors, they are more likely to award them the access, approvals, and licenses that afford fresh opportunities for growth. For example, in a recent, massive public–private infrastructure project in Long Beach, California, the for-profit companies selected to participate were screened based on their prior performance in sustainability. Superior ESG execution has demonstrably paid off in mining, as well. Consider gold, a commodity (albeit an expensive one) that should, all else being equal, generate the same rents for the companies that mine

Exhibit 2

A strong environmental, social, and governance (ESG) proposition links to value creation in five essential ways.

	Strong ESG proposition (examples)	**Weak ESG proposition** (examples)
Top-line growth	Attract B2B and B2C customers with more sustainable products Achieve better access to resources through stronger community and government relations	Lose customers through poor sustainability practices (eg, human rights, supply chain) or a perception of unsustainable/unsafe products Lose access to resources (including from operational shutdowns) as a result of poor community and labor relations
Cost reductions	Lower energy consumption Reduce water intake	Generate unnecessary waste and pay correspondingly higher waste-disposal costs Expend more in packaging costs
Regulatory and legal interventions	Achieve greater strategic freedom through deregulation Earn subsidies and government support	Suffer restrictions on advertising and point of sale Incur fines, penalties, and enforcement actions
Productivity uplift	Boost employee motivation Attract talent through greater social credibility	Deal with "social stigma," which restricts talent pool Lose talent as a result of weak purpose
Investment and asset optimization	Enhance investment returns by better allocating capital for the long term (eg, more sustainable plant and equipment) Avoid investments that may not pay off because of longer-term environmental issues	Suffer stranded assets as a result of premature write-downs Fall behind competitors that have invested to be less "energy hungry"

it regardless of their ESG propositions. Yet one major study found that companies with social-engagement activities that were perceived to be beneficial by public and social stakeholders had an easier go at extracting those resources, without extensive planning or operational delays. These companies achieved demonstrably higher valuations than competitors with lower social capital.[5]

ESG can also drive consumer preference. McKinsey research has shown that customers say they are willing to pay to "go green." Although there can be wide discrepancies in practice, including customers who refuse to pay even 1 percent more, we've found that upward of 70 percent of consumers surveyed on purchases in multiple industries, including the automotive, building, electronics, and packaging categories, said they would pay an additional 5 percent for a green product if it met the same performance standards as a nongreen alternative. In another study, nearly half (44 percent) of

[5] Sinziana Dorobantu, Witold J. Henisz, and Lite J. Nartey, "Spinning gold: The financial returns to stakeholder engagement," *Strategic Management Journal*, December 2014, Volume 35, Number 12, pp. 1727–48, onlinelibrary.wiley.com.

the companies we surveyed identified business and growth opportunities as the impetus for starting their sustainability programs.

The payoffs are real. When Unilever developed Sunlight, a brand of dishwashing liquid that used much less water than its other brands, sales of Sunlight and Unilever's other water-saving products proceeded to outpace category growth by more than 20 percent in a number of water-scarce markets. And Finland's Neste, founded as a traditional petroleum-refining company more than 70 years ago, now generates more than two-thirds of its profits from renewable fuels and sustainability-related products.

2. Cost reductions

ESG can also reduce costs substantially. Among other advantages, executing ESG effectively can help combat rising operating expenses (such as raw-material costs and the true cost of water or carbon), which McKinsey research has found can affect operating profits by as much as 60 percent. In the same report, our colleagues created a metric (the amount of energy, water, and waste used in relation to revenue) to analyze the relative resource efficiency of companies within various sectors and found a significant correlation between resource efficiency and financial performance. The study also identified a number of companies across sectors that did particularly well—precisely the companies that had taken their sustainability strategies the furthest.

As with each of the five links to ESG value creation, the first step to realizing value begins with recognizing the opportunity. Consider 3M, which has long understood that being proactive about environmental risk can be a source of competitive advantage. The company has saved $2.2 billion since introducing its "pollution prevention pays" (3Ps) program, in 1975, preventing pollution up front by reformulating products, improving manufacturing processes, redesigning equipment, and recycling and reusing waste from production. Another enterprise, a major water utility, achieved cost savings of almost $180 million per year thanks to lean initiatives aimed at improving preventive maintenance, refining spare-part inventory management, and tackling energy consumption and recovery from sludge. FedEx, for its part, aims to convert its entire 35,000-vehicle fleet to electric or hybrid engines; to date, 20 percent have been converted, which has already reduced fuel consumption by more than 50 million gallons.[6]

3. Reduced regulatory and legal interventions

A stronger external-value proposition can enable companies to achieve greater strategic freedom, easing regulatory pressure. In fact, in case after case across sectors and geographies, we've seen that strength in ESG helps reduce companies' risk of adverse government action. It can also engender government support.

The value at stake may be higher than you think. By our analysis, typically one-third of corporate profits are at risk from state intervention. Regulation's impact, of course,

---

[6] Witold J. Henisz, "The costs and benefits of calculating the net present value of corporate diplomacy," *Field Actions Science Reports*, 2016, Special Issue 14.

Exhibit 3

In many industries, a large share of corporate profits are at stake from external engagement.

Estimated share of EBITDA[1] at stake, %

Industry	Share at stake, %	For example
Banks	50–60	Capital requirements, systemic regulation ("too big to fail"), and consumer protection
Automotive, aerospace and defense, tech	50–60	Government subsidies, renewable regulation, and carbon-emissions regulation
Transport, logistics, infrastructure	45–55	Pricing regulation and liberalization of sector
Telecom and media	40–50	Tariff regulation, interconnection, fiber deployment, spectrum, and data privacy
Energy and materials	35–45	Tariff regulation, renewables subsidies, interconnection, and access rights
Resources	30–40	Resource nationalism, mineral taxes, land-access rights, community reach, and reputation
Consumer goods	25–30	Obesity, sustainability, food safety, health and wellness, and labeling
Pharma and healthcare	25–30	Market access, regulation of generic drugs, pricing, innovation funding, and clinical trials

[1]Earnings before interest, taxes, depreciation, and amortization.

varies by industry. For pharmaceuticals and healthcare, the profits at stake are about 25 to 30 percent. In banking, where provisions on capital requirements, "too big to fail," and consumer protection are so critical, the value at stake is typically 50 to 60 percent. For the automotive, aerospace and defense, and tech sectors, where government subsidies (among other forms of intervention) are prevalent, the value at stake can reach 60 percent as well (Exhibit 3).

4. Employee productivity uplift

A strong ESG proposition can help companies attract and retain quality employees, enhance employee motivation by instilling a sense of purpose, and increase productivity overall. Employee satisfaction is positively correlated with shareholder returns.[7] For example, the London Business School's Alex Edmans found that the companies that made *Fortune*'s "100 Best Companies to Work For" list generated 2.3 percent to 3.8 percent higher stock returns per year than their peers over a greater than 25-year horizon.[8] Moreover, it's long been observed that employees with a sense not just

[7] Alex Edmans, "Does the stock market fully value intangibles? Employee satisfaction and equity prices," *Journal of Financial Economics*, September 2011, Volume 101, Number 3, pp. 621–40, sciencedirect.com.

[8] Alex Edmans, "The link between job satisfaction and firm value, with implications for corporate social responsibility," *Academy of Management Perspectives*, November 2012, Volume 26, Number 4, pp. 1–9, journals.aom.org.

of satisfaction but also of connection perform better. The stronger an employee's perception of impact on the beneficiaries of their work, the greater the employee's motivation to act in a "prosocial" way.[9]

Recent studies have also shown that positive social impact correlates with higher job satisfaction, and field experiments suggest that when companies "give back," employees react with enthusiasm. For instance, randomly selected employees at one Australian bank who received bonuses in the form of company payments to local charities reported greater and more immediate job satisfaction than their colleagues who were not selected for the donation program.[10]

Just as a sense of higher purpose can inspire your employees to perform better, a weaker ESG proposition can drag productivity down. The most glaring examples are strikes, worker slowdowns, and other labor actions within your organization. But it's worth remembering that productivity constraints can also manifest outside of your company's four walls, across the supply chain. Primary suppliers often subcontract portions of large orders to other firms or rely on purchasing agents, and subcontractors are typically managed loosely, sometimes with little oversight of workers' health and safety.

Farsighted companies pay heed. Consider General Mills, which works to ensure that its ESG principles apply "from farm to fork to landfill." Walmart, for its part, tracks the work conditions of its suppliers, including those with extensive factory floors in China, according to a proprietary company scorecard. And Mars seeks opportunities where it can deliver what it calls "wins-wins-wins" for the company, its suppliers, and the environment. Mars has developed model farms that not only introduce new technological initiatives to farmers in its supply chains, but also increase farmers' access to capital so that they are able to obtain a financial stake in those initiatives.[11]

5. Investment and asset optimization

A strong ESG proposition can enhance investment returns by allocating capital to more promising and more sustainable opportunities (for example, renewables, waste reduction, and scrubbers). It can also help companies avoid stranded investments that may not pay off because of longer-term environmental issues (such as massive write-downs in the value of oil tankers). Remember, taking proper account of investment returns requires that you start from the proper baseline. When it comes to ESG, it's important to bear in mind that a do-nothing approach is usually an eroding

---

[9] Adam M. Grant, "Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity," *Journal of Applied Psychology*, January 2008, Volume 93, Number 1, pp. 48–58, psycnet.apa.org; Adam M. Grant, "Relational job design and the motivation to make a prosocial difference," *Academy of Management Review*, April 2007, Volume 32, Number 2, pp. 393–417, journals.aom.org; and J. Stuart Bunderson and Jeffery A. Thompson, "Violations of principle: Ideological currency in the psychological contract," *Academy of Management Review*, October 2003, Volume 28, Number 4, pp. 571–86, journals.aom.org.

[10] Jan-Emmanuel de Neve et al., "Work and well-being: A global perspective," in *Global Happiness Policy Report*, edited by Global Council for Happiness and Wellbeing, New York, NY: Sustainable Development Solutions Network, 2018.

[11] Katy Askew, "'Extended supply chains are broken': Why Mars thinks the commodities era is over," June 6, 2018, Food Navigator, foodnavigator.com.

line, not a straight line. Continuing to rely on energy-hungry plants and equipment, for example, can drain cash going forward. While the investments required to update your operations may be substantial, choosing to wait it out can be the most expensive option of all. The rules of the game are shifting: regulatory responses to emissions will likely affect energy costs and could especially affect balance sheets in carbon-intense industries. And bans or limitations on such things as single-use plastics or diesel-fueled cars in city centers will introduce new constraints on multiple businesses, many of which could find themselves having to catch up. One way to get ahead of the future curve is to consider repurposing assets right now—for instance, converting failing parking garages into uses with higher demand, such as residences or day-care facilities, a trend we're beginning to see in reviving cities.

Foresight flows to the bottom line, and leaning into the tailwinds of sustainability presents new opportunities to enhance investment returns. Tailwinds blow strongly in China, for example. The country's imperative to combat air pollution is forecast to create more than $3 trillion in investment opportunities through 2030, ranging across industries from air-quality monitoring to indoor air purification and even cement mixing.

The personal dynamic

The five links to value creation are grounded in hard numbers, but, as always, a softer side is in play. For leaders seeking out new ESG opportunities or trying to nudge an organization in directions that may feel orthogonal to its traditional business model, here are a few personal points to keep in mind.

Get specific

It's important to understand the multiple ways that environmental, social, and governmental factors can create value, but when it comes to inspiring those around you, what will you really be talking about? Surprisingly, that depends. The individual causes that may inspire any one of us are precisely that—individual. That means that the issues most important to executives on your team could incline in different directions. Large companies can have dozens of social, community, or environmental projects in motion at any time. Too many at once can be a muddle; some may even work at cross-purposes.

In our experience, priority initiatives should be clearly articulated, and the number should be no more than five. To decide on which ones and to get the most out of them, let the company be your lodestar. For one leading agribusiness, that means channeling its capabilities into ameliorating hunger. The company taps its well-honed competencies to work with farmers in emerging regions to diversify their crops and adopt new technologies, which increases production and strengthens the company's ties with different countries and communities.

Even within the same industry, different companies will have different ESG profiles depending on their position in the corporate life cycle. Attackers typically have high upside potential to drive growth from ESG initiatives (for instance, the craft brewer BrewDog donates 20 percent of its annual profits), while longer-established competitors simply don't have that choice. For some companies, such as coal businesses or tobacco manufacturers, ESG will be more effectively

geared to maintaining community ties and prioritizing risk avoidance. Regardless of your company's circumstances, it will be the CEO's role to rally support around the initiatives that best map to its mission.

Get practical

Value creation should be the CEO's core message. Anything else could sound off-key. Managers, especially more senior ones, are usually assessed based on performance targets. Under those conditions, top-down ESG pronouncements can seem distracting or too vague to be of much use; "save the planet" won't cut it. To get everyone on board, make the case that your company's ESG priorities do link to value, and show leaders how, ideally with hard metrics that feed into the business model (for example, output per baseline electricity use, waste cost in a given plant or location per employee, or revenue per calorie for a food-and-beverage business).

The case will be simpler if you've done the hard work to analyze what matters along your value chain, where the greatest potential lies, and which areas have the most impact for your company. Proactive companies carefully research potential initiatives, including by tapping thought leaders and industry experts, iterate their findings with internal and external stakeholders, and then publish the results. Making the case publicly—not least to investors—enforces rigor and helps ensure that practical actions will follow.

Get real

An honest appraisal of ESG includes a frank acknowledgment that getting it wrong can result in massive value destruction. Being perceived as "overdoing it" can sap a leader's time and focus. Underdoing it is even worse. Companies that perform poorly in environmental, social, and governance criteria are more likely to endure materially adverse events. Just in the past few years, multiple companies with a weak ESG proposition saw double-digit declines in market capitalization in the days and weeks after their missteps came to light.[12] Leaders should vigilantly assess the value at stake from external engagement (in our experience, poor external engagement can typically destroy about 30 percent of value) and plan scenarios for potential hits to operating profits. These days, the tail events can seem to come out of nowhere, even from a single tweet. Playing fast and loose with ESG is playing to lose, and failure to confront downside risk forthrightly can be disastrous.

Conversely, being thoughtful and transparent about ESG risk enhances long-term value—even if doing so can feel uncomfortable and engender some short-term pain. Ed Stack, the CEO of North American retailer Dick's Sporting Goods, said he expected that the company's 2018 announcement to restrict gun sales would alienate some customers, and he was right: by his own estimate, the announcement cost the company $150 million in lost sales, or slightly less than 2 percent of yearly revenue. Yet the company's stock climbed 14 percent in a little over a year following the shift.

---

[12] Witold J. Henisz and James McGlinch, "ESG, material credit events, and credit risk," *Journal of Applied Corporate Finance*, July 2019, Volume 31, Number 2, pp. 105–17, onlinelibrary.wiley.com.

Sidebar

ESG for the long term

Who says that a strong environmental, social, and governance (ESG) proposition cannot create value for companies and their shareholders? Not Milton Friedman. "It may well be in the long-run interest of a corporation," the economist wrote a half-century ago, "to devote resources to providing amenities to [its] community or to improving its government. That may make it easier to attract desirable employees, it may reduce the wage bill . . . or have other worthwhile effects."[1]

Shareholders and stakeholders do not compete in a zero-sum game. Quite the opposite: building a strong connection with broad elements of society creates value, not least because it builds resilience into the business model. Compromising your connections with stakeholders simply to make earnings targets, on the other hand, destroys value. It's the essence of short-termism, measurably and overwhelmingly harmful to most shareholders' economic interests. Research shows that firms that make significant investments for longer-term payoffs have future cash flows that are discounted less by investors than the cash flows of firms that allocate a smaller portion of their cash for the long term; immediate-minded fixes such as share repurchases (which arguably divert cash from investments that generate longer-term returns) correlate with increased discounting as well.[2] Businesses need to play the long game. That means they need to satisfy the needs of their customers, employees, and communities—these days, often a global community—in order to maximize value creation. Thriving businesses concerned with long-term horizons fuel a virtuous cycle. They create jobs, increase tax revenue, and raise standards of living. ESG helps generate wealth, and wealth is not a fixed pie.

But just as it's wrong to assume that shareholders' interests must perforce come at stakeholders' expense, one should not assume that shareholders' and stakeholders' interests cannot conflict. Of course they can! Should companies pay employees more than is necessary to keep them engaged and productive, even if doing so would place employee interests above those of the company as a whole and its shareholders in particular?

The question isn't theoretical—shareholders have sued management on that very issue. While US courts have

typically looked to the business-judgment rule, which affords directors wide discretion to decide such matters, judges have even weighed in about shareholder value maximization. For example, in 2010, when the directors of classifieds site Craigslist admittedly sought to run their business without a shareholder-maximization objective, putting the interests of the community above “the business of stockholder wealth maximization, now or in the future,” the Delaware courts—the most important jurisdiction in the United States for matters of corporate law—insisted that corporations exist to promote value for shareholders. (“The ‘Inc.’ after the company name,” the deciding court said, “has to mean at least that.”) The ruling thus proceeded to invalidate a poison pill that would have allowed Craigslist’s board to execute “a business strategy that openly eschews stockholder wealth maximization.”[3]

Different countries come to different conclusions about the purpose of business. But across legal systems, maximizing wealth for the long term demands that managers consider trade-offs. In a system such as that of the United States, where shareholder wealth maximization can have the force of law, executives can meet their shareholder-minded mission through an approach that economist Michael Jensen calls an “enlightened value maximization.”[4] Under that framework, managers “spend an additional dollar on any constituency provided the long-term value added to the firm from such expenditure is a dollar or more.” That enforces a cost-benefit analysis for ESG investments, just as companies would do when allocating capital for any other purpose and keeping long-term value creation in mind.

---

[1] Milton Friedman, “A Friedman doctrine—The social responsibility of business is to increase its profits,” *New York Times Magazine*, September 13, 1970.

[2] Rachelle C. Sampson and Yuan Shi, “Are US firms becoming more short-term oriented? Evidence of shifting firm time horizons from market discount rates, 1980-2013,” forthcoming in *Strategic Management Journal* (available at SSRN, ssrn.com).

[3] eBay Domestic Holdings, Inc. v. Newmark, 16 A.3d 1 (Del. Ch. 2010).

[4] Michael C. Jensen, “Value maximization, stakeholder theory and the corporate objective function,” *Business Ethics Quarterly*, April 2002, Volume 12, Number 2, pp. 235–56, cambridge.org.

One reason for the resilience of Dick's Sporting Goods may be that gun sales were already a declining part of the company's portfolio. Another reason was that it remained stubbornly committed to its sense of purpose. Researchers have found that the market capitalization of firms increases with stakeholder support, particularly in times when peer stakeholders criticize or attack firm operations.[13] Holding to your company's central values is particularly essential today as polarized forces widen the social gyre. "Fueled in part by social media, public pressures on corporations build faster and reach further than ever before," BlackRock's Larry Fink observed in his highly influential 2019 letter to CEOs. Fink argued that "[a]s divisions continue to deepen, companies must demonstrate their commitment to the countries, regions, and communities where they operate." Walking the talk on purpose strengthens the company and its community. "Profits," Fink notably concluded, "are in no way inconsistent with purpose—in fact, profits and purpose are inextricably linked." (For more about foundational perspectives, see sidebar, "ESG for the long term.")

The linkage from ESG to value creation is solid indeed. Five levers in particular, across the bottom and top lines, can be difference makers. In a world where environmental, social, and governmental concerns are becoming more urgent than ever, leaders should keep those connections in mind. Q

Tim Koller is a partner in McKinsey's Stamford office, and **Robin Nuttall** is a partner in the London office. **Witold Henisz** is a professor at the Wharton School of the University of Pennsylvania.

Copyright © 2019 McKinsey & Company. All rights reserved.

[13] Sinziana Dorobantu, Witold J. Henisz, and Lite Nartey, "Not all sparks light a fire: Stakeholder and shareholder reactions to critical events in contested markets," *Administrative Science Quarterly*, January 2017, Volume 72, Number 3, pp. 561–97, journals.sagepub.com.

Governance **Insights** Center
PwC's ESG Pulse

Mind the gap: the continued divide between investors and corporates on ESG

June 2020

The gap between corporates and investors on ESG-related disclosures is as wide as ever. Investors are increasingly aligned around a desire to understand the company's long-term value creation plan and receive credible, standardized information to support long-term risk assessments. But many corporates, even when they have a good story to tell and robust processes to manage ESG risk, are not giving investors the right information in the right format. A few straightforward steps could bring the two sides together.

pwc

pwc.com/us/governanceinsightscenter

The gap remains

A few years ago, we identified a serious communications gap between corporates and investors over environmental, social and governance (ESG) information. Investors were looking for standardized, rigorous data to support investment decisions. Many corporates, however, were releasing ESG information inconsistently and in a manner investors found difficult to use.

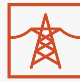
Since then, this gap has continued and ESG's importance has grown. More and more institutional investors are looking for a company's management to articulate a sustainable long-term value creation strategy that outlines not just growth opportunities, but also the related risks. They view ESG matters as critical to understanding the full risk profile of a company and how prepared it is for the future.

There's good reason for investors to put this emphasis on ESG questions. Companies with risk management practices that take into consideration broader industry, regulatory and societal risks are more likely to drive long-term sustainable performance—and shareholder value.

ESG: what does that really mean?

Examples of questions that investors might ask

Many enterprises have sensitive data stored all over the globe and with third parties. How well can they defend against cyber threats?



Many utilities and industrial companies need plentiful water at adequate temperatures to operate. How robust are their plans to confront possible water scarcity?

Many consumer-facing organizations have vendors in countries with weak labor laws. Can they prevent human rights violations and maintain a stable workforce that meets consumer demands?

Most large enterprises serve diverse markets. Does senior leadership and the board have the diverse backgrounds and skills to understand and meet these customers' needs?

Investors are increasingly aligning their messaging—and engagement practices—to make clear that they want ESG-related data to answer critical questions (see sidebar) for risk and strategy assessments.

Yet this messaging has largely been unsuccessful: many corporates are unclear on why investors want ESG-related data, what exact data they want and in what form they want it. Many are concerned about providing information that might be misunderstood or misapplied. And with little alignment around reporting standards, even when individual corporates do provide good data on ESG-related questions, investors may not be able to make comparisons with peers.

Different priorities lead to mixed messaging

More and more investors are telling corporates that they want information on ESG-related risks to support long-term assessments. In a 2017 CFA Institute survey, for example, 65% of investors said that their motive for taking ESG issues into consideration was to help manage investment risks[1]—mirroring our own conclusions in 2016. It's why so many investors are submitting, and often succeeding in passing, shareholder proposals seeking more and better ESG-related information.

Yet different kinds of investors—passive and active, long term and short term, those with and without ESG mandates—have different priorities. Passive investment managers, for example, whose holding period may be indefinite, usually care deeply about long-term ESG-related risks. But a short-term active investor may only care about the chance of an ESG-related disaster (or a new source of value) this quarter. Investors that have ESG as a priority may focus on completely different issues when evaluating a given company. ESG data is also increasingly being relied on for new investment products (e.g., ESG ETFs).

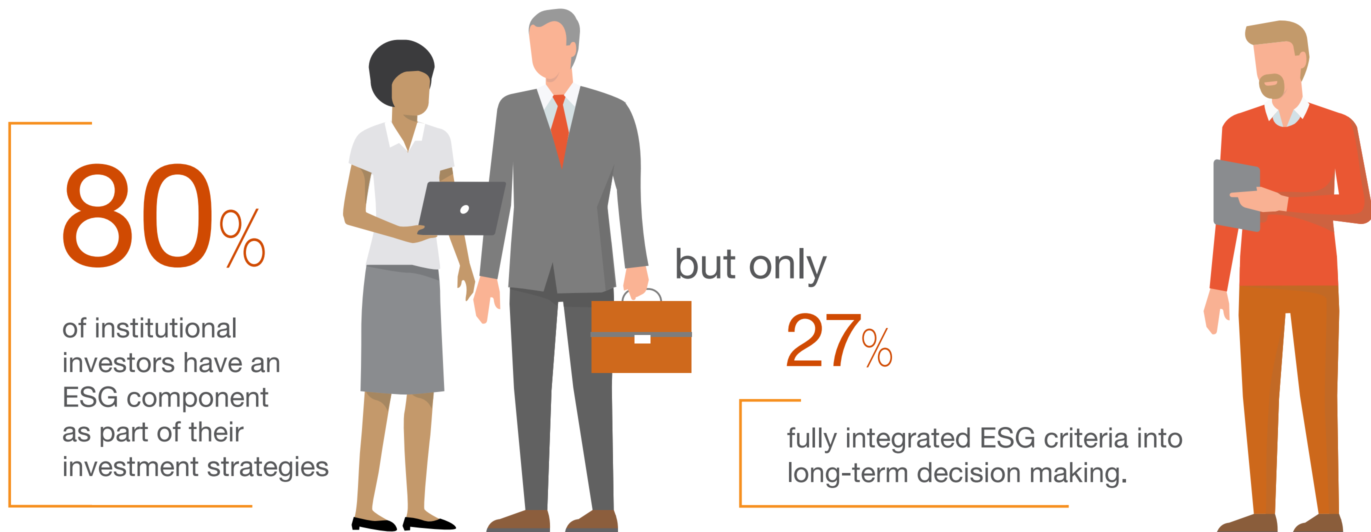
The end result, unfortunately, is that investors are increasingly demanding ESG information, but the messaging is confusing, inconsistent and scattered, which does not command a compelling response.

1 CFA Institue, *Environmental, Social and Governance (ESG) Survey*, 2017.

Many investors have a structural obstacle

Many investment firms also have a structural reason for failing to make a single, consistent request for ESG-related data. Some investors embed stewardship officers, who focus on environmental, social and governance matters, in portfolio management decisions, but such firms are a minority. A survey by State Street Global Advisors found that 80% of institutional investors have an ESG component as part of their investment strategies—but only 27% fully integrated ESG criteria into long-term decision making.[2]

Without such integration, corporates may hear about ESG concerns only from investment firms' stewardship officers—not from the chief investment officers and portfolio managers with whom they have more frequent contact. And when they do hear questions from portfolio managers about matters such as cybersecurity, privacy or board diversity, they may not recognize that these questions are part of the ESG landscape.



Source: State Street Global Advisors, *ESG Institutional Investor Survey*, April 2018.

2 State Street Global Advisors, *ESG Institutional Investor Survey,* April 2018.

Corporates: a slow evolution

Many companies are falling short on ESG-related communication with investors. But some are making more progress than others.

As we see it, the ESG evolution has three stages:

1 Front runners:
cohesive identification, integration and communication

Some leading companies have identified ESG-related risks and opportunities, embedded them into their long-term value creation story and are communicating this story effectively.

Since ESG questions will impact their present and future business model, these forward-thinking organizations are integrating values, goals and metrics into business strategies to mitigate ESG risks. They are seizing related opportunities to innovate and reduce costs. Driven by strong internal leaders, they also tell this story effectively.

Some investors are already rewarding ESG front runners, and we expect more to do so soon.

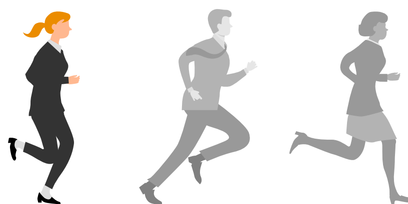
2 Middle tier:
strong on identification, weak on communication

Some companies have integrated ESG questions into enterprise risk management processes, which identify and work to mitigate these risks. Yet they fail to get the message out.

These companies typically provide robust sustainability reports, but neither their content nor their form is aimed at investors. The reports often contain so much information it's hard for investors to find what's most relevant to their needs and make comparisons among competitor companies. These reports also may not appear to have the same credibility as other, more investor-focused disclosures.

Many of these companies have also minimally, if at all, integrated ESG goals into business strategy, limiting further progress.

3 Laggards:
even identification is lacking

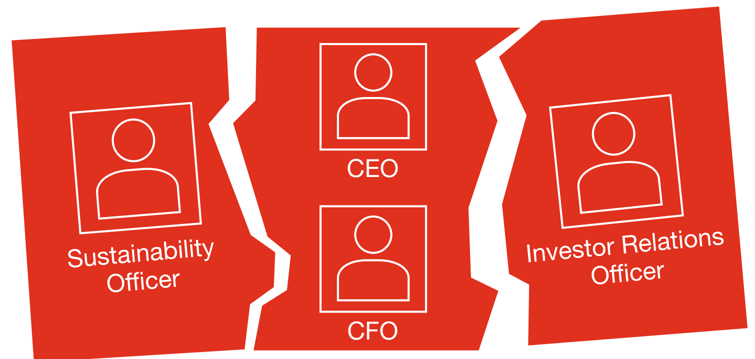


Companies in this third tier have not dedicated significant attention to how ESG factors might impact their business. They view sustainability issues as areas that belong solely in a corporate responsibility report, which they may or may not provide.

Some of these companies merely publish purpose statements and other material from corporate social responsibility departments. These statements typically focus on employee efforts in their communities and other activities meant to demonstrate good corporate citizenship, but which might not have anything to do with the company's long-term strategy.

Corporates often have a structural obstacle too

Companies in all three tiers may share a structural similarity: they may have a sustainability group or an individual sustainability officer who issues an annual corporate responsibility report. But this team or officer may not be integrated with the company's strategy development, asset allocation, risk assessment, financial reporting or investor relations teams.



ESG risks and risk mitigation strategies may therefore not be embedded (or even considered) in the overall enterprise risk management process or business strategy—preventing that strategy from achieving truly sustainable long-term value creation. Accordingly, when senior executives describe future plans for the company to investors, they may not have even considered ESG risks.

Many officers and senior executives in investor relations, uncomfortable with ESG questions, may also consider ESG discussions a risk in themselves. Such discussions, these leaders worry, could undermine valuation, trigger increased scrutiny or distract from their core narrative.

It is therefore understandable why so many companies have chosen the middle tier of ESG-related communication: it appears to be the "safe zone." These companies are avoiding the downside risks of being an ESG laggard (such as negative screening or targeting by stewardship teams). They are also avoiding the extra work and perceived risks of being an ESG front runner. Although the benefits of advancing to the next tier may not yet appear compelling, as investor alignment grows, the middle ground may not remain safe for long.

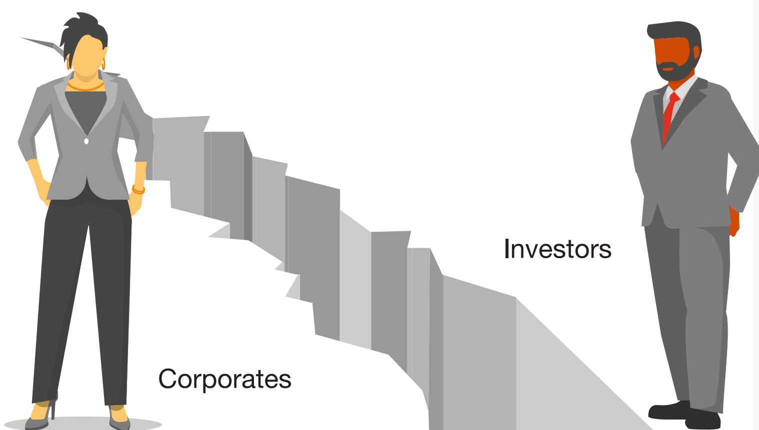
> Part of the challenge right now is a lot of companies will put out a sustainability report, which is great, but we don't know if those numbers are audited. In many cases it's not consistent reporting; they're not always reporting on the same metrics. To make an investment decision, you need useful, consistent information.
>
> – Christopher Ailman, CIO, CalSTRS
>
> A conversation with CalSTRS' Christopher Ailman on ESG

Corporates risk losing control of their ESG story

With so many different investor voices asking for different kinds of ESG information in different ways—often without expressing compelling and consistent reasons—many corporates feel only scattered pressure to provide this information. They also may be concerned that meeting all of the demands of these different investors could be a lot of work for limited value.

Yet growing numbers of investors are not merely saying they want better ESG data. They are also investing in data infrastructure to find it. In the CFA Institute survey, investors' top sources of ESG information on companies were public information and third-party research—not communications or filings from the companies themselves.[3] Passive investment managers, for example, typically rely on large ESG datasets from third-party sources to adjust the weighting of their portfolios.

Much of this third-party information is unverified. It may therefore be inaccurate, but without better corporate involvement, no one can be certain.



Given the complexity of how ESG datasets come together it is hard for investors to fully trust the available information.

What is certain is that, by leaving a communications gap for third parties to fill, corporates are losing control over their ESG story.

Capitalizing on ESG reporting

In recent years, a number of groups have proposed ESG-related reporting standards. One of the leaders in this area is the Sustainability Accounting Standards Board (SASB) which has developed industry-based standards intended to "help public corporations disclose financially material information to investors in a cost-effective and decision-useful format." In November 2018, they released standards for 77 specific industries, following a six-year process of obtaining stakeholder feedback.

Many investors like these standards, but corporates are often wary. Some are concerned about presenting ESG-related risks as "financially material." Others may not have completed a robust and rigorous assessment of these risks.

But these reporting standards aren't all or nothing. Companies don't have to disclose all of the recommended metrics for their specific industry designation. They can use their own judgment as to what is financially material and select relevant metrics from across the standards suggested by SASB (or others).

When it comes to ESG, the important thing is start by considering ESG-related risks within the organization's overall risk assessment. Many enterprises will then find that applying the standards offered by SASB or others is an opportunity: to help identify those risks, and to shape the narrative in a format that investors will appreciate.

3 CFA Institue, *Environmental, Social and Governance (ESG) Survey,* 2017.

How to close the gap

While structural challenges persist, there is a path forward to close the gap between investors and corporates.

For investors to get the information they need for long-term risk assessment, they need to align their different voices and priorities. Here's how:

- Connect stewardship and portfolio management groups to understand each other's ESG-related needs and present a consistent, strong message to corporates.
- Show quantitatively how in their investment process they reward or penalize companies for ESG efforts and disclosure.
- Work to align investment industry associations around ESG disclosure standards and norms.
- Encourage chief investment officers to ask corporates for specific data on ESG-related metrics to support their evaluations of a company's long-term prospects.
- Do their due diligence on the accuracy of ESG datasets and work with providers to enhance the quality of information.

Pressures for sustainable practices will likely rise in the coming years. Now's the time to establish best practices in ESG risk management and communications, building the company's brand in this area and establishing credibility with investors.

Here are some measures to take advantage of this opportunity:

- Engage with portfolio managers and analysts to first, understand how they are integrating ESG concerns into investment decisions and second, provide your own vision of how ESG performance should enter into investor models.
- Build a rigorous process to prepare ESG information (with executive certifications, description of control processes, and assurance) and communicate this process to investors.
- Put yourself in an investor's shoes and focus on the information that will help their decision making. One leading practice to consider is providing quantitative evidence of how your superior ESG risk management justifies a higher valuation.
- Promote interaction between the sustainability team, the chief risk officer, investor relations and finance to develop a succinct long-term value creation story that includes ESG risks and opportunities.
- Communicate your ESG risk-mitigation strategy clearly and fully (avoiding boilerplate language) in primary investor communications.
- Educate executives in the finance and investor relations departments on SASB (see page 7), and consider disclosing selected metrics in an investor-friendly format.

Even if investors today are focused primarily on risk, companies should also show the upside potential. CEOs don't wait for investors to ask about innovation in order to share progress on breakthroughs. Similarly, if companies are—as they should be—well-positioned to grow by solving some of the biggest societal challenges, such as the transition to a low-carbon economy, they shouldn't wait for investors to ask before they share these plans.

Conclusion: both sides can gain

For both the corporate and investment world, a failure to discuss ESG risks can be dangerous. Extreme climate events could impact operations; a cyber breach might threaten data; a lawsuit over gender discrimination or product quality could impact the brand and the bottom line. If such risks become reality, both corporates and their investors would suffer.

Investors are increasingly sending strong signals that they are focused on ESG risks, but many corporates still have sustainability teams working in isolation. As a result, investor relations and finance, as well as the C-suite, often fail to integrate sustainability risks into their long-term strategy discussions with investors.

The gap persists, but solutions exist.

If investors send a crisp and consistent message—and clarify the value at stake for companies—they're more likely to get companies to respond. With such pressure from investors, corporates will also be more likely to work toward new norms of standardized, credible information to support assessments of long-term risks and value.

If corporates embed ESG factors into their overall strategy and risk oversight discussions, they'll be better able to present their risk-mitigation and value creation story—including the growth potential from identifying and managing ESG issues—and shape the narrative around their brand and practices.

Both sides stand to gain. It's time to bring perspectives together to build a future with better risk management and sustainable value creation for all stakeholders.

We see that shareholder value is increasingly being driven by issues such as climate change, labor practices and consumer product safety. We believe that addressing material ESG issues is good business practice and essential to a company's long-term financial performance—a matter of value, not values.

– Cyrus Taraporevala, President and CEO,
State Street Global Advisors
CEO's Letter on our 2020 Proxy Voting Agenda

How PwC can help

To have a deeper discussion about how this topic might impact your business, please contact your engagement partner or a member of PwC's Governance Insights Center or Sustainability Services team.

Paula Loop
Leader, Governance Insights Center
paula.loop@pwc.com

Sara DeSmith
Assurance Leader, Sustainability Services
sara.desmith@pwc.com

Brigham McNaughton
Director, US Sustainable Business Solutions
brigham.l.mcnaughton@pwc.com

Christine Carey
Marketing Manager, Governance Insights Center
christine.carey@pwc.com

pwc.com

This content is for general information purposes only, and should not be used as a substitute for consultation with professional advisors.

© 2020 PricewaterhouseCoopers LLP. All rights reserved. PwC refers to the United States member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details. 512599-2019 vlw

SHAREHOLDER VALUE(S): INDEX FUND ESG ACTIVISM AND THE NEW MILLENNIAL CORPORATE GOVERNANCE

MICHAL BARZUZA,* QUINN CURTIS† & DAVID H. WEBBER‡

Abstract

Major index fund operators have been criticized as ineffective stewards of the firms in which they are now the largest shareholders. While scholars debate whether this passivity is a serious problem, index funds' generally docile approach to ownership is broadly acknowledged. However, this Article argues that the notion that index funds are passive owners overlooks an important dimension in which index funds have demonstrated outspoken, confrontational, and effective stewardship. Specifically, we document that index funds have taken a leading role in challenging management and voting against directors in order to advance board diversity and corporate sustainability. We show that index funds have engaged in a pattern of competitive escalation in their policies on ESG issues. Index funds' confrontational and competitive activism on ESG is hard to square with their passive approach to more conventional corporate governance questions.

* Professor of Law, University of Virginia School of Law. For useful comments and suggestions we are grateful to Steve Bainbridge, George Geis, Kate Judge, Dorothy Lund, Ariel Porat, Mark Roe, Leo Strine, Andrew Tuch, participants at the UVA/UCLA Corporate & Securities Law Conference, Tel Aviv Corporate Governance Seminar, Tel Aviv Law & Economics Workshop, Tulane Corporate & Securities Law Round Table, University of Chicago Law School Faculty Workshop.

† Professor of Law, University of Virginia School of Law

‡ Professor of Law, Boston University School of Law

Electronic copy available at: https://ssrn.com/abstract=3439516

To explain this dichotomy in approaches, we argue that index funds are locked in a fierce contest to win the soon-to-accumulate assets of the millennial generation, who place a significant premium on social issues in their economic lives. With fee competition exhausted and returns irrelevant for index investors, signaling a commitment to social issues is one of the few dimensions on which index funds can differentiate themselves and avoid commoditization. For index funds, the threat of millennial migration to another fund is more significant than the threat of management retaliation. Furthermore, managers themselves, we argue, face intense pressure from their millennial employees and customers to respond to their social preferences. This three dimensional millennial effect—as investors, customers and employees—we argue, is an important development with the potential to provide a counterweight to the wealth-maximization paradigm of corporate governance.

We marshal evidence for this new dynamic, situate it within the existing literature, and consider the implications for the debate over index funds as shareholders and corporate law generally.

Electronic copy available at: https://ssrn.com/abstract=3439516

> [M]illennial workers were asked what the primary purpose of businesses should be – 63 percent more of them said "improving society" than said "generating profit.". . . [T]he sentiments of these generations will drive not only their decisions as employees but also as investors, with the world undergoing the largest transfer of wealth in history: $24 trillion from baby boomers to millennials.[1]

—Larry Fink, CEO of BlackRock, the world's largest asset manager

I. INTRODUCTION

Recently, the attention of business law scholars, corporate law practitioners, executives, and corporate directors has turned to the role of giant index mutual funds as the most important shareholders in many large companies. Together, the "big three," BlackRock, Vanguard, and State Street ("SSGA"), control a staggering 25 percent of the shares of all S&P 500 companies, and this share is growing.[2] Across the pages of top law reviews,[3] at prestigious roundtables, and in board rooms around the world, commentators have debated whether index funds, which seek only to track the market at low cost and not outperform it, will nevertheless invest the resources necessary to be vigilant shareholders.

In broad strokes, the debate over index funds as shareholders has resolved into camps. Critics argue that index funds, as cost-conscious, passive investors, have essentially zero incentive to ensure that the companies they invest in are well-run.[4] Since index funds hold the same companies as their competitors, investing in improving the value of their portfolio will not provide a competitive advantage, and might upset managers who could in turn direct their firm's retirement savings to other funds. These critics point to evidence showing that across a range of governance issues, index funds take a "don't rock the boat" approach. They

1. Larry Fink, *2019 Letter to CEOs*, BLACKROCK (2019) https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter.

2. Lucian Bebchuk & Scott Hirst, *Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy*, 119 COLUM. L. REV. 2029, 2033 (2019).

3. *See, e.g.*, *id.*; Jill Fisch, Assaf Hamdani & Steven Davidoff Solomon, *The New Titans of Wall Street: A Theoretical Framework for Passive Investors*, PENN. L. REV. 17 (2019); Dorothy Shapiro Lund, *The Case Against Passive Shareholder Voting*, 43 J. of Corp. L. 101 (2018); Ronald J. Gilson & Jeffrey N. Gordon, *The Agency Costs of Agency Capitalism: Activist Investors and the Revaluation of Governance Rights*, 113 COLUM. L. Rev. 863 (2013).

4. *See generally* Bebchuk & Hirst, *supra* note 2; Lund, *supra* note 3.

Electronic copy available at: https://ssrn.com/abstract=3439516

rarely challenge executives,[5] lag other institutions in promoting corporate governance best practices, never bring shareholder proposals,[6] and tend to side with incumbent managers in contested elections.[7] Relative to their portfolio size, the big three have tiny corporate stewardship teams that, purely as a matter of personnel, can dedicate little time to individual companies.[8]

To be sure, scholars and index fund advisors themselves identify some reasons that index funds might worry about firms' success, such as advising fees and competition from active funds.[9] Even those scholars and fund advisors who defend index funds' stewardship, however, argue that index funds are likely to undertake only those interventions with the potential to have wide and significant impact on firms' value.[10] Furthermore, both sides largely agree that index funds have disincentives to actively promote governance improvements against management interests.[11] While the debate

5. Leo E. Strine, *Fiduciary Blind Spot: The Failure of Institutional Investors to Prevent the Illegitimate Use of Working Americans' Savings for Corporate Political Spending,* 97 WASH. U. L. REV. 1007, 1025 (2020) (highlighting index funds' passivity in monitoring management political spending).

6. *See, e.g.*, Bebchuk & Hirst, *supra* note 2, at 2040 (finding that index funds do not submit shareholder proposals).

7. *Id.* at 2094. *S*ee *also* Alon Brav et al., *Picking Friends Before Picking (Proxy) Fights: How Mutual Fund Voting Shapes Proxy Contests* 18-19 (Colum. Bus. Sch., Research Paper No. 18-16, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3101473 (finding index funds more likely than other funds to vote against hedge fund nominees in contested elections).

8. Bebchuk & Hirst, supra note 2, at 2076-83.

9. *See, e.g.*, Fisch, Hamdani & Davidoff, supra note 3, at 33 ("If investors believe that passive funds cannot offer a better rate of return than active funds, they will flee to active funds, and vice versa."); Marcel Kahan & Edward B. Rock, *Index Funds and Corporate Governance: Let Shareholders be Shareholders* 1 (N.Y.U. Law and Economics Research Paper No. 18-39) ("With regard to the highest profile contests that will likely affect firm value, the strong direct incentives should assure that the Big Three will vote intelligently."), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3295098.

10. *See e.g.,* Fisch, Hamdani & Davidoff, *supra* note 3, at 18 (arguing that index funds "focus on issues with a broad market impact, such as potential corporate governance reforms, that have the potential to reduce the underperformance and mispricing of portfolio companies."); Kahan & Rock, *supra* note 9, at ("When institutional investors are acting as "deciders", especially in the small number of controversies with significant implications for firm value, the evaluation of their incentives and capacities are both fundamentally different than with regard to routine and continuous "stewardship" of portfolio firms.").

11. Bebchuk & Hirst, *supra* note 2 at 2037 ("When index fund managers face qualitative stewardship decisions, we show that they have incentives to be excessively deferential—relative to what would best serve the interests of their own beneficial investors—toward the preferences and positions of the managers of portfolio companies."); Kahan & Rock, *supra* note 9 at 47-48 ("A second, long recognized source of conflicts is the desire of stock-pickers for investment advisors to maintain cordial relationship with management of their portfolio companies . . . by not casting votes against management when voting against management would enhance firm value, they do so at the expense of shareholders-

Electronic copy available at: https://ssrn.com/abstract=3439516

is vigorous thus, there is reasonable consensus that index funds are mostly reticent, largely docile shareholders, except maybe with respect to interventions with a dramatic effect on firms' value.

This Article makes several contributions to the literature. We first show that the consensus view of index fund stewardship is both factually and theoretically incomplete: When it comes to ESG (environmental, social and governance) issues, index funds are far from docile.[12] With respect to these salient social issues, index funds boldly challenge managers, vote out directors, and demonstrate vocal leadership in thought and deed—activities that are sharply at odds with the conventional account of index fund passivity. Importantly, index fund activism on these issues is not just cheap talk, rather, it directed problematic firms systematically, and generated notable effects. In 2017 for example, after State Street announced its objection to all male boards in its portfolio firms, the index fund voted against 400 of the 476 firms in its portfolio that did not have any female director. By the end of 2018 more than 300 of these firms added a female director. Accordingly, that in July 2019 the last all-male board in the S&P 500 added a woman to its ranks, is largely attributable to the outspoken and confrontational efforts of the big three, and BlackRock and State Street in particular.

Our second contribution is to show that, in contrast to conventional wisdom, funds compete aggressively with each other in escalating their ESG policies. For example, in pressing for increased representation of women on corporate boards, index funds have voted against directors, proactively publicized these votes, and used the media to highlight their confrontations with management. State Street and BlackRock have engaged in a pattern of escalating demands with respect to board diversity. As a result, these asset managers are currently well ahead of other corporate governance institutions, like Institutional Shareholder Services (ISS), in pressing this issue.

at-large"); Fisch, Hamdani & Davidoff, *supra* note 3, at 65 ("One concern is that potential business ties between sponsors and companies' management may affect passive funds' voting behavior. . . . These services create the risk that Vanguard and Fidelity will vote the shares of their funds in favor of management rather than in the best interests of the fund shareholders, in order to curry favor from management and win or retain 401(k) plan business.").

[12] *See, e.g.*, Paul Rissman & Diana Kearney, *Rise of the Shadow ESG Regulators: Investment Advisers, Sustainability Accounting, and Their Effects on Corporate Social Responsibility*, 49 Envtl. L. Rep. 10155 (2019).

Electronic copy available at: https://ssrn.com/abstract=3439516

Similarly, while efforts on the environmental front were initiated with a general request for companies to address "sustainability," Blackrock has recently announced a significant push related to climate change, including divesting its active funds from coal stocks.[13] While index funds are generally thought to keep a low profile to avoid backlash from managers or regulators, we show that funds have pressed ahead despite political backlash to some of these interventions. Consequently, we argue that on ESG issues, index funds are far from reticent shareholders—they are perhaps more active and influential than institutional shareholders have ever been.

Our third contribution is to offer an explanation of why index funds' actions with respect to ESG issues bear so little resemblance to their activities on more traditional matters of shareholder stewardship. The former cannot be explained within the literature's existing theoretical framework, which approaches shareholder stewardship largely as a trade-off between asset management fees and the fear of management retaliation. While index funds might fear management retaliation, we show that a more potent concern is on the horizon: In the next two decades, somewhere between $12 and $30 trillion will pass to the millennial generation in what BlackRock CEO Larry Fink has called "the largest transfer of wealth in history."[14] This staggering wealth, which dwarfs the cumulative assets under management of the big three, is the prize sought by asset managers across the economy as the millennial generation begins to enter its wealth accumulation phase. To win the millennial generation, index funds have turned their attention not simply to share price—the conventional marker of shareholder value—but to the social issues that millennial investors care about: shareholder values.

When it comes to investment preferences, millennials are markedly different than their predecessors. The literature and market research

13. *See infra* notes 86-88 and accompanying text.

14. *See* Gillian Tett, *Millennial Heirs to Change Investment Landscape*, FIN. TIMES, (Sep. 20, 2018), https://www.ft.com/content/59f6562a-786d-11e8-af48-190d103e32a4 [https://perma.cc/F2R6-U5C7] (citing U.S. Trust estimate that $12 trillion in assets will pass to Millennials over the next decade, and Deloitte estimate that $24 trillion will be transferred over the next fifteen years); Fink, *supra* note 1 ("In the years to come, the sentiments of these generations will drive not only their decisions as employees but also as investors, with the world undergoing the largest transfer of wealth in history: $24 trillion from baby boomers to Millennials."; Liz Skinner, *The Great Wealth Transfer is Coming, Putting Advisers at Risk,* INV. NEWS (Aug. 7, 2015). https://www.investmentnews.com/article/20150713/FEATURE/150719999/the-great-wealth-transfer-is-coming-putting-advisers-at-risk ("Over the next 30 years, an epic $30 trillion will be passed down from baby boomers to Generation X to Millennials.").

Electronic copy available at: https://ssrn.com/abstract=3439516

unanimously concludes that, compared to prior generations, millennials are less interested in investment returns and more interested in their investments reflecting their social values.[15] It is no surprise that index funds are out front in the race to demonstrate a commitment to millennial social values: With prices for index funds already cut to the bone, and investment performance an irrelevant consideration for index investors, index funds must seek out differentiation in the market where they can find it. Using their voting power to promote their investors' social values, and doing so publicly and loudly, is a way for these funds, which otherwise risk becoming commodities, to give millennial investors a reason to choose them.

That index funds are chasing millennial wealth explains their aggressive, competitive approach to ESG issues. First, we argue, it is in the interest of index funds to not only respond to existing shareholder preferences for social values, but to find new issues that can be made salient and become first movers on those as well. Second and related, we show that funds caught flat footed tend to respond with more aggressive policies than funds that acted earlier. Thus, after State Street scored a global sensation with its Fearless Girl statue on Wall Street and announced that it would vote against directors of firms with no female directors, BlackRock announced that it would expect all boards to have a minimum of two female directors. And it did not end there—State Street followed with more stringent voting policies, and BlackRock then responded with an even more aggressive approach, voting against boards at firms with which they had not previously engaged.[16]

Third, while funds must still be wary of management backlash— the Article shows that investors' preference for social values is a critical factor that will act as a counterweight to those forces. Eventually, managers—who face pressure on social issues not just from index fund shareholders, but from *employees* and *customers* as well—will have to respond. For example, following its explosive scandal, Papa Jones' income from selling pizza dropped from $22.8 million to $4.6 million,.[17] Indeed, on August 19, 2019, the Business Roundtable, a group of CEOs of the largest corporations in the world, announced that they "share a fundamental commitment to all of our

15. *See infra* Section III.
16. *Id*.
17. *Id.*

Electronic copy available at: https://ssrn.com/abstract=3439516

stakeholders," including customers, employees, and communities.[18] In invoking the stakeholder value theory, the titans of mainstream capitalism suggest that changing shareholder values are having an effect on firms.

The importance of these developments should not be understated. What we are witnessing is an emergence of a new framework for corporate governance that has already reshaped hundreds of boards. The consequences of this shift are just beginning to be realized. In response to competition for money to manage, the largest pools of assets in our economy have turned their power as shareholders to advancing investors' social agenda. Far from being asleep at the switch as shareholder stewards, these funds are reconceiving what it means to act in shareholders' interests. Similarly, in response to pressure from their millennials' employees and consumers, managers across firms conform in advancing social goals.

Our fourth and final contribution is to begin to consider the impact of these developments on corporate law. Shareholder value assumption influences the law as well. While corporate scholars are acquainted with theories of the firm that ask managers to subordinate shareholder value to the interests of other constituencies under some circumstances, the consequences of a world in which shareholders themselves have strong preferences for social responsibility and are positioned to act on those preferences through the traditional levers of corporate power are less explored. Already, the Trump administration has pushed back against funds' efforts to promote social values in the context of retirement plans. However, we argue that if shareholders own the firm, then their preferences, broadly construed, should be taken seriously.

***

This article proceeds as follows. In Part I, we describe the existing debate over the role of index funds as reticent shareholders. In Part II, we offer contrasting evidence of index funds' aggressive approach to social issues and argue that the existing account of index funds' incentives cannot explain what we observe. In Part III, we establish that Millennial investors have the potential future wealth to move markets and that social values drive many of their economic decisions. In Part IV, we analyze index funds' incentives in light of the new Millennial economy, show that funds face

18. Our Commitment, BUS. ROUNDTABLE, https://opportunity.businessroundtable.org/ourcommitment/ (last visited June 20, 2020).

Electronic copy available at: https://ssrn.com/abstract=3439516

fierce competition to cater to Millennials' preferences, assert that index funds' observed activism is explained by the pursuit of Millennial investors' assets, and argue that this is an essential extension of the existing literature. In Part V, we discuss the implications of this new approach to corporate governance.

II. THE DEBATE OVER INDEX FUNDS AS SHAREHOLDERS

As corporations have replaced defined benefit pension plans with defined contribution retirement plans (e.g., 401(k) plans), huge pools of assets have accumulated in mutual funds. These funds, which offer simple and low-cost diversification across a portfolio of many companies, have grown by more than 50 percent since 2010.[19] As how workers save for retirement evolves, a second transformation is underway in the mutual fund industry: mutual fund assets are now largely flowing to index funds that seek only to match the performance of the market at the lowest possible cost, rather than to actively managed funds that seek to beat the market through skilled stock picking by a portfolio manager.[20] This is a significant development because a small set of index funds have become, by dollar value, the most important shareholders in the capital markets. Currently, the largest index fund operators, Vanguard, BlackRock, and Fidelity, hold about 25 percent of the voting power in all S&P 500 companies.[21]

It is axiomatic that firms are owned by their shareholders, but the practical meaning of this ownership relationship has evolved considerably over time. For decades, the dominant paradigm of corporate governance was the Berle and Means[22] view of dispersed, rationally passive shareholders at the mercy of managers who exercised de facto control over both the operation of the firm and the membership of the board of directors. Over the last several decades, this paradigm has been displaced by successive waves of financial and legal innovation, with dramatic consequences for corporate governance. The leveraged buyout wave of the 1980s, enabled by the creation of markets for high-yield debt instruments, disrupted the all-too-

19. *2019 Investment Company Factbook*, INVESTMENT COMPANY INSTITUTED 11 (2019), https://www.ici.org/pdf/2019_factbook.pdf.

20. Kevin McDevitt and Michael Schramm, *2018 U.S. Fund Flows Trends in 5 Charts*, MORNINGSTAR (Jan. 28, 2019), https://www.morningstar.com/blog/2019/01/28/us-fund-flows-trends.html.

21. Bebchuk and Hirst, *supra* note 2 at 2033.

22. ADOLF BERLE & GARDINER MEANS, The Modern Corporation and Private Property (1932).

Electronic copy available at: https://ssrn.com/abstract=3439516

comfortable position of managers by activating the market for corporate control. The subsequent development of the poison pill created a substantial obstacle to buyouts, but led to the rise of shareholder activist campaigns, largely initiated by hedge funds that sought to profit by influencing firm strategy rather than by buying the firm entirely. Modern corporations operate under the threat of these hedge fund interventions.

Now, the realities of firm ownership have evolved further to put index funds at the forefront. Hedge fund activism depends critically on persuading other shareholders that the hedge fund's preferred strategy is a good one. With a relatively small number of funds holding large stakes in many of the largest firms, the big three have become the pivotal shareholders across the market. The question of the moment in corporate law is thus how index funds will wield their considerable power.

A. THE INSTITUTIONAL STRUCTURE OF MUTUAL FUNDS

It is helpful to review the structure of mutual funds, whether index or actively managed. We will first give a very brief overview of mutual funds and their advisors, distinguish active and index funds, discuss how mutual funds vote their proxies, and examine the consequences of those decisions for firms.

1. The Institutional Structure of Mutual Funds

Mutual funds are pools of assets with a distinct legal identity and unique regulatory regime. Mutual funds take in assets from investors and issue shares in return. These assets are invested in any number of securities, but most mutual funds invest in the common stock of public companies.[23] Mutual fund investors can redeem their shares at any time. Redemption means that the mutual fund must return cash to investors equivalent to their pro rata share of the fund's portfolio at its then current value. Unlike with an operating company, investors in mutual funds do not need to find a buyer for their shares; they can simply ask for their investment back, and the mutual fund has a legal obligation to return it.[24]

Each mutual fund is a separate legal entity with its own board of directors, but, as a practical matter, mutual funds are operated by complexes

23. *2019 Investment Company Factbook*, *supra* note 19.
24. Investment Company Act, 15 U.S.C. § 80a-1.

Electronic copy available at: https://ssrn.com/abstract=3439516

that manage multiple funds.[25] We generally associate these complexes with mutual fund operation: Vanguard, Fidelity, T. Rowe Price, and others. Complexes may sponsor hundreds of mutual funds offering different investment goals and management styles. Mutual fund complexes make money by charging advisory fees to manage the assets in the fund. These fees are determined as a percentage of the assets under management and generally do not depend on how the fund performs. While hedge fund managers reap huge rewards when their funds have strong returns, mutual funds have a far tamer compensation profile as a result of statutory limits on investment advisor incentive.[26] Specifically, while hedge fund managers can charge fees that allow them to share in the appreciation of the portfolio, mutual funds can only charge such fees if they also refund fees should there be a shortfall.[27] In practice, most mutual funds simply charge a percentage of assets under management. As a result, mutual fund managers are rewarded for managing large funds, but not directly for performance.

There are two broad classes of mutual funds: actively managed funds that seek to beat the market by picking stocks that are likely to perform better than average and index funds that seek only to track the market at the lowest possible cost. While both types of mutual funds charge fees as a percentage of assets and not based on performance, active funds nevertheless have powerful incentives to worry about the performance of their funds. Competition for assets is the primary mode of competition among active funds. Active funds sell the capacity to beat the market, and research has shown that active funds that outperform the market are likely to grow.[28] Since fees are a percentage of fund assets, large funds generate more revenue. As a result, active fund managers care deeply about performance. In particular, active funds seek strong performance relative to other active funds of similar investing styles. An active fund that posts a strong year can expect a dramatic influx of assets to manage and—even holding the fee constant as a percentage of assets—will generate more revenue the following year.

25. *See generally,* John Morley & Quinn Curtis, *Taking Exit Rights Seriously: Why Governance and Fee Litigation Don't Work in Mutual Funds*, 120 YALE L.J. (2010).

26. For an overview of the regulation of compensation, *see* Ian Ayres and Quinn Curtis, *Protecting Consumer Investors by Facilitating "Improved Performance" Competition*, 2015 ILL. L. REV 1, 28-31.

27. *Id.*

28. Eric Siri & Peter Tufano, *Costly Search and Mutual Fund Flows*, 53 J. FIN. 1589, 1595 (1998).

Electronic copy available at: https://ssrn.com/abstract=3439516

The same performance incentive does not occur in index funds. Index fund operators care about their funds being as large as possible, because, like active funds, they will generate more revenue from asset-based fees. However, index funds do not seek to beat the market, so they cannot grow large via eye-popping performance. Instead, index funds compete largely on price. Since all index funds that track the same index sell the same portfolio, tracking the index in question at the lowest possible price is the most important means of attracting new investments.

Both index funds and actively managed funds have the power to vote the shares they hold in their portfolios on behalf of their investors. In fact, the large pools of assets these funds represent mean that these funds have—at least potentially—considerable influence over companies in which they invest.[29] Since 2003, the SEC has required that funds disclose how they vote their proxies.[30] Funds have responded by voting their proxies at nearly every opportunity.[31] Given the diversity of their portfolios, mutual funds cast ballots on a large number of issues, and mutual fund complexes, with several hundred funds under management, cast thousands of votes.[32] Voting policies are largely set at the complex level, and individual funds—which have legal authority to vote their shares—may delegate that authority to a central authority within the mutual fund complex.[33] An industry has sprung up selling proxy-advisory services to help asset managers manage voting on numerous complex issues.[34]

As major shareholders, mutual funds' activities as shareholders have the potential to strongly influence management, but the degree to which mutual funds have an incentive to invest in using "voice"[35] to enhance corporate performance is unclear. Given the number of votes mutual funds cast, a debate—considered in detail below—has sprung up around whether mutual funds invest sufficiently to cast informed votes.

29. Gilson & Gordon, *supra* note 3, at.

30. Fisch, Hamdani & Davidoff, *supra* note 3, at 44.

31. *Id.*

32. *Id.*

33. *Id*.

34. Stephen Choi, Jill Fisch & Marcel Kahan*, Director Elections and the Role of Proxy Advisors,* 82 S. CAL. L. REV. 649, 650 (2009).

35. Henry Hansman & Reinier Kraakman, *Exit, Voice, and Liability: Legal Dimensions of Organizational Structure* (characterizing the ability to sell, engagement management, and sue for breach of fiduciary duties, as "exit," "voice," and "liability" in corporate law).

Electronic copy available at: https://ssrn.com/abstract=3439516

2. The Promise and Pitfalls of Mutual Funds as Corporate Monitors

The significant influx of invested assets into mutual funds over the last several decades raised hopes that mutual funds might overcome the problems of dispersed, rationally disinterested shareholders that tended to concentrate power in the hands of managers.[36] For several reasons, mutual funds, whether index or active, did not become the fierce advocates for shareholder interests that some had hoped, at least not with respect to the traditional concerns of corporate governance. The reasons for this are slightly different with respect to active funds and index funds. While there are many common factors, it is worth laying out the reasons why active funds are often, in the words of Gilson and Gordon, "reticent"[37] when it comes to engaging in controversial corporate governance issues.

The reticence of active mutual funds is best understood in contrast to the aggressive stance of activist hedge funds when it comes to challenging management. It is common for a hedge fund to take a concentrated stake in a struggling company and use the voting power associated with that stake to influence the company's directors to make changes or to run a proxy campaign to replace the board. If the market responds positively to these changes, which it often does, the hedge fund stands to profit as the value of its stake increases. In principle, an actively managed mutual fund could similarly profit by investing in a firm and using the tools of shareholder control to improve that firm's operations, thereby increasing its stock price and increasing the value of the fund's portfolio. But the realities of active mutual fund management render this type of intervention only rarely attractive.

First, whatever benefits actively managed mutual funds would obtain from such a strategy would be shared by all other owners of the firm. This is—of course—true for activist hedge funds as well, but the effect of this dilution is more acute for active funds for two reasons. To begin, other active funds with the same investment style are likely to have similar stakes in the same company. By investing in improving the governance of one such company, the active fund benefits, not just other market participants, but its direct competitors. Since active funds care about relative performance, this

36. BERLE & MEANS, *supra* note 22.
37. Gilson & Gordon, *supra* note 3 at 889.

Electronic copy available at: https://ssrn.com/abstract=3439516

is a significant disincentive to activism.[38] To be sure, the fund could overweight the stock in its portfolio, but its differential benefit relative to other funds with similar stakes would nevertheless be diluted. This is related to the second obstacle to this strategy, which is that legal limits on concentrated ownership for mutual funds restrict the degree to which they can focus their holdings on a particular company. Since mutual funds must be diversified,[39] their stake in any particular company must inevitably be fairly small, meaning the profits from intervention will not only be shared with the shareholders in the target company, but diluted by the other holdings in the fund's portfolio. Hedge funds are free to take much more concentrated stakes, and therefore are less susceptible to this problem.

Second, and probably most importantly, the fee structure of mutual funds provides weaker incentives for this type of intervention. Since hedge fund managers typically receive 20 percent of the portfolio growth they generate, they have strong incentives to invest in identifying and pursuing value-creating activist opportunities. Mutual funds, which benefit from strong performance only by increasing assets under management after posting strong performance, have less powerful incentives, and so are less apt to pursue challenging strategies. Put more bluntly, asset managers with the ability to conduct value-increasing activist campaigns are likely to find the hedge fund sector a more lucrative place to apply their skills.

These obstacles do not mean that actively managed mutual funds are indifferent to low-quality companies. Rather, in ordinary circumstances, an actively managed mutual fund has a far easier remedy than to challenge management: simply sell the stock. By selling stocks of companies with poor management, actively managed mutual funds increase the chance of their portfolio beating the market without incurring the cost of engaging in an activist campaign. Moreover, to the extent active mutual funds are better than their competitors at finding such companies, the benefits of selling will not be shared in the way that the benefits of activism are.[40]

38. *Id*. at 889-90.
39. Investment Company Act, 15 U.S.C. § 5(b).
40. Gilson & Gordon, *supra* note 3, at 893.

Electronic copy available at: https://ssrn.com/abstract=3439516

B. INDEX FUNDS AND CORPORATE GOVERNANCE: THEORY

Many obstacles to shareholder activism in active mutual funds apply to index funds as well, including diversified portfolios, fees based on assets under management, and regulatory obstacles. However, index funds differ in that they cannot sell a stock just because it appears likely to underperform. Index funds sell market exposure to a particular index and therefore are not in the business of picking and choosing stocks. Even if the portfolio manager is confident that a stock will underperform, index fund investors are locked in. Thus, index funds lack that "exit" option that dominates for active funds and have very long-term time-horizons for stocks they hold. Perhaps the absence of an exit option, the long-term horizon, and the enormous (and growing) shareholder power of index funds mean that they will be less reticent than active funds. Whether this is the case is the subject of an ongoing debate, described in some detail below.

1. Obstacles to Effective Index Fund Governance

The absence of an option to sell might increase index funds' willingness to use voice, but index funds also differ from active funds in that they do not compete on performance, at least with other index funds.[41] All index funds that track the same index will deliver performance that is all-but identical performance before fees, with fees being the primary differentiator among funds. Index funds cannot, even in principle, outperform the market and can only outperform their competitors by charging less. Any expenditure on informed shareholder voting increases costs with no direct competitive benefits, and—as with active funds—any improvements in companies due to these expenditures would be shared among competitive index funds holding the same companies.[42] There is simply no competitive edge against other index funds that can be gained by investing in governance.[43]

Ensuring that companies in the index perform well may increase the return of the index as a whole and thus increase assets under management and the fees that index funds collect, but the economic significance of this is

41. Fisch, Hamdani & Davidoff, *supra* note 3, argue that index funds face competition from active funds.

42. *See* Bebchuck & Hirst, *supra* note 2, at 2037.

43. *See, e.g.*, Sean J. Griffith, *Opt-in Stewardship: Toward an Optimal Delegation of Mutual Fund Voting Authority*, Eur. Corp. Gov. Inst. Working Paper No. 463 (2019); Sean J. Griffith & Dorothy S. Lund, *Conflicted Mutual Fund Voting in Corporate Law*, 99 B.U. L. Rev 1151 (2019).

Electronic copy available at: https://ssrn.com/abstract=3439516

minimal. A fund with a 0.1 percent fee and a very large five percent ownership stake would invest only $1,000 to attain a $20,000,000 enhancement to the value of a portfolio company.[44] There is simply not enough direct impact on fund advisor income to support significant shareholder activism based solely on assets under management.

Bebchuk and Hirst note that index funds have a more conventional agency problem. Many of the largest fund managers also have significant 401(k) practices that involve selling retirement plan services to companies who might be the subject of activist campaigns. Challenging management at these firms could risk these lucrative contracts. Indeed, empirical evidence supports such a claim.[45] But even absent a direct client relationship, these business relationships might motivate index fund advisors to take a more management-friendly approach to corporate governance issues generally, even without engaging in favoritism directed at particular firms.[46]

Finally, it should be noted that the other obstacles to active fund activism apply to index funds with equal force. They hold diversified portfolios and so lack the large stakes needed to support profitable activism, and their fee structure gives their advisors little incentive to find value-creating activist opportunities.

2. Potential Incentives for Index Fund Governance

It may seem that index funds have no incentive to spend on exercising shareholder power, but this is not strictly true. There are some countervailing factors that might induce index funds to engage in activism and invest in governance. This section analyzes some of the arguments suggesting that index funds have incentives to invest in activism.

First, mutual funds own shares on behalf of their investors, and have fiduciary duties to exercise their ownership rights in the interest of investors.[47] The SEC has specifically encouraged that these fiduciary duties encompass a duty to vote their shares.[48] As noted above, mutual funds generally do vote their proxies.

44. *See* Bebchuck & Hirst, *supra* note 2, at 2042.

45. *Id.*

46. *Id.*

47. Investment Company Amendments Act of 1970 § 36(b).

48. *See* Disclosure of Proxy Voting Policies Voting Records By Registered Management Investment Companies Investment Company Act Release No. 25922, 17 C.F.R. 239, (Jan. 31 2003).

Electronic copy available at: https://ssrn.com/abstract=3439516

Second, index funds, which have become shareholders of enormous significance in recent years, may fear regulation and be at pains to demonstrate that they are responsible stewards as a means of forestalling government intervention.[49] By demonstrating that they are engaged owners and "good citizens" through investments in oversight and stewardship, index funds might make it less likely that they would become the subjects of costly regulation. Of course, index funds might invite regulatory scrutiny by being too aggressive as well, so avoiding regulation might motivate funds to take relatively safe, pro-management stances, even as they demonstrate their diligence by reliably voting their proxies.

Index funds might face competitive pressure from non-index funds as well. Fisch, Davidoff-Solomon and Hamdani dispute the notion that index funds have no incentive to worry about firm performance.[50] They argue that index funds compete not only against other index funds, but also against actively managed funds generally. That is, if index funds begin to lag behind active funds, assets will flow out of index funds collectively, reducing the revenue they generate. Ensuring that companies are well-run in general helps mitigate the potential ability of active managers to beat the market, ensuring that index investing remains a viable strategy.

This important argument surely captures a competitive dynamic that is true as far as it goes, but how far it goes is quite unclear. First, while index funds might collectively fear a flight to active management, engaging in stewardship to prevent such a flight would nevertheless be subject to a classic collective action problem. That is, an investment an individual fund made in preventing the outperformance of active funds by improving corporate governance would produce benefits shared among all index funds. Under such circumstances, we would expect index funds to systematically underinvest in governance. Secondly, the large index fund managers also provide active management services.[51] While outflows from index funds would be undesirable from the point of view of these managers, they would nevertheless be positioned to capture at least a portion of funds moving to active management.

49. Bebchuk & Hirst, *supra* note 2, at 2130.

50. Fisch, Hamdani & Davidoff, *supra* note 3, at 32.

51. Kahan & Rock, *supra* note 9, at 20.

Electronic copy available at: https://ssrn.com/abstract=3439516

It is also notable that mutual funds are able to free-ride on the efforts of activist hedge funds who have more powerful incentives.[52] Activist hedge funds take large stakes, but index funds' holdings are larger still and—as neutral, sophisticated parties—the position of index funds in proxy contests is influential. As such, index funds are increasingly the swing voters in contested director elections and other activist interventions. One the one hand, the ability to free ride means that index funds' investment in governance can be lower than it otherwise might—perhaps much lower. On the other hand, their role as swing voters raises the stakes on index funds getting it right, and means that a pro-management bias from index funds could be damaging to shareholder value in macro terms.

Without taking sides in the debate over index fund activism, it is clear that there are reasons that index funds might not engage in optimal oversight of the companies they own. That is, they may invest less in oversight, stewardship, and governance than the ultimate owners of the index funds, their investors, would prefer. Index funds might also be biased toward management as a means of keeping the peace with managers or regulators who might be influenced by regulators. We need not settle this debate in order to characterize the new dimension our argument brings to the table.

C. INDEX FUNDS AND CORPORATE GOVERNANCE: THE CONVENTIONAL VIEW OF PRACTICE

While there is some dispute as to the incentives that index funds have to invest in corporate governance, there is relative agreement that funds have limited incentives to intervene in corporate governance and can be expected to do so only when the economic benefits in terms of improved firm value are large, and the activism is not firm specific so that the index fund can benefit from economies of scale.[53] Thus, index funds can be expected to focus on market wide activism and primarily engage on issues that have significant potential to improve the value of companies. Confrontations with

52. Gilson & Gordon, *supra* note 3, at 908.

53. Kahan & Rock, *supra* note 9, at ("When institutional investors are acting as "deciders", especially in the small number of controversies with significant implications for firm value, the evaluation of their incentives and capacities are both fundamentally different than with regard to routine and continuous "stewardship" of portfolio firms.")

Electronic copy available at: https://ssrn.com/abstract=3439516

management will likely be avoided wherever possible to reduce the risk of backlash.[54]

With respect to conventional types of corporate governance activism, index fund practice is largely consistent with this theoretical picture, as documented in a recent, comprehensive overview of index fund activism by Bebchuck and Hirst.[55] Put briefly, the evidence shows that index funds vote their proxies, but rarely initiate shareholder action, and have small—but growing—corporate governance operations. The current debate turns less on disagreement about the facts on the ground when it comes to index fund corporate governance practices than it does on the harder-to-settle question of whether these practices are sufficient.

The big three index fund operators have surprisingly small corporate governance teams. BlackRock, Vanguard and State Street have forty-five, twenty-one, and twelve personnel working on corporate governance issues, respectively.[56] Of course, it is not possible to specify what appropriate staffing levels *ought* to be, but it is striking that firms that each hold more than 17,000 portfolio companies and control 20 percent of the S&P 500 have fewer than 100 individuals charged with dealing with corporate governance issues at those companies. As Bebchuk and Hirst note, this amounts to between one-sixth and one-half day of an individual's time per portfolio company per year.

Bebchuk and Hirst find that the big three index fund operators did not bring a single shareholder proposal under 14a-8 in the ten years from 2008-

54. Bebchuk & Hirst, *supra* note 2, at 2037 ("When index fund managers face qualitative stewardship decisions, we show that they have incentives to be excessively deferential—relative to what would best serve the interests of their own beneficial investors—toward the preferences and positions of the managers of portfolio companies."); Kahan & Rock, *supra* note 9, at 46 ("A second, long recognized source of conflicts is the desire of stock-pickers for investment advisors to maintain cordial relationship with management of their portfolio companies . . . by not casting votes against management when voting against management would enhance firm value, they do so at the expense of shareholders-at-large."); Fisch, Hamdani & Davidoff, *supra* note 3, at 65 ("One concern is that potential business ties between sponsors and companies' management may affect passive funds' voting behavior. Commentators have identified some of the potential conflicts arising from business ties between public companies and fund sponsors. For example . . . Vanguard and Fidelity provide extensive services to employer-sponsored 401(k) plans. These services create the risk that Vanguard and Fidelity will vote the shares of their funds in favor of management rather than in the best interests of the fund shareholders, in order to curry favor from management and win or retain 401(k) plan business.").

55. *See generally* Bebchuck & Hirst, *supra* note 2.

56. *Id*. at 2077.

Electronic copy available at: https://ssrn.com/abstract=3439516

2017 when nearly 4,000 such proposals were made, many of which the index funds supported. The big three index fund complexes are not averse to supporting these proposals, particularly when they pertain to important matters of corporate governance.[57] And shareholder proposals are quite inexpensive to initiate; they are often undertaken by small investors or even individuals. Many portfolio companies have not yet adopted the corporate governance arrangements that the big three advocate, yet the large index investors have not seen fit to initiate the low-cost and effective intervention of a shareholder proposal, even once. This is consistent with the view that index funds generally have incentives to be reticent when it comes to interventions in corporate governance.

Index funds are also reticent when it comes to individual director nominations. Bebchuk and Hirst find that the big three did not directly nominate any directors to the boards of portfolio companies, nor do they find evidence that the big three highlight efforts to appoint specific directors in the stewardship reports.[58] It may be that index fund operators work quietly with nominating committees to encourage particular choices for director nominations, but if this is the case, the big three have not chosen to highlight these efforts publicly, even as they are at pains to demonstrate their stewardship efforts in other contexts.

Index funds tend to be followers rather than leaders in their published guidelines for corporate governance. Many routine matters are outsourced to proxy advisory services, with funds spending their limited resources on issues only when ISS or Glass Lewis identify potential problems.[59] While each of the big three publishes detailed voting guidelines, they are mutually similar and similar to the ISS and Glass Lewis guidelines in most respects.

There are countervailing points of evidence, though. The big three consistently point to engagement efforts that occur directly with managers of portfolio companies. As major shareholders, the big three are in a position to access management directly and get their attention. Index fund sponsors point to these activities as their preferred channel of stewardship and a basis for eschewing shareholder proposals. While these activities are largely undocumented so their extent and influence on managers is difficult to

57. Id.
58. Id.
59. Lund, *supra* note 3, at 124.

Electronic copy available at: https://ssrn.com/abstract=3439516

observe, it is clear that the low staffing of the big three as applied to corporate governance functionally limits the scope of these activities.

***

The above evidence reflects index funds' limited incentives to engage in conventional activism, but the existing literature does not address an important dimension of index fund activism that is largely inconsistent with this general characterization: as the next section will demonstrate, index funds have been leaders in demanding gender diversity on the boards of their portfolio companies.

III. INDEX FUNDS AS SOCIAL ACTIVISTS

Contrary to the existing account of index fund passivity, there are areas where index funds have in fact been aggressive in challenging management, withholding votes from unsatisfactory directors and changing corporate practice. This section documents extensive index fund activism around board diversity and other social issues. We review in detail how these efforts differ from index funds' engagements on more conventional dimensions of shareholder activism. We consider and dismiss elements of the current theoretical framework that have been offered to explain why index funds engage in significantly more aggressive activist behavior related to board diversity. Lastly, we conclude that the theoretical framework needs expansion.

A. INDEX FUND ACTIVISM ON SOCIAL ISSUES

Calls for public companies to increase the gender diversity of their boards of directors are not new, but in recent years, calls for diversification have come not just from social activists, but from investors, and companies have responded. In light of the foregoing discussion, it is surprising that index funds have been at the forefront of this movement. Despite their reticence in other areas of corporate governance, index funds have been vocal and aggressive in demanding more diverse boards, even more so than other corporate governance players like Institutional Shareholder Services (ISS) or actively managed funds. As the following parts show, index funds have engaged in broadly publicized campaigns, publicly announced votes against specific companies, adopted policies of voting against boards that fail to diversify, and have pressed increasingly stringent diversity requirements.

Electronic copy available at: https://ssrn.com/abstract=3439516

1. Index Funds' Outspoken Support for Diversity

Existing accounts of index fund activism are factually correct that index funds are typically reticent followers when it comes to corporate governance reforms, but when the subject matter of activism turns from conventional governance reforms to demands for increased gender diversity on boards, index funds have been notably outspoken, both in communications directed primarily at corporate managers and in marketing efforts directed at the general public.

By far the highest profile public action around board diversity was State Street's "Fearless Girl" statue, commissioned as part of a marketing campaign conceived by advertising agency McCann New York. The statue, a defiant young girl, was placed opposite the Charging Bull statue on Bowling Green in the Manhattan Financial District so as to appear to be staring it down. The campaign was meant, in part, to promote a fund operated by State Street that selectively invested in companies with gender-diverse boards. The index fund trades under the ticker symbol SHE, and a plaque at the base of the statue read "Know the power of women in leadership. SHE makes a difference." Erected on March 7, 2017, the day before International Women's Day, the statue drew immediate news coverage and social media attention. While initially given only a week-long permit, it ultimately remained in place for eighteen months, and a petition drive sought to make it permanent. Fearless Girl was a resounding success as a marketing campaign, but as described in more detail below, State Street followed this marketing coup with action. Concurrent with the placement of the statue, State Street announced that it would demand accountability from companies that lacked gender diversity on their boards.[60]

While the Fearless Girl campaign garnered significant news coverage, other index fund managers' efforts have been more specifically directed at corporate managers. In 2018, index fund giant BlackRock reached out to more than 300 companies in the Russell 1000 with fewer than two women

60. *See* Joann S. Lubin & Sarah Krouse, *State Street to Start Voting Against Companies That Don't Have Women Directors*, WALL ST. J., (Mar. 7, 2017), https://www.wsj.com/articles/state-street-says-it-will-start-voting-against-companies-that-dont-have-women-directors-1488862863 [https://perma.cc/WWL6-ZRNP].

Electronic copy available at: https://ssrn.com/abstract=3439516

on their boards "asking that they justify" the lack of diversity.[61] Unlike most engagement efforts, this engagement was widely publicized, and the tone—at least publicly—was far more confrontational than other types of index fund engagement: "It is absolutely not a thing that we do over bottles of wine. If they're lucky, they get a really nasty cup of BlackRock coffee," said BlackRock's head of global stewardship Michelle Edkins.[62] When interviewed by Bloomberg, Edkins' dissatisfaction with the responses from some firms' management was clear: "On board diversity, frankly some of the answers we got were from the 1880s . . . . There aren't any qualified women . . . . We don't need a woman director. We're not a consumer-facing company."[63]

For its part, Vanguard has also emphasized diversity in its engagement efforts. In a 2019 policy statement, Vanguard wrote "We have long believed in the importance of diversity in the boardroom, and we have increasingly advocated for greater representation of women on corporate boards."[64] As with BlackRock, Vanguard took a pro-diversity position in a letter to corporate directors, outlining its expectations that companies would make progress toward increased diversity.[65] Vanguard backed this expectation with an implied threat to vote against boards that failed to meet these expectations: "[Boards'] demonstration of meaningful progress over time will inform our engagement and voting going forward."[66]

61. *See* Emily Chasan, *BlackRock Asks Companies to Explain Dearth of Women on Boards*, BLOOMBERG (Feb. 2, 2018), https://www.bloomberg.com/news/articles/2018-02-02/blackrock-asks-companies-to-explain-dearth-of-women-on-boards.

62. *See* Sarah Krouse, *At BlackRock, Vanguard and State Street, 'Engagement' Has Different Meanings*, WALL ST. J., (Jan. 20, 2018), https://www.wsj.com/articles/at-blackrock-vanguard-and-state-street-engagement-has-different-meanings-1516449600?mod=article_inline.

63. See Emily Chasan, *BlackRock is Sick of Excuses for Corporate Boards Lacking Women*, BLOOMBERG (Nov. 3, 2018) https://www.bloomberg.com/news/articles/2018-11-03/blackrock-is-sick-of-excuses-for-corporate-boards-lacking-women.

64. THE VANGUARD GROUP, *Vanguard Investment Stewardship Perspectives: Board Diversity* (2019) https://about.vanguard.com/investment-stewardship/perspectives-and-commentary/persp_board_diversity.pdf.

65. *See* Ryan Vlastelica, *Vanguard Calls for More Diverse Corporate Boards, Better Climate-Change Disclosures*, MARKETWATCH (Sep. 1, 2017), https://www.marketwatch.com/story/vanguard-calls-for-more-diverse-corporate-boards-better-climate-change-disclosures-2017-08-31.

66. *Id.*

Electronic copy available at: https://ssrn.com/abstract=3439516

2. Backing Advocacy with Votes

These calls to action, both public and through back channel engagement with individual companies, were not idle talk. Index fund operators have not been afraid to aggressively challenge boards when companies are not responsive to calls for gender diversity, including voting against current directors.

In March of 2017, State Street announced that it would vote against the chair of the nominating committee of boards that failed to show progress on gender diversity.[67] Since the nominating committee is charged with identifying director candidates, the threat was targeted against the board member best positioned to address a lack of diversity. While State Street initially did not attach numerical requirements to this policy, it made clear that there is no justification for having no female directors at all.[68] State Street backed its demands for action with the substantial power of its proxy ballots. In June 2017, the advisor announced that it had voted against directors at 400 companies without female directors that did not persuade State Street that they were making adequate efforts to diversify.[69]

In September of 2018 State Street further escalated its diversity voting guidelines, stating that, beginning in 2020, it would withhold votes from the *entire* nominating committee if a company did not have at least one woman among its directors and had not satisfied State Street that it was making efforts to improve.[70] This expansion of the policy put the entire nominating committee in play and also attached a numerical goal (albeit a minimal one) to diversity efforts.

67. *See* Lubin & Krouse, *supra* note 60.

68. *Id.*

69. State Street identified 476 companies that had no female directors and determined that 76 demonstrated significant progress. They voted against directors at the remaining 400 firms. *See* Justin Baer, *State Street Votes Against 400 Companies Citing Gender Diversity*, WALL ST. J., (July 25, 2017) https://www.wsj.com/articles/state-street-votes-against-400-companies-citing-gender-diversity-1501029490.

70. *See* STATE STREET, *State Street Global Advisors Reports Fearless Girl's Impact: More than 300 Companies Have Added Female Directors* (Sep. 27, 2018), https://newsroom.statestreet.com/press-release/corporate/state-street-global-advisors-reports-fearless-girls-impact-more-300-companie [hereinafter STATE STREET, *Fearless Girl*; Amy Whyte, *State Street to Turn Up the Heat on All-Male Boards*, INSTITUTIONAL INV. (Sep. 27, 2018), https://www.institutionalinvestor.com/article/b1b4fh28ys3mr9/State-Street-to-Turn-Up-the-Heat-on-All-Male-Boards [https://perma.cc/MJE5-RS57].

Electronic copy available at: https://ssrn.com/abstract=3439516

BlackRock followed a similar pattern in its approach to voting. After the public campaign, letters, and engagement efforts described above, BlackRock announced in February 2018 that it would vote against the entire nominating committee at firms that did not show progress on gender diversity, and said that it "would normally expect to see at least two women directors on every board."[71]

This sequence of events reflects an escalating, and, as we argue below, ultimately competitive dynamic among index funds to press firms to increase the representation of women on their boards.

B. INDEX FUND OPERATORS AS THOUGHT LEADERS

Index funds are not simply following the herd in their diversity efforts. It is instructive to compare the position of the big three index fund operators on board diversity, as outlined above, to that of the largest proxy advisory firm, Institutional Shareholder Services (ISS), and other large mutual fund complexes such as Fidelity and T.Rowe Price.

ISS, which is in the business of selling proxy-voting information and recommendations to asset managers, has been a pioneer in pressuring companies, through its proxy recommendations, to adopt a number of corporate governance reforms, including strong opposition to "clear day" poison pills, among others. But when it comes to diversity, ISS has lagged behind the big three index fund complexes and continues to have a policy on diversity that is materially less stringent than the big three. While the big three emphasize that they do not blindly follow ISS guidelines, they all pay attention to ISS's policies and recommendations. Further, ISS remains influential among other asset managers and is thought to swing a considerable share of the proxy vote, either directly through its recommendations or through the supporting reasoning and research it provides. ISS issues voting policy guidelines that outline circumstances under which it will recommend votes against directors as a result of perceived governance deficiencies. Because of ISS's influence in the marketplace, these guidelines have a pseudo-regulatory effect.

71. Sarah Krouse, *BlackRock: Companies Should Have at Least Two Female Directors*, WALL ST. J., (Feb. 2, 2018), https://www.wsj.com/articles/blackrock-companies-should-have-at-least-two-female-directors-1517598407.

Electronic copy available at: https://ssrn.com/abstract=3439516

Along several dimensions, ISS stakes out fairly aggressive stands on matters of corporate governance. For example, ISS is opposed to companies adopting "clear-day" poison pills absent a shareholder vote, and will recommend a vote against boards that do so. By contrast, the big three index fund managers have relatively ambiguous policies.

However, when it comes to diversity on boards, the policies of the big three, outlined above, stake a position well ahead of ISS, both in terms of timing and in terms of what the policies ask of companies. State Street was the first complex to make a strong public stand in favor of diversity in March of 2017, and State Street's statement required companies to show progress, explain their lack of progress, or face withheld votes. Only in November of 2017 did ISS add a diversity component to its guidelines, and its position was that it would "highlight" insufficiently diverse boards, but would not recommend withholding votes.[72] A year later, in November 2018, ISS announced that it would include diversity as a component of its corporate governance quality score, but, by that point, BlackRock had already announced—in February of 2018—that it would ordinarily expect to see two women on each board, and State Street was already voting against directors en masse and had recently announced it would expand its withhold campaign to the entire nominating committee.[73]

The most recent version of ISS's voting guidelines has finally caught up to where BlackRock and State Street were over a year ago, but these changes only took effect earlier this year. ISS now states that:

> For companies in the Russell 3000 or S&P 1500 indices, effective for meetings on or after Feb. 1, 2020, generally vote against or withhold from the chair of the nominating committee (or other directors on a case-by-case basis) at companies when there are no women on the company's board.[74]

72. Zachary L. Cochran, Alana L. Griffin, Jeffrey M. Stein, Keith M. Townsend & James C. Woolery, *King & Spalding Discusses ISS Voting Policies for 2018*, COLUM. L. SCH. BLUE SKY BLOG (Dec. 20, 2017), http://clsbluesky.law.columbia.edu/2017/12/20/king-spalding-discusses-iss-voting-policies-for-2018/ ("ISS added sufficient board diversity to the fundamental principles it considers in voting for board nominees and will now highlight boards that are lacking gender diversity (specifically, those with no female directors), although this will not lead to an adverse vote recommendation.").

73. STATE STREET, *Fearless Girl*, *supra* note 70.

74. ISS, *Americas Proxy Voting Guidelines Update for 2019*, (Nov. 19, 2018), https://www.issgovernance.com/file/policy/active/updates/Americas-Policy-Updates.pdf.

Electronic copy available at: https://ssrn.com/abstract=3439516

ISS then lists three mitigating factors, including a "firm commitment . . . to appoint at least one female to the board in the near term" that would avoid an adverse recommendation.[75] This policy closely corresponds to State Street's 2017 voting behavior but took effect three years later.

High profile active fund managers have also lagged on the diversity issue. For example, the following statement from Fidelity's voting guidelines is unlikely to strike fear into the hearts of board nominating committees:

> Fidelity may support shareholder proposals that request additional disclosures from companies regarding environmental or social issues, where it believes that the proposed disclosures could provide meaningful information to the investment management process without unduly burdening the company.[76]

T. Rowe Price offers a somewhat stronger statement that nevertheless trails the big three index fund managers:

> We recognize diversity can be defined across a number of dimensions. However, if a board is to be considered meaningfully diverse, in our view some diversity across gender, ethnic or nationality lines must be present. At this time, we have not changed our voting guidelines for director elections for companies without any outward evidence of board diversity. However, these situations are a focus of our engagement program, and may in the future form the basis of new voting guidelines.[77]

Notably, both Fidelity and T.Rowe Price primarily manage active funds.

Comparing the big three's stance on board diversity to either ISS or other large mutual fund complexes highlights the degree to which index funds are taking a leadership position on the issue of board diversity. Index fund managers approach board diversity differently from other issues of corporate governance. In the next section we explore whether the theoretical account of index fund incentives can explain why.

75. *Id.*

76. FIDELITY, *Proxy Voting Guidelines*, (Mar. 2019), https://www.fidelity.com/bin-public/060_www_fidelity_com/documents/Full-Proxy-Voting-Guidelines-for-Fidelity-Funds-Advised-by-FMRCo-and-SelectCo.pdf.

77. T. ROWE PRICE, *Proxy Voting Guidelines*, (2019), https://www3.troweprice.com/usis/content/trowecorp/en/utility/policies/_jcr_content/maincontent/polices_row_1/para-mid/thiscontent/pdf_link/pdffile.

Electronic copy available at: https://ssrn.com/abstract=3439516

C. INDEX FUND ACTION ON CLIMATE CHANGE

There is no doubt that index funds have acted most aggressively and decisively on the issue of board diversity, but the big three have also been vocal about other social issues, namely climate change. While the big three tend to frame their approach to climate change and associated regulation as an issue of investment risk, BlackRock in particular often discusses its climate change engagement as part of a larger debate over corporate sustainability. As early as 2015, BlackRock argued that long term investors needed to engage on issues of climate change. BlackRock issued a report highlighting the importance of climate change as an issue with significant impact on future portfolios.[78] The report noted that climate change posed both physical risks—the impact of a changing climate—and regulatory risks—the impact of legal changes designed to mitigate climate change or reduce emissions. From the investors' point of view, the report stated:

> Divesting from climate-unfriendly businesses is one option. The biggest polluting companies, however, have the greatest capacity for improvement. Engagement with corporate management teams can help effect positive change, especially for big institutional investors with long holding periods.[79]

This language suggests a role for investors in mitigating the effect of polluting companies on the environment.

This theme was echoed in BlackRock CEO Larry Fink's 2018 letter to CEOs, which focused on the importance of corporations articulating a "social purpose."[80] Fink stated that "[t]o prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society," ending with a call to boards to consider a series of questions:

> Companies must ask themselves: What role do we play in the community? How are we managing our impact on the environment? Are we working to create a diverse workforce? Are we adapting to technological change? Are we providing the retraining and opportunities that our employees and

78. *See generally* BLACKROCK INV. INST., *The Price of Climate Change: Global Warming's Impact on Portfolios*, (Oct. 2015), http://blueandgreentomorrow.com/wp-content/uploads/2015/11/The-Price-of-Climate-Change-BlackRock.pdf.

79. *Id.* at 2.

80. Larry Fink, *2018 Letter to CEOs*, BLACKROCK (2018), https://www.blackrock.com/corporate/investor-relations/2018-larry-fink-ceo-letter.

Electronic copy available at: https://ssrn.com/abstract=3439516

> our business will need to adjust to an increasingly automated world? Are we using behavioral finance and other tools to prepare workers for retirement, so that they invest in a way that will help them achieve their goals?
>
> As we enter 2018, BlackRock is eager to participate in discussions about long-term value creation and work to build a better framework for serving all your stakeholders. Today, our clients – who are your company's owners – are asking you to demonstrate the leadership and clarity that will drive not only their own investment returns, but also the prosperity and security of their fellow citizens. We look forward to engaging with you on these issues.[81]

More recently, BlackRock issued another report with a somewhat different tone. In April 2019, BlackRock published *Getting Physical*, which highlighted BlackRock's efforts to use big data and climate modeling to "increase portfolio resilience" to the increasing frequency of adverse weather events and other impacts of climate change.[82] The discussion of engagement in the report focuses on companies as entities impacted by the external force of climate change, not as contributors to the problem and focuses on engagement to ensure companies are prepared, not to advocate reduced emissions.

Following the pattern of escalation we've observed in the context of board diversity, BlackRock has announced that it would make climate change a central part of its investment approach going forward.[83] BlackRock CEO Larry Fink dedicated his annual letter to climate issues, which he argued would reshape the economy and asset management. [84] In addition to calling for additional disclosure to permit investors to better manage climate-related investment risk, BlackRock announced that it would divest the firm's actively managed portfolios (about $1.8 trillion) from coal stocks.[85] While

81. *Id.*

82. BLACKROCK INV. INST., *Getting Physical: Scenario Analysis for Assessing Climate-Related Risks*, (Apr. 2019) https://www.blackrock.com/us/individual/literature/whitepaper/bii-physical-climate-risks-april-2019.pdf.

83. Laurel Wamsley, *World's Largest Asset Manager Puts Climate At The Center Of Its Investment Strategy*, NPR, (Jan. 14, 2020.), https://www.npr.org/2020/01/14/796252481/worlds-largest-asset-manager-puts-climate-at-the-center-of-its-investment-strate.

84. Fink, *supra* note 2.

85. Bill McKibben, *Citing Climate Change, BlackRock Will Start Moving Away From Fossil Fuels*, THE NEW YORKER (Jan. 16, 2020), https://www.newyorker.com/news/daily-comment/citing-climate-change-blackrock-will-start-moving-away-from-fossil-fuels.

Electronic copy available at: https://ssrn.com/abstract=3439516

divestment from one fossil fuel and pressure on firms to disclose risks are somewhat modest steps, they are nevertheless concrete, and transition of the world's largest asset manager away from coal in its managed portfolios is a significant development.

State Street has also foregrounded its climate change efforts, writing:

> Sustainability has been at the center of SSGA's asset stewardship program for a number of years. SSGA has had approximately 2,200 engagements on ESG issues with over 1,200 companies in our global portfolio since 2013. While board governance has been a significant focus of our thought leadership efforts in the past, we have also been engaging with companies and developing our views on environmental and social considerations and their effect on our stewardship obligations.[86]

They add, "We are certain that over time these issues pose both risks to and opportunities for long-term returns. Therefore, as stewards we are convinced that, as part of good business practice, ESG issues must be part of effective board leadership and board oversight of long-term company strategy."[87]

For its part, Vanguard also highlights climate change and has used its position as a shareholder to argue for broader disclosures around the risks posed by climate change. Like the others, it adopts a climate-change as financial risk model in its governance policy: "We consistently engage with portfolio companies about climate risk, especially companies in carbon-intensive industries. We believe that climate risk can potentially have a long-term impact on companies in many sectors."[88] Notably, Vanguard has largely oriented its stewardship efforts towards encouraging companies to make more detailed disclosures related to the risks that climate change creates for business, identifying this issue as one of its engagement priorities.[89]

86. Rakhi Kumar, Michael Younis, and Caitlin McSherry, *Incorporating Sustainability Into Long-Term Strategy*, SSGA (Feb. 2019), https://www.ssga.com/investment-topics/environmental-social-governance/2019/02/incorporating-sustainability-into-long-term-strategy.pdf.

87. SSGA, *ESG Investing*, https://www.ssga.com/eu/ie/pensions-charities-investor/en/our-insights/viewpoints/esg-investing.html.

88. Glenn Booraem, *What We Do. How We Do It. Why It Matters.*, VANGUARD 13 (Apr. 2019), https://about.vanguard.com/investment-stewardship/perspectives-and-commentary/what_how_why.pdf; STATE STREET, *Fearless Girl*, *supra* note 70.

89. *Vanguard Investment Stewardship: Update on the 2020 Proxy Season,* VANGUARD (Apr. 1, 2020), https://about.vanguard.com/investment-stewardship/VISPRX_042020.pdf.

Electronic copy available at: https://ssrn.com/abstract=3439516

There is little question that the index managers' rhetoric around board diversity is backed by meaningful action and a confrontational approach to unresponsive firms. Their approach to climate change, so far, has been less confrontational, perhaps reflecting the centrality of environmental issues to corporate operations at many companies. While these steps are tentative, it is clear that the big three are eager to highlight them for investors, and it is equally clear that index funds' engagement on these issues has led corporate boards to more frequently and publicly discuss the issue of climate change.

D. THE PUZZLE OF INDEX FUND SOCIAL ACTIVISM

Can the existing account of index fund activism account for index funds' approach to board diversity? As argued above, the general consensus of the literature is that index funds can be expected to focus on market-wide interventions with significant upside and a low propensity to upset management. We argue that index fund social activism does not fit this profile.

1. Activism is High Impact

We can easily dispense with the notion that index fund activism for diversity is merely window-dressing or marketing puffery. Companies frequently build marketing campaigns around salient social issues without accompanying action, so it is natural to be skeptical of high profile campaigns. However, the evidence above establishes that index funds have taken concrete, effective action to back up their public comments on diversity, devoting their very limited shareholder engagement resources to diversity and voting proxies to punish recalcitrant boards. These are concrete interventions with real costs and consequences.

These activist actions have been effective – it is clear that companies feel real pressure to respond to calls for board diversity. On September 27, 2018, SSGA reported that since its announced intention to vote against all male boards in March 2017, more than 300 companies had added female directors to their boards.[90] In its recent annual report for 2018, SSGA reported this increased to more than 400 companies and more firms had pledged to follow suit.[91] According to Equilar, the percentage of newly

90. STATE STREET, *Fearless Girl*, *supra* note 70.

91. *See* STATE STREET, *State Street Releases 2018 Corporate Responsibility Report*, SSGA (2019), http://www.statestreet.com/content/dam/statestreet/documents/values/2018_STT_CR_Report.pdf; *See*

Electronic copy available at: https://ssrn.com/abstract=3439516

elected directors who are women has increased 75 percent in three years, from 20.1 percent in 2015 to 35.6 percent in the third quarter of 2018. The last S&P 500 company with an all-male board recently appointed a woman as a director.[92]

2. Board Diversity and Value Creation

Is intervention on board diversity the sort of market-wide, high-impact, value-creating change we might expect index funds to undertake? It is certainly true that index funds have framed their diversity efforts in terms of long-term value creation. However, recall that index funds have only weak incentives to pursue value-enhancing interventions in the first place. For value-creation to be a plausible motive for index fund action on board diversity, such intervention would need to be particularly profitable. As it is, two aspects of board diversity activism are inconsistent with the purported value-creation motive.

First, though index fund operators appeal to the academic literature in making the case for increased diversity, the academic record is more ambiguous than these arguments would suggest. An extensive literature has examined the effect of board gender diversity on firm value. The results of this literature are mixed,[93] but this is likely because a fundamental difficulty plagues this research area, the issue of correlation versus causation. As one study put it: "[I]n equilibrium it is difficult to distinguish if knowledgeable board members increase firm value through their actions or if highly valued firms simply attract knowledgeable board members."[94] For example, a 2009 study found that differences in board monitoring intensity were correlated with the gender of board members, suggesting that boards with more women tended to be more conscientious monitors, and found that, in a simple regression, companies with more women directors performed better.

also BUSINESS WIRE, *State Street Releases 2018 Corporate Responsibility Report*, YAHOO FIN. (July 11, 2019), https://finance.yahoo.com/news/state-street-releases-2018-corporate-194700589.html.

92. Vanessa Fuhrmans, *The Last All-Male Board on the S&P 500 is No Longer*, WALL ST. J. (July 24, 2019), https://www.wsj.com/articles/the-last-all-male-board-on-the-s-p-500-is-no-longer-11564003203.

93. *See generally* Renée B. Adams, Jakob de Haan, Siri Terjesen, & Hans van Ees, *Board Diversity: Moving the Field Forward*, 23 CORP. GOVERNANCE: INT'L REV. 77 (2015); Kenneth R. Ahern & Amy K. Dittmar, *The Changing of the Boards: The Impact on Firm Valuation of Mandated Female Board Representation*, 127 Q. J. ECON. 137 (2012).

94. Ahern, *supra* note 93.

Electronic copy available at: https://ssrn.com/abstract=3439516

However, the researchers noted that the "correlation disappears once we apply reasonable procedures to tackle omitted variables and reverse causality problems" and found that, in a richer empirical design, "firms perform worse the greater is the gender diversity of the board".[95] Other studies have found a positive link between diversity and firm value,[96] and still others have found no link.[97] The literature is, to be sure, still in flux, but it cannot be said that current empirical evidence unambiguously supports the claim that board diversification is a particularly effective way for shareholders to generate returns.

To illustrate, some studies address this endogeneity problem by studying reforms that have required companies to diversify boards. In 2003, Norway required, by law, that 40 percent of directors be women at a time when only nine percent of directors were female. In examining the effects of this law, one study concluded that the adoption of the law had a large, negative effect on firm value both at the time of adoption and in measured performance after the change took effect.[98] By contrast, another study found no effect on firm value when studying the same change.[99] Yet another 2013 study found higher labor costs and lower short-term profits among firms affected by the change.[100] Even if these papers told an entirely consistent story, the dramatic nature of the Norway intervention (with a 40 percent representation requirement imposed on a short timeline, punishable by dissolution) and the absence of a clear control group for the Norway change would raise questions about what it could teach us about other contexts. More recently, California adopted a law requiring companies headquartered there to comply with a mandatory gender quota. An initial study of the

95. Renée B. Adams & Daniel Ferreira, *Women in the Boardroom and Their Impact on Governance and Performance*, 94 J. FIN. ECON. 291, 292 (2009).

96. *See* Kevin Campbell & Antonio Mínguez-Vera, *Gender Diversity in the Boardroom and Firm Financial Performance*, 83 J. BUS. ETHICS 435 (2008); Cristian L. Dezsö & David G. Ross, *Does Female Representation in Top Management Improve Firm Performance? A Panel Data Investigation*, 33 STRATEGIC MGMT. J. 1072 (2012).

97. *See* Larelle Chapple & Jacquelyn E. Humphrey, *Does Board Gender Diversity Have a Financial Impact? Evidence Using Stock Portfolio Performance*, 122 J. BUS. ETHICS 709 (2014); Corinne Post & Kris Byron, *Women on Boards and Firm Financial Performance: A Meta-Analysis*, 58 ACAD. MGMT. J. 1546 (2014).

98. *Id.*

99. B. Espen Eckbo, Knut Nygaard, & Karin S. Thorburn, *Does Gender-Balancing the Board Reduce Firm Value?* (Finance Working Paper No. 463/2016).

100. David A. Matsa & Amalia R. Miller, *A Female Style in Corporate Leadership? Evidence from Quotas*, 5 AM. ECON. J. APPLIED ECON. 136 (July 2013).

Electronic copy available at: https://ssrn.com/abstract=3439516

market response to this rule suggests that firms that would be affected by the change showed significant decreases in firm value when the change was announced.[101] However, the authors of this study call into question the interpretation that the diversity quota was directly responsible for the decline in value, suggesting instead that the reform demonstrated political willingness to impose potentially costly regulatory requirements on California firms and arguing that the resulting fall in value reflected investors' fears of what might come next rather than any real impact of the quota on firm performance.[102]

Second, even if diversifying boards represented low-hanging fruit for value creation, this would still not explain why index funds are being more proactive on this front than other money managers. Index funds' incentives to engage in value-creating activism are weaker than those for actively managed funds or hedge funds. As such, we would expect these other investors to lead the charge as they do with more conventional corporate governance interventions. Instead, hedge funds are lagging behind a group of investors with only weak incentives to worry about firm value. This is inconsistent with a shareholder-value creation account of board diversification.[103]

In arguing that conventional shareholder value creation is unlikely to explain index funds' commitment to promoting diversity, we do not mean to disparage these efforts. In the wake of the Me Too movement, there are sound reasons for companies to seek diverse leadership. And, even if the economic evidence is ambiguous, there are legitimate concerns of social

101. Felix von Meyernick, Alexandra Niessen-Ruenzi, Markus Schmid & Steven Davidoff Solomon, *As California Goes, So Goes the Nation? The Impact of Board Gender Quotas on Firm Performance and the Director Labor Market*, SSRN (Feb. 22, 2019), https://papers.ssrn.com/abstract=3303798.

102. *Id.*

103. A rejoinder might be that board diversification is a long-term play that is uniquely attractive to index investors with permanent stakes in large companies. Perhaps hedge fund managers and active fund managers, with their eye on beating the market in the short-term are simply less worried about issues of board structure that will play out over the long-term. However, this argument impounds a questionable claim: though board diversity is an eminently observable feature of a firm, somehow the market fails to anticipate this future value and impound it in the current price. This type of "short-termism" argument is a familiar one, and is frequently made by corporate managers against hedge funds launching activist campaigns against struggling companies. While it is difficult to conclusively rebut an argument that turns on an ad hoc invocation of market inefficiency, we see no reason why investors collectively would fail to appropriately price board diversity. As such, the argument that index funds are uniquely suited to pursue this value-creation strategy should be regarded as suspect.

Electronic copy available at: https://ssrn.com/abstract=3439516

justice and equity in play. A well-run company in 2019 ought to have a diverse board, full stop. But the entire thrust of the index fund corporate governance literature is that index funds have very weak incentives to invest in ensuring that the companies whose equities they hold are well run. As such, index funds' activism on this issue is conspicuous, and the empirical literature does not explain it.

3. Activism is Not Risk-Free

Index funds' intervention on socially salient issues is not risk free to index fund complexes. It is fair to say that board diversity is not an issue that is likely to draw public backlash from a CEO, though proxy votes cast against directors always carry the possibility of acrimony. But CEOs are not the only actors in play. Any financial institution that compares in size to the big three index fund managers is likely to be concerned about regulation. The influence of index funds over public companies has not escaped the notice of policy makers. Perhaps, by engaging so publicly and aggressively on a salient issue, index funds hope to signal their commitment to be good stewards of their investments and therefore good citizens of the corporate landscape. One reasonable account is that these campaigns are designed to forestall regulation.

While plausible, it is notable that, if the motivation of index funds to engage in activism on diversity and other social issues is to avoid regulation, then it has not been entirely successful. Asset managers have attracted the attention of the Trump administration, which has responded with guidance designed to brush back campaigns oriented toward social issues. On April 23, 2018, the Department of Labor issued a Field Assistance Bulletin that "reiterated" that "plan fiduciaries are not permitted to sacrifice investment return or take on additional investment risk as a means of using plan investments to promote collateral social policy goals."[104] On April 10, 2019, the Trump administration issued an executive order on energy infrastructure,[105] which included a directive to the Department of Labor to "complete a review of existing Department of Labor guidance on the fiduciary responsibilities for proxy voting to determine whether any such

104. John J. Canary, *Field Assistance Bulletin No. 2018-01*, U.S. DEPARTMENT OF LABOR (Apr. 23, 2018), https://www.dol.gov/agencies/ebsa/employers-and-advisers/guidance/field-assistance-bulletins/2018-01.

105. Promoting Energy Infrastructure and Economic Growth, 84 Fed. Reg. 15495 (Apr. 10, 2019).

Electronic copy available at: https://ssrn.com/abstract=3439516

guidance should be rescinded, replaced, or modified to ensure consistency with current law and policies that promote long-term growth and maximize return on ERISA plan assets."[106] That executive order was framed as an effort to aid the energy industry by questioning whether filing and voting in support of environmental shareholder proposals was consistent with the fund trustees' fiduciary duties to their participants and beneficiaries.[107] The executive order was a strong signal from the White House that it disapproved of this fund-driven activism and viewed such activism as, at best, a distraction and, at worst, a direct undermining of the American energy sector. Further, while it did not specifically address voting on gender diversity issues, the arguments raised suggest disapproval of these voting policies too.

While these directives were likely targeted primarily at pension funds, they are far from irrelevant to the big three. ERISA covers 401(k) plans, and the index funds operated by the big three hold vast sums of 401(k) investments. Given employers face potential liability for the funds they include in their 401(k) menu, the DOL guidance, in particular, made it risky for employers to offer specialized mutual funds with an ESG focus.[108] While the DOL guidance poses relatively little risk to the big three, at least as currently formulated, the Trump administration pushback creates a spectrum of regulatory uncertainty around index funds' social activism and is evidence against the view that these governance interventions are explained as a means of staving off regulatory intervention for index funds.

It is difficult to imagine how the administration could have provided better cover to funds wanting to retreat from their activism than this executive order. It would have been perfectly plausible for the big three to suggest, with regret or otherwise, that White House hostility meant that they had to tread carefully in this arena. It could have easily led the funds to reemphasize their core mission of pursuing returns and point out that they had done what they could but that this activism had put a significant target on their backs as well as note that the proper forum for pursuing environmental change was the political process. The funds may have even announced new efforts to engage or lobby inside the traditional political

106. *Id.*

107. *Id.*

108. *See* Nick Thornton, *ESG Investing in 401(k)s Faces Fiduciary, Regulatory Questions*, BENEFITS PRO (Mar. 19, 2019), https://www.benefitspro.com/2019/03/19/esg-investing-in-401ks-faces-fiduciary-regulatory-questions.

Electronic copy available at: https://ssrn.com/abstract=3439516

apparatus on these issues while separating these efforts from their shareholder voting policies. Alternatively, the funds could have gone on saying all the right things while actually stepping back from their confrontational voting stances on this issue.

When combined with the existing managerial pressure, the executive order could have provided all the necessary incentive to retreat, however the evidence suggests that the funds ignored this executive order and continued on their more aggressive course. BlackRock's new, more aggressive voting policy postdates it.[109] And if one examines not just how these funds voted in the 2019 proxy season, but also how they have publicly trumpeted those votes, it appears that they intend to resist the signal in that executive order, not yield to it.[110] This is not the behavior of funds determined to avoid confrontation.

In addition, to deflect some of the managerial and political pressure that they face, the funds could commit to following ISS recommendations in word and deed. ISS, the shareholder-friendly proxy advisory firm, has long taken positions on environmental and gender diversity issues, sometimes in favor of such proposals.[111] One could therefore imagine the funds publicly committing to follow ISS's recommendations on these proposals, perhaps even announcing their intent to push ISS to take particular stances. This could have relieved the funds of pressure to act on environmental and diversity issues while retaining a buffer between themselves and the managerial or political pressure. However, the funds' behavior shows that

109. *See* BlackRock Investment Stewardship, *Proxy Voting Guidelines for U.S. Securities*, BLACKROCK 5 (Jan. 2019), https://www.blackrock.com/corporate/literature/fact-sheet/blk-responsible-investment-guidelines-us.pdf [https://perma.cc/7NGS-HF5G] ("To the extent that we believe that a company has not adequately accounted for diversity in its board composition within a reasonable time frame, we may vote against the nominating / governance committee for an apparent lack of commitment to board effectiveness.").

110. *See, e.g.*, John Manganaro, *ESG, Proxy Voting Trends Unlikely to Shift on Executive Order*, PLANSPONSOR (Apr. 12, 2019), https://www.plansponsor.com/esg-proxy-voting-trends-unlikely-shift-executive-order/ ("The impact of the executive order is likely to be more symbolic than substantive when it comes to the real-world activities of retirement plan fiduciaries and investment managers. 'Less than one year ago . . . the DOL clarified its views on how shareholder engagement could be conducted in a manner consistent with ERISA's fiduciary duties' . . . 'Proxy voting and other forms of engagement are fiduciary functions under ERISA.'").

111. *See, e.g.*, INSTITUTIONAL SHAREHOLDER SERVICES, *Environmental, Social, and Governance QualityScores to be Reflected in ISS Proxy Research Reports* (Feb. 5, 2018), https://www.issgovernance.com/iss-announces-launch-of-environmental-social-qualityscore-corporate-profiling-solution/ [https://perma.cc/WWE2-2SDM].

Electronic copy available at: https://ssrn.com/abstract=3439516

they do not want the buffer; they want the credit for taking direct action. Far from marching in lockstep with ISS recommendations and deferring to its judgment, these funds have gotten out ahead of ISS on these issues.[112]

***

On balance, the evidence suggests that index funds' activism around social issues is inconsistent with the incentive structure that has been posited in the existing literature. Index fund social activism simply stands apart from other corporate governance interventions in both the approach the funds take and the impact of these efforts on corporate practice. In the balance of this paper, we outline an extension of the conventional framework that accounts for many of the facts above. We explain why issues of social importance have burst onto the asset management scene, why index funds' approach to these issues is different than other corporate governance interventions, and why index funds are uniquely situated to respond to the incentives we identify.

IV. THE COMING GENERATIONAL SHIFT

While index funds' overall passivity with respect to traditional corporate governance issues is consistent with the conventional wisdom that managerial and political pressures keep them from exercising much shareholder voice, index funds are actually significantly active on several socially responsible investment issues, namely board diversity and the environment. In contrast to the conventional view that funds avoid challenging management because they fear loss of access to companies' 401(k) platforms, funds are in fact quite confrontational towards management on these issues. There is hardly a more aggressive stance one can take towards a corporate board than voting against its members, yet the evidence shows that these funds have repeatedly taken such aggressive action. They persist in that activism even in the face of intense managerial and political pressure and trumpet that activism. They avoid obvious opportunities to retreat from it as well as alternative approaches that would enable them to claim to be doing what's right while following someone else's

112. *See ISS 2019 Policy Updates May Affect Board Gender Diversity and Pay-for-Performance Methodology*, COMPENSIA 3 (Oct. 23, 2018), http://compensia.com/gics-code-changes-will-affect-many-technology-companies-2/ [https://perma.cc/2AHZ-GE9N] (noting that the ISS gender diversity policy would "simply mirror" the "broader trend" among institutional investors like BlackRock and State Street).

Electronic copy available at: https://ssrn.com/abstract=3439516

lead. This strongly suggests that there is another, countervailing force that is driving this behavior that has been overlooked in the academic literature.

Moreover, social activism is trending decisively towards increased confrontation with boards and management. In the early phase of this new social activism, funds merely voted against the chairs of nomination committees for failing to include women on boards.[113] These policies have been revised in favor of more aggressive approaches ranging from voting against the entire nomination committees to even voting against the entire board.[114] This behavior is not characteristic of funds that are acting in fear of managerial retaliation or rendered reticent by weak incentives. Further, funds persist in this behavior not only in the face of concerns about managerial retaliation, but in the face of political pressure. Consider the funds' response to the Trump White House's recent executive order directing the U.S. Department of Labor to revisit trustee fiduciary duties under ERISA.[115]

To be sure, index funds do fear retaliation, but they fear something else more. That force is the rise in economic importance of the Millennials, a generation with a pronounced and novel preference for social responsibility in corporate governance. Index funds—unable to distinguish themselves with superior returns—are sensitive to these investor preferences as a threat to their asset base and as a means to create investor affinity in an otherwise commoditized industry. As the giant index funds rush to demonstrate their bona fides in this new reality, we are witnessing the rise of a new, Millennial-driven corporate governance, one that is values-driven, not value driven. Current fund and market behavior, notably the behavior just described, cannot be fully explained without understanding this development. It is already transforming the investment arena and we believe it will have implications for decades.

A. THE RISE OF THE MILLENNIALS AS SAVERS

The business community is facing a generational shift, from baby boomers to Millennials. Over the next decade, Millennials will assume a rising role among investors, employees, and consumers, and they will become the most dominant generation not long thereafter, outstripping their

113. *See, e.g.*, Lubin & Krouse, *supra* note 60.
114. *See, e.g.*, Whyte, *supra* note 70.
115. Promoting Energy Infrastructure and Economic Growth, *supra* note 105.

Electronic copy available at: https://ssrn.com/abstract=3439516

Generation X parents.[116] As a result of that current and future prominence, a large body of research has developed to study this generation, the largest since the Baby Boomers. That research has taken almost every imaginable form, assessing this generation's political, consumer, cultural, employment, and investment preferences. These studies are ongoing but certain distinct features are already well documented.

Most relevant for our purposes, Millennials are less focused on their investment returns than any generation since such questions were first asked. The evidence suggests not that they are indifferent to investment returns, but that they have a greater tendency to assess and even prioritize the social and other real world effects of their investments.[117] Prior generations viewed larger social questions as belonging to the political sphere, the sphere of political campaigns, legislation, and perhaps litigation. The investment sphere was the place to make money and save for retirement. But Millennial views and attitudes towards investment suggest a collapsing, or at least eroding, distinction between what were once thought of as distinct spheres of activity.

This broader, more socially conscious attitude towards investment is creating bottom up pressure for investment funds to demonstrate how they advance socially important goals. That bottom-up pressure has now reached the upper-echelons of the market and is reshaping how these massively powerful institutional investors engage in activism. The reason why this bottom-up pressure has reached the upper echelons of the market is straightforward. The Millennial generation will wield massive wealth and the race to manage that wealth has already begun.

The massive prize of managing Millennial wealth has triggered a new high-stakes race among funds and has created strong competitive pressures to offer investment products that have high social value. Millennials are just now getting introduced to "brands" like BlackRock, Vanguard, and State

116. See Richard Fry, *Millennials are Projected to Overtake Baby Boomers as America's Largest Generation*, PEW RES. CTR. (Mar. 1, 2018), https://www.pewresearch.org/fact-tank/2018/03/01/Millennials-overtake-baby-boomers/ ("[T]he Millennial population is projected to peak in 2036 at 76.2 million. . . . The Census Bureau projects that the Gen X population will peak at 65.6 million in 2018").

117. *See, e.g.*, Fink, *supra* note 1 ("In a recent survey by Deloitte, millennial workers were asked what the primary purpose of businesses should be – 63 percent more of them said 'improving society' than said 'generating profit.'").

Electronic copy available at: https://ssrn.com/abstract=3439516

Street. State Street has chosen to introduce itself to a new generation with the Fearless Girl—Google "Fearless Girl" and one of the first links that comes up is a State Street link titled, "About Us—Who We Are—Fearless Girl—State Street Global Advisors." Instead of "Retire in style," "Trust us with your nest egg," "We're so smart we'll make you a lot of money," the message is "We are Fearless Girl." When Millennials think of State Street, they now think of the Fearless Girl, wearing a pink hat knitted by admirers who pose for Instagram selfies with her, standing up to the Wall Street bull. In addition, as we write this, the State Street home page features a picture of Michael Bloomberg with State Street CEO Ron O'Hanley captioned, "Tackling Climate Change Risk: Ron O'Hanley and Mike Bloomberg discuss how grassroots efforts like Beyond Carbon and institutional capital can promote a cleaner and more sustainable world."[118] This directly marries Millennials' concern about gender diversity and the environment to the investment products State Street offers.

Our thesis is that management of Millennial wealth is driving the funds' environmental and diversity activism. The prize is so large that winning it is the countervailing force that pushes funds to overcome managerial and political pressure to remain passive. For our thesis to be correct, two things must also be true: (1) Millennial wealth will be massive such that the time to compete for it is now; and (2) the way to reach that Millennial wealth is to target this generation's political preferences. In the next Parts, we address both propositions.

B. MILLENNIALS' WEALTH AND "THE GREAT TRANSFER"

In the coming decades, somewhere between $12 and $30 trillion will be transferred to Millennials.[119] Even the low end of that spectrum will mark the largest intergenerational wealth shift in history.[120] It is comparable to the

118. *Tackling Climate Change Risk: A Conversation with Ron O'Hanley and Mike Bloomberg*, STATE STREET (July 2019), http://www.statestreet.com/ideas/articles/ohanley-bloomberg-climate-change.html [https://perma.cc/Q37M-JDY4].

119. *See* Tett, *supra* note 14 (citing U.S. Trust estimate that $12 trillion in assets will pass to Millennials over the next decade, and Deloitte estimate that $24 trillion will be transferred over the next fifteen years); Fink, *supra* note 1 ("In the years to come, the sentiments of these generations will drive not only their decisions as employees but also as investors, with the world undergoing the largest transfer of wealth in history: $24 trillion from baby boomers to millennials."; Skinner, *supra* note 14 ("Over the next 30 years, an epic $30 trillion will be passed down from baby boomers to Generation X to Millennials.").

120. *Id.*

Electronic copy available at: https://ssrn.com/abstract=3439516

gross domestic product of the U.S,[121] far exceeding the current assets under management by any given U.S. mutual fund complex.[122] And it is no secret. Investment professionals are aware of it. It has been reported in the press and industry-generated studies. Paul Donovan, chief global economist of UBS' Wealth Management, put it best:

> It's worth pointing out that the Millennial generation, which we're all wringing our hands about — these poor people not able to own houses! — this is going to be the wealthiest generation ever that we've experienced. The basic fact is that wealth does not disappear in a puff of smoke. The wealth is still there in the economy . . .
>
> When I die my nieces will inherit the assets that I have accumulated. And indeed the assets my parents have accumulated . . . There are fewer Millennials than baby boomers. The concentration of wealth will increase, and fewer people will share the national wealth.[123]

According to one estimate, this intergenerational transfer will peak from 2031-2045, when roughly 10 percent of all U.S. wealth will change hands every five years.[124]

121. News Release, *Gross Domestic Product, Second Quarter 2019 (Advance Estimate) and Annual Update*, U.S. BUREAU OF ECONOMIC ANALYSIS (July 26, 2019), https://www.bea.gov/news/2019/gross-domestic-product-2nd-quarter-2019-advance-estimate-and-annual-update [https://perma.cc/T2ZZ-9Q5S] ("Current-dollar GDP increased . . . to a level of $21.34 trillion.").

122. *See* Jeff Benjamin, *10 Largest Mutual Fund Companies By Assets*, INV. NEWS (Aug 16, 2018), https://www.investmentnews.com/gallery/20180824/FREE/824009999/PH/10-largest-mutual-fund-companies-by-assets ("The mutual fund industry currently has $18.9 trillion in total assets, $10.8 trillion of which is held by 10 companies.").

123. Jim Edwards, *Millennials Will Be the Richest Generation Ever, According to UBS — so perhaps they ought to stop complaining about the housing market*, BUS. INSIDER (Jan. 24, 2018), https://www.businessinsider.com/interview-with-ubs-paul-donovan-on-Millennials-and-inequality-2018-1 [https://perma.cc/3T2R-T2FU].

124. *See The "Greater" Wealth Transfer: Capitalizing on the Intergenerational Shift in Wealth*, ACCENTURE (2015), https://www.accenture.com/nl-en/~/media/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Industries_5/Accenture-CM-AWAMS-Wealth-Transfer-Final-June2012-Web-Version.pdf [https://perma.cc/8VJN-K7A4] ("While the 'Great Transfer' will see over $12 trillion shift, the 'Greater' wealth transfer is much larger, estimated at over $30 trillion in financial and nonfinancial assets in North America. At its peak between 2031 and 2045, 10 percent of total wealth in the United States will be changing hands every five years. The accelerating pace of this transfer, combined with the generational differences in the demands and expectations of wealth management service providers, makes this massive transfer of wealth between generations a defining issue for the wealth management industry.").

Electronic copy available at: https://ssrn.com/abstract=3439516

True, Baby Boomers will retain the largest percentage of disposable capital for some years to come,[125] but the capital shift to Generation X and the Millennials has already begun, and it will only accelerate over time.[126] While the actual size of that wealth transfer is debatable, the economic significance of managing it is not. In BlackRock CEO Larry Fink's now famous 2019 shareholder letter, he described the forthcoming asset transfer from Baby Boomers to Millennials—which he estimated at $24 trillion—as "the largest transfer of wealth in history."[127]

Even if one were to assume that the bulk of disposable wealth will remain in the hands of Baby Boomers for some time, it does not follow that investment fund activism will prioritize that generation's preferences. Barring some catastrophe, we think it is exceedingly unlikely that Baby Boomers, who have begun to retire, are still "in play" from a marketing perspective. That generation already has established investment advisers who have already made the bulk of their profits off of managing that money. Further, Baby Boomers are also entering the most risk-averse stage of life. The real competition is for future revenues and new market entrants, and that is why the current absolute size of a generation's wealth should not be the only factor. One can readily imagine that a retiree who has already worked with State Street for decades may not have heard of Fearless Girl or State Street's diversity voting policies, and if he did and somehow objected to

125. *See* Meredith Jones, *Opinion: Millennials Have More Money Than You Think — So Expect ESG Funds in Your 401(k)*, MARKETWATCH (Oct. 24, 2018), https://www.marketwatch.com/story/Millennials-have-more-money-than-you-think-so-expect-esg-funds-in-your-401k-2018-10-23 [https://perma.cc/33GL-9LAG] ("To be clear, baby boomers still contain the largest segment of millionaires AND control 70% of disposable capital, but they are aging and will transfer up to another $30 trillion (with a 'T') to their Gen X and millennial children and grandchildren over the next decade and a half-ish. Based on these figures, it would seem that millennials can (or will) be able to put their money where their mouths are when it comes to responsible investments, and why there are a host of investing options no matter where millennials fall on the income spectrum. In addition, now that millennials are the dominant force in the workplace, there will likely be more adoption of responsible investment options within 401(k) plans, making it even easier for millennials investors to align their values with their investments. Although less than 10% of 401(k)s currently offer ESG options, large financial firms (think BlackRock, Wells Fargo and Natixis to name a few) are betting that will change and are developing products for the 401(k) marketplace.").

126. *Id.*

127. Fink, *supra* note 1 ("In the years to come, the sentiments of these generations will drive not only their decisions as employees but also as investors, with the world undergoing the largest transfer of wealth in history: $24 trillion from baby boomers to millennials.")

Electronic copy available at: https://ssrn.com/abstract=3439516

either, it seems unlikely that he would switch to BlackRock over it, where he would find an institution pursuing largely the same objectives anyway.

BlackRock itself has observed this basic marketing point in its report, "Understanding Millennial Investors." In a section titled 'Affiliation: Brand loyalty is earned', the report states: "[M]illennials are still forming loyalties, and are therefore more likely to switch or supplement their provider for the right incentive… Both gen X and Millennials agree on common characteristics that give a brand strength… but it is the latter group that not only expect but are demanding to see companies doing things the 'right' way – especially in financial services."[128]

The list of financial institutions and major media outlets that have studied and reported on the issue of future Millennial wealth, having all reached more or less the same conclusion, is extensive. It includes many of the leading financial institutions and journals of our day, including Deloitte, BlackRock, PWC, Morgan Stanley, Wells Fargo, The Harvard Business Review, The Financial Times, The Economist, CNN, Pensions and Investments, etc.[129]

128. Understanding Millennial Investors, *A generation game: Gen X and millennials*, BLACKROCK (2019) https://www.blackrock.com/uk/intermediaries/insights/millienial-investors [https://perma.cc/P3XU-XBPL]

129. *See* Fink, *supra* note 1 ("Companies that fulfill their purpose and responsibilities to stakeholders reap rewards over the long-term. Companies that ignore them stumble and fail. This dynamic is becoming increasingly apparent as the public holds companies to more exacting standards. And it will continue to accelerate as millennials – who today represent 35 percent of the workforce – express new expectations of the companies they work for, buy from, and invest in. Attracting and retaining the best talent increasingly requires a clear expression of purpose. With unemployment improving across the globe, workers, not just shareholders, can and will have a greater say in defining a company's purpose, priorities, and even the specifics of its business. Over the past year, we have seen some of the world's most skilled employees stage walkouts and participate in contentious town halls, expressing their perspective on the importance of corporate purpose. This phenomenon will only grow as millennials and even younger generations occupy increasingly senior positions in business."); Tett, *supra* note 14 ("That raises a crucial question: will the recipients of this wealth have different attitudes towards how they use it? If so, what will this mean for the world of impact investing?"); Julia Horowitz, *BlackRock is Getting Ready for Millennial Investors*, CNN (Dec. 4, 2018) https://edition.cnn.com/2018/12/04/investing/blackrock-Millennial-push/index.html [https://perma.cc/TZE8-65D2]; *Swipe Right to Invest: Millennials and ESG, the Perfect Match?*, MSCI (Nov. 2017) https://www.msci.com/documents/10199/07e7a7d3-59c3-4d0b-b0b5-029e8fd3974b [https://perma.cc/YF8M-FXT9] ("'The No. 1 question I get from advisers is how to handle the coming generational wealth transfer,' said ETF.com's Mr. Nadig, 'some $30 trillion that will make its way from the baby boomers to millennials in the coming two decades. ESG has emerged as one of the dominant answers to that question.'"); *Millennials Drive Growth in Sustainable Investing*, MORGAN STANLEY INST. SUSTAINABLE INV. (Aug. 9, 2017), https://www.morganstanley.com/ideas/sustainable-socially-

Electronic copy available at: https://ssrn.com/abstract=3439516

responsible-investing-Millennials-drive-growth [https://perma.cc/7AET-BX7R]; Mark R. Kramer, *The Backlash to Larry Fink's Letter Shows How Far Business Has to Go on Social Responsibility*, HARV. BUS. REV. (Jan. 31, 2019), https://hbr.org/2019/01/the-backlash-to-larry-finks-letter-shows-how-far-business-has-to-go-on-social-responsibility (quoting Charles Elson as saying "This is fundamentally not the role of a public company, and it's unfair to investors who may not agree with his politics. A CEO shouldn't use house money to further a goal that may not create economic returns."); Val Srinivas & Urval Goradia, *The Future of Wealth in the United States: Mapping Trends in Generational Wealth*, DELOITTE CTR. FIN. SERV. (2015), https://www2.deloitte.com/content/dam/insights/us/articles/us-generational-wealth-trends/DUP_1371_Future-wealth-in-America_MASTER.pdf ("Millennials, already seen as a segment with quirky tendencies and limitless potential, will affirm their status as the new drivers of consumption going forward. Their financial commitments (for example, education, homes, and cars) will fuel growth in the banking sector. Once they graduate to higher incomes, their share of assets will also pick up, although their lower per-capita wealth will demand differentiated service levels. However, their most pronounced impact on financial services may be driven by their value-conscious behavior and how they buy products and services, which may force a revamp of long-entrenched operating models."); Jones, *supra* note 125 ("Meanwhile, surveys of investors almost universally point to millennials as the biggest fans of responsible or sustainable investors. Morgan Stanley surveyed 1,000 active investors in 2015 and 2017 and found that millennials were not only more interested in responsible investing (86% vs. 75% of the total population in 2017), but that their interest was growing. Between 2015 and 2017, the percentage of millennials who were 'strongly interested' in sustainable investing jumped a massive 10 percentage points. A more recent survey from Crossmark Global Investments showed an even starker contrast between millennials and their older investing peers. While a mere 6% of seniors were even familiar with ESG investing, a whopping 80% of those aged 23 to 39 were aware of the strategy and 26% had already made ESG investments."); Generation SRI, *Sustainable Investing Joins the Mainstream*, ECONOMIST (Nov. 25, 2017), https://www.economist.com/finance-and-economics/2017/11/25/sustainable-investment-joins-the-mainstream ("In 2008, when she was in her mid-20s and sitting on a $500m inheritance, Liesel Pritzker Simmons asked her bankers about 'impact investing'. They fobbed her off. 'They didn't understand what I meant and offered to screen out tobacco,' recalls the Hyatt Hotels descendant, philanthropist and former child film star. So she fired her bankers and advisers and set up her own family office, Blue Haven Initiative. It seeks investments that both offer market-rate returns and have a positive impact on society and the environment. 'Financially it's sensible risk mitigation,' she says. 'Our philanthropy becomes far more efficient if we don't need to undo damage done in our investment management.' Such ideas are gaining ground, particularly among the young. Fans of 'socially responsible investment' (SRI) hope that millennials, the generation born in the 1980s and 1990s, will drag these concepts into the investment mainstream. SRI is a broad-brush term, that can be used to cover everything from divestment from companies seen as doing harm, to limiting investment to companies that do measurable good (impact investing). The U.S. Forum for Sustainable and Responsible Investment, a lobby group, estimates that more than a fifth ($8.7trn) of the funds under professional management in America is screened on SRI criteria, broadly defined, up from a ninth in 2012."); Julien Courbe, *Managing Millennial Money*, PWC (Mar. 2017), https://www.pwc.com/us/en/industries/financial-services/library/managing-Millennial-money.html ("Millennials' lifestyle priorities will challenge traditional advisor models. This group's savings objectives are far different from those of other demographics and appear eager to pursue goals that are less focused on wealth accumulation. Plus, major life choices such as marriage, children, and college funding are being pushed to later in life, so it may be some time before millennials prioritize savings. These preferences will defer the need for traditional financial advice. . . . [B]ut it is critical to engage the millennial group and make inroads as early as possible. To do so, incumbents will have to

Electronic copy available at: https://ssrn.com/abstract=3439516

It is possible that they are all wrong. Some dissenters have argued that Millennials' future wealth has been overstated, in part because current trends suggest that Baby Boomers will live longer than prior generations and are much more likely to spend their resources on themselves than pass it on as inheritance.[130] A recent report by the Federal Reserve concludes that Millennials have fewer resources than either Generation X or Baby Boomers had at the same age[131] and student debt loads and the Great Recession further hurt Millennials.[132] On the other hand, the Pew Research Center concluded that household incomes are up, even though the Fed found that individual incomes may be down, because more Millennial women are working than in preceding generations.[133] What seems beyond peradventure, though, is that the fund complexes themselves are taking Millennial wealth seriously. They are the future of investing, and competition for their assets—and future assets—has already begun in earnest.

C. MILLENNIALS' PREFERENCES—VALUES RATHER THAN RETURNS

We have just established that Millennials will wield massive economic power in the coming decades. In this section, we review the evidence suggesting that Millennials differ sharply from prior generations in their attitudes towards socially responsible investment.

Survey results, from the Third Annual Responsible Investor Survey conducted by Nuvee, [134] are consistent with a large body of research showing that Millennials weigh the environmental impact of investments

understand these preferences and, in response, create a more human and credible marketplace position by using the tools this demographic prefers.)

130. *See* Gabriel Garcia, *That $30 Trillion 'Great Wealth Transfer' is a Myth*, CNBC (May 22, 2018), https://www.cnbc.com/2018/05/22/that-30-trillion-great-wealth-transfer-is-a-myth.html.

131. *See* Christopher Kurz, Geng Li, & Daniel J. Vine, *Are Millennials Different?*, FED. RES. BOARD FIN. & ECON. DISCUSSION SERIES 2018-080 (2018), https://www.federalreserve.gov/econres/feds/files/2018080pap.pdf; Hillary Hoffower, *Millennials Have Been Called the 'Brokest' and the 'Richest' Generation, and Experts Say Both of Those are True*, BUS. INSIDER (Jan. 29, 2019), https://www.businessinsider.com/Millennials-wealth-generation-experts-data-2019-1.

132. *Id.*

133. Richard Fry, *Young Adult Households are Earning More than Most Older Americans Did at the Same Age*, PEW RES. CTR. (Dec. 11, 2018), https://www.pewresearch.org/fact-tank/2018/12/11/young-adult-households-are-earning-more-than-most-older-americans-did-at-the-same-age/?amp=1.

134. Third Annual Responsible Investing Survey, *Investor Interest in Responsible Investing Soars*, NUVEEN (2018), https://www.tiaa.org/public/pdf/investor_interest_in_responsible_investing_soars.pdf.

Electronic copy available at: https://ssrn.com/abstract=3439516

considerably more than their elders do. The Financial Times recently summarized that research as follows:

> US Trust found 75 percent of wealthy Millennials "consider the social and environmental impact of the companies they invest in to be an important part of investment decision-making". Two-thirds "view their investment decisions as a way to express their social, political, or environmental values". Similarly, according to a survey by Morgan Stanley, "Millennials are twice as likely to invest in a stock or a fund if social responsibility is part of the value-creation thesis". A report by Fidelity says "a majority of affluent Millennials (77 percent) and Generation X donors (72 percent) indicated they had made some form of impact investment, such as investing in a publicly traded company with good social or environmental practices". Among the Baby Boomer and older generation the ratio was a mere 30 per cent.[135]

TABLE 1: Survey Results from the Third Annual Responsible Investor Survey Conducted by Nuvee

…	*Total Investors*	*Millennial*	*Non-Millennial*
Base	*1012* *1103**	*197*	*815*
I tend to recycle everyday	88% 86%*	93%	86%
I'd like to work for an employer that makes a positive social impact on the world	76% 73%*	91%	70%
I prefer to use reusable bags, rather than paper or plastic, because it is more environmentally sustainable	76% 71%*	91%	70%
I'd like to work for an employer that makes a positive impact on the world	76% 70%*	92%	70%
The Recession has made me more financially conservative than previous generations	76% 72%*	89%	70%

135. Tett, *supra* note 14.

Electronic copy available at: https://ssrn.com/abstract=3439516

I prefer to shop for brands that have environmentally sustainable business practices	72% 61%*	90%	64%
Given today's political climate, I prefer to invest in ways that will positively impact the environment	72%	95%	63%
I grew up learning to care for the environment from TV shows, books and my parents	69% 60%*	93%	59%
I care more about having a positive impact on society than doing well financially	64% 49%*	92%	52%

Notes: Survey results from 2017; * survey results from 2015

Similarly, in 2015 and again in 2017, Morgan Stanley conducted online surveys of 800 investors, a quarter of whom were Millennials.[136] The survey found that Millennials were significantly more likely to invest in companies or funds that target specific social or environmental outcomes, and more than twice as likely to exit an investment position because of objectionable corporate activity.[137] In its 2017 survey, Morgan Stanley found that Millennials are the driving force in the adoption of socially responsible investment strategies.[138]

We have found effectively no research refuting the notion that Millennial attitudes differ from those of prior generations. Most of the resistance to the Millennials thesis comes either from the idea that their future financial power has been overestimated, as noted above, or because of the failure of some businesses to profit from socially responsible investment strategies that cater to Millennials. For example, Pacific Life Insurance Co. launched a socially conscious online investing platform in 2015 called Swell Investing. However, it closed on August 30, 2019 after failing to attract

136. *Sustainable Signals: New Data from the Individual Investor*, MORGAN STANLEY INST. SUSTAINABLE INV. (2017), https://www.morganstanley.com/pub/content/dam/msdotcom/ideas/sustainable-signals/pdf/Sustainable_Signals_Whitepaper.pdf.

137. *Id. See also Sustainable Signals: The Individual Investor Perspective*, MORGAN STANLEY INST. SUSTAINABLE INV. (Feb. 2015), https://www.ibe.org.uk/userassets/surveys/2015 percent2002 percent20morgan percent20stanley percent20- percent20sustainable percent20investing.pdf.

138. *Id.*

Electronic copy available at: https://ssrn.com/abstract=3439516

enough customers.[139] Some might suggest that the Millennial market for socially responsible investment products has been exaggerated. However, at least one reason for Swell's closure is that "[g]iants like BlackRock Inc. and The Vanguard Group . . . have attracted billions in ESG assets after dramatic price cuts on new socially-conscious ETFs."[140] Swell's closing could just as easily be seen as evidence supporting our hypothesis, not refuting it.

It is also possible that Millennial investment attitudes will change over time. Perhaps as this generation ages, it will become more conservative, and its preferences will change. But the funds are looking to recruit Millennial clients now, and we believe this is what explains their pursuit of these initiatives currently. It could be that the funds will change course if Millennial attitudes change, or if the generation that follows Millennials has different preferences. Our point is that the funds' behavior is geared towards winning those Millennial clients now by catering to their preferences now. Perhaps more potently, the funds are portraying these efforts as cohering with traditional investment preferences, often by arguing that pursuing ESG priorities is actually value maximizing.[141] In that instance, the socially responsible choice is really no choice at all. ETF.com's Nadig says that "[t]he No. 1 question I get from advisers is how to handle the coming generational wealth transfer… some $30 trillion that will make its way from the baby boomers to Millennials in the coming two decades. ESG has emerged as one of the dominant answers to that question."[142]

Millennials' behavior in other contexts—as employees and as consumers—supports the argument that they are more likely to respond to

139. Ryan W. Neal, *Pacific Life Shutters ESG Robo-Adviser Swell Investing*, INV. NEWS (July 25, 2019), https://www.investmentnews.com/article/20190725/FREE/190729956/pacific-life-shutters-esg-robo-adviser-swell-investing (citing Swell spokesman's comment that "the company was not able to achieve the necessary scale in the current market to sustain operations.").

140. *See* Emily Chasan, *Pacific Life Lost the Bet on Socially Minded Millennials*, BLOOMBERG (July 26, 2019), https://www-bloomberg-com.cdn.ampproject.org/c/s/www.bloomberg.com/amp/news/articles/2019-07-26/pacific-life-s-bet-on-socially-minded-Millennials-didn-t-pay-off.

141. *See, e.g.*, *Sustainable Investing: A 'Why Not' Moment*, BLACKROCK INV. INST. (May 2018), https://www.blackrock.com/corporate/literature/whitepaper/bii-sustainable-investing-may-2018-international.pdf ("ESG investing is not just about doing good. A growing body of research points to a link with asset performance. Companies that manage sustainability risks and opportunities well tend to have stronger cash flows, lower borrowing costs and higher valuations. . . . Good governance translates to lower corporate risk, we believe, and in turn, a lower cost of doing business. Findings are similar for environmental and social risk management . . . .").

142. *See Swipe Right to Invest*, *supra* note 129.

Electronic copy available at: https://ssrn.com/abstract=3439516

social issues than prior generations, and is certainly playing a role in how mutual fund complexes will court their business.

1. Millennials as Employees

Within two years, Millennials are predicted to cross a significant threshold: they will comprise 50 percent of the workforce, a figure the Bureau of Labor Statistics projects will rise to 75 percent by the year 2030.[143] Already, that demographic change is having significant effects in the workplace. Some recent case studies illustrate the point.

Wayfair is a Boston-based furniture manufacturing and distribution company.[144] Its employees recently discovered that the company had entered into a $200,000 contract with BCFS Health and Human Services to supply bedroom furniture to an immigrant detention center at the U.S.-Mexico border.[145] Hundreds of employees signed a letter to the company's leadership team requesting that it cease all business with BCFS and others supplying detention centers and that it craft a code of conduct "that empowers Wayfair and its employees to act in accordance with our core values."[146] For our purposes, it is noteworthy that the signers identified themselves as "company employees and shareholders."[147] The company responded that it was "proud to have such an engaged team that is focused on impacting our world in meaningful and important ways"[148] but restated its policy of fulfilling all lawful orders. This did not satisfy the employees—they staged a walkout and 500 people, ten percent of employees, participated.[149] A week before the walkout, Wayfair's stock was trading at $162.47,[150] but by June 26, the date

143. See Mark Emmons, *Key Statistics About Millennials in the Workplace*, DYNAMIC SIGNAL (Oct. 9, 2018), https://dynamicsignal.com/2018/10/09/key-statistics-Millennials-in-the-workplace/; Richard Fry, *Millennials are the Largest Generation in the U.S. Labor Force*, PEW RES. CTR. (Apr. 11, 2018), https://www.pewresearch.org/fact-tank/2018/04/11/Millennials-largest-generation-us-labor-force/.

144. *See* Meghan B. Kelly & Laney Ruckstuhl, *Wayfair Employees Protest Sale of Furniture to Migrant Detention Center*, NPR (Jun. 26, 2019), https://www.npr.org/2019/06/26/736308620/wayfair-employees-protest-sale-of-furniture-to-migrant-detention-center.

145. *Id.*

146. *Id.*; See also (@sun_daiz), TWITTER (June 25, 2019, 11:55 AM), https://twitter.com/sun_daiz/status/1143548274240102401 [https://perma.cc/T6LA-WZEA].

147. *Id.*

148. *Id.*

149. *Id.*; Cristina Alesci, Nathaniel Meyersohn, & Kate Trafecante, *Wayfair Donates $100,000 to the Red Cross After Employee Backlash*, CNN (June 26, 2019), https://www.cnn.com/2019/06/26/business/wayfair-donation-migrant-facility/index.html.

150. *See Wayfair Inc. (W)*, YAHOO! FINANCE, https://finance.yahoo.com/quote/W/.

Electronic copy available at: https://ssrn.com/abstract=3439516

of the walkout, the stock had dropped more than ten percent to $145.81.[151] Immediately before the walkout, Wayfair donated $100,000 to the American Red Cross, but this did not mollify the protesters.[152] The day of the walkout, Forbes ran an article, "3 Reasons To Sell Wayfair On Today's Employee Walkout," arguing, among other things, that the company had engaged in "weak cost-benefit analysis" by concluding that "angering its employees and tarnishing its brand were costs that were smaller than the $86,000 in profit it will generate from the … contract" and that it "put[] Wayfair into a political firestorm that could damage its brand" and "make it harder for Wayfair to attract and retain talented employees."[153] The sides remain at an impasse over the issue.

Other examples of this worker-driven activism are easy to find. Google employees recently protested a company project with the Chinese government to develop a search engine that would censor sensitive information and facilitate surveillance.[154] Microsoft and Amazon employees have acted similarly.[155] These episodes reflect observable trends, much as the new index fund activism reflects those trends on the investor side.

According to a recent study by communications and marketing firm Weber Shandwick, Millennials play a particularly prominent role in this new employee-driven activism.[156] Among other things, the study asked employees whether they had "'spoken up to support or criticize' their employer's 'actions over a controversial issue that affects society.'"[157]

151. *Id.*

152. *Id.*

153. Peter Cohan, *3 Reasons to Sell Wayfair on Today's Employee Walkout*, FORBES (June 26, 2019), https://www.forbes.com/sites/petercohan/2019/06/26/3-reasons-to-sell-wayfair-on-todays-employee-walkout/#2eebe440492f.

154. Rakeen Mabud, *Two Lessons From the Wayfair Walkout*, FORBES (July 12, 2019), https://www.forbes.com/sites/rakeenmabud/2019/07/12/two-lessons-from-the-wayfair-walkout/#6423396c3a88.

155. *See, e.g.,* Sheera Frenkel, *Microsoft Employees Question C.E.O. Over Company's Contract With ICE*, N.Y. TIMES (July 26, 2018), https://www.nytimes.com/2018/07/26/technology/microsoft-ice-immigration.html; Emily Stewart & Alexia Fernandez Campbell, *8,000 Amazon Employees Asked the Company to Do More on Climate Change. Shareholders Just Said No.*, VOX (May 22, 2019), https://www.vox.com/recode/2019/5/22/18635604/amazon-shareholder-meeting-2019-climate-change-proposal.

156. *See Employee Activism in the Age of Purpose: Employees (Up)Rising*, WEBER SHANDWICK (May 29, 2019), https://www.webershandwick.com/wp-content/uploads/2019/06/Employee-Activism-in-the-Age-of-Purpose-FINAL.pdf.

157. *Id.* at 8.

Electronic copy available at: https://ssrn.com/abstract=3439516

Thirty-eight percent of employees said yes.[158] But among Millennials, 48 percent said yes, compared to 33 percent of Generation Xers and 27 percent of Baby Boomers.[159] Seventy percent of Millennial employees agreed with the statement "employees can make a difference by speaking out on controversial issues that affect society" compared to 68 percent and 65 percent of Generation Xers and Baby Boomers respectively.[160] Seventy percent of Millennials agreed with the statement, "employees can make an even greater impact on the world than leaders who run organizations," compared to 60 percent of Generation Xers and 54 percent of Baby Boomers.[161] Thus, like Millennial investors, Millennial employees feel empowered, believe that activism can make a difference, have themselves participated in activism, and see the workplace as an appropriate and necessary forum for activism. It is easy to imagine these same employees demanding ESG activism by their investment managers.

2. Millennials as Consumers

There are also consumer-side examples of how rapidly a company can enter into a near-death spiral by tarnishing its brand.

Papa John's, a once thriving company, suffered massive business harm after its founder was publicly accused of making racist comments. The saga began when its CEO, board chair, and founder John Schnatter criticized the National Football League for showing "poor leadership" in dealing with football players who kneeled during the national anthem as a form of political protest.[162] Schnatter, who had donated $1,000 to the Trump presidential campaign, argued that the protests should have been "nipped in the bud" during the preseason rather than allowed to grow.[163] Papa John's was the most recognized NFL sponsor at the time and advertised heavily during games, so Schnatter blamed the company's sagging sales on the

158. *Id.*
159. *Id.*
160. *Id.* at 5.
161. *Id.*
162. Cindy Boren & Des Bieler, *Papa John's Owner Blames Sagging Sales on NFL Anthem Protests and League Leadership*, WASH. POST (Nov. 1, 2017), https://www.washingtonpost.com/news/early-lead/wp/2017/11/01/papa-johns-owner-blames-sagging-sales-on-nfl-anthem-protests-and-league-leadership/.
163. *Id.*

Electronic copy available at: https://ssrn.com/abstract=3439516

reduced viewership of NFL games caused by the kneeling controversy.[164] Schnatter's comments drew all the wrong kinds of attention to the company. First, rivals DiGiorno and Pizza Hut engaged in a "Twitter war" with the company, mocking its declining sales.[165] Worse, in response to Schnatter's remarks, white supremacist website The Daily Stormer named Papa John's "the official pizza of the alt-right."[166] As a result, Schnatter announced that he would step down as the company's CEO, though he retained his role as board chair.[167] The following July, Forbes reported that Schnatter used a racial slur on a conference call in May.[168] This explosive scandal, following Schattner's troubling comments from the prior winter, had a devastating effect on the company. Sales dropped 7.1 percent for the year and 8.1 percent in the fourth quarter.[169] Fourth quarter income dropped from $22.8 million the prior year to $4.6 million.[170]

The company's response to the decline in sales reveals its diagnosis of the problem. In March 2019, its new CEO, Steven Ritchie, announced the launch of a TV and digital marketing campaign to "show Papa John's leaning into the story of our products and ingredients and doing it in a way that is relevant to Millennial and Gen Z customers" in an attempt to "ensure the new generation of pizza customers understand [sic] the quality foundation of our brand so that we can attract new customers."[171]

Other examples include the rapid collapse into bankruptcy of the once storied film studio, The Weinstein Company, after 100 women accused

164. *Id.*

165. *See, e.g.*, Ed Mazza, *Papa John's Gets Badly Burned in Twitter War with DiGiorno*, HUFFINGTON POST (Nov. 2, 2017), https://www.huffpost.com/entry/papa-john-digiorno-twitter-war_n_59fbcb4be4b0b0c7fa393cb5.

166. *See* Cristina Maza, *Alt-Right White Supremacists Claim Papa John's as Official Pizza*, NEWSWEEK (Nov. 3, 2017), https://www.newsweek.com/papa-john-alt-right-nazis-white-supremacists-nfl-pizza-701648.

167. *See* Thomas Moore, *Timeline of a Crisis: Papa John's Deletes Founder From Marketing*, PR WEEK (July 13, 2018), https://www.prweek.com/article/1487792/timeline-crisis-papa-johns-deletes-founder-marketing.

168. *Id.*

169. *See* Grace Schneider, *Papa John's Sales Dropped Again, This Time By 8.1 percent Last Quarter*, LOUISVILLE COURIER JOURNAL (Feb. 26, 2019), https://www.courier-journal.com/story/money/companies/2019/02/26/papa-johns-lost-72-million-adjusted-net-income-2018/2993974002/.

170. *Id.*

171. *See* Danny Klein, *Papa John's Faces an Uphill Battle in 2019*, QSR MAG. (Feb. 2019), https://www.qsrmagazine.com/pizza/papa-john-s-faces-uphill-battle-2019.

Electronic copy available at: https://ssrn.com/abstract=3439516

company CEO and co-founder Harvey Weinstein of sexual harassment, assault, or rape.[172] Alternatively, other examples also include more positive steps to signal social responsibility on the consumer side. For example, in direct opposition to the Papa John's scandal, Nike launched an ad campaign featuring Colin Kaepernick, the most prominent kneeling football player who was largely credited with starting the protest (and whose career ended because of it).[173] Dick's Sporting Goods decided to stop selling guns, and Bank of America recently announced it would not finance private prisons or detention centers.[174]

In our view, each of these companies concluded that the marketing benefits outweighed the costs of giving up certain businesses or associating themselves with particular political movements. Index funds are facing similar calculations.

3. Millennials as Investors

Developments in the investment world outside the context of index funds provide additional evidence of the market responding to the looming entry of Millennials. In addition to deploying existing and previously unused voting power to advance ESG goals, funds are also creating new financial products to meet Millennial demand. For the first time, BlackRock and Wells Fargo are developing ESG funds for retirement savings plans, specifically target-date retirement funds for use in 401(k) plans.[175] BlackRock's plan launched in 2018.[176] Bloomberg reported that assets in ESG funds rose 37 percent in 2017.[177] As reported by Investment News: "The move is aimed at spurring reluctant Millennials to invest more for retirement. There is evidence that a younger generation of investors want such options and have

172. *See* Brooks Barnes, *Weinstein Company Files for Bankruptcy and Revokes Nondisclosure Agreements*, N.Y. TIMES (Mar. 19, 2018), https://www.nytimes.com/2018/03/19/business/weinstein-company-bankruptcy.html.

173. *See* Daniel Roberts, *Wayfair is Just the Latest Example of Brands Getting Burnt By Politics*, YAHOO! FINANCE (June 28, 2019), https://finance.yahoo.com/news/wayfair-is-just-the-latest-example-of-brands-getting-burnt-by-politics-173541818.html.

174. *Id.*

175. *See BlackRock, Wells Fargo Reportedly Preparing ESG Funds for 401(k) Plans*, INV. NEWS (June 13, 2018), https://www.investmentnews.com/article/20180613/FREE/180619973/blackrock-wells-fargo-reportedly-preparing-esg-funds-for-401-k-plans.

176. *Id.*

177. *Id.*

Electronic copy available at: https://ssrn.com/abstract=3439516

yet to create a nest egg for the future."[178] Not surprisingly, the other big two have done the same, with State Street having created its SPDR SSGA Gender Diversity Index ETF and Vanguard having similarly created a long list of ESG ETFs for both U.S. and international stocks.[179]

A list of recently related financial products targeting this space drives the point home. As Marketwatch describes it, in an article titled: "Millennials have more money than you think — so expect ESG funds in your 401(k)":

> Want a low carbon footprint? The SPDR S&P 500 Fossil Fuel Reserves Free, the iShares MSCI ACWI Low Carbon Target ETF, or the American Funds New Economy Fund could be worth a look.
>
> Want more social justice? The Impact Shares NAACP Minority Empowerment ETF, SPDR SSGA Gender Diversity Index ETF, or the Pax Ellevate Global Women's Leadership Fund are just a few options available.
>
> Interested in supporting companies with good environmental, social and governance characteristics? The Parnassus Endeavor Fund, the iShares MSCI USA ESG Select ETF, or one of Vanguard's new ESG ETFs — the Vanguard ESG US Stock ETF, and the Vanguard ESG International Stock ETF — are a few of a growing number of fund offerings.
>
> In short, if Millennial investors want to invest responsibly through their employer's retirement offering or from the comfort of their parents' basement, a growing number of them can, and likely will.[180]

Interestingly, as a reflection of the long term thinking deployed by those who are creating these products, all of them have low investment minimums, with the ETF funds requiring purchase of no more than one share.[181] We think this is further evidence of our contention that the funds anticipate a massive future wealth transfer, that they believe at least one way to reach Millennials is through socially responsible investment, and that the time to do so is now, explaining the funds' current activism.

Other, smaller transactions similarly reflect the funds' interest in Millennials and socially responsible investing. For example, BlackRock

178. *Id.*

179. *See* Lara Crigger, *ETF Investors Embrace ESG 'Lifestyle'*, ETF.COM (July 17, 2019), https://www.etf.com/sections/features-and-news/etf-investors-embrace-esg-lifestyle?nopaging=1.

180. Jones, *supra* note 122.

181. *Id.*

Electronic copy available at: https://ssrn.com/abstract=3439516

recently acquired a stake in Acorns, an app that invests spare change.[182] Its stated purpose in so doing is to give BlackRock "insight into the behavior of a younger investors, so it can develop products to suit their needs down the line. The company is also fleshing out its suite of ethical and sustainable investing funds, which it expects to appeal to younger clients."[183]

Unsurprisingly, index fund ESG voting patterns and product generation directly reflect the views of the executives who are running these organizations. This was confirmed by a recent survey of seventy senior executives at forty-three investment firms, including leaders at the big three, large public pension funds like CalPERS and CalSTRS, and the government pension funds of Japan, Sweden, and the Netherlands.[184] Quoting Cyrus Taraporevala, president and CEO of State Street Global Advisors: "ESG issues have become much more important for us as long-term investors… We seek to analyze material issues such as climate risk, board quality, or cybersecurity in terms of how they impact financial value in a positive or a negative way. That's the integrative approach we are increasingly taking for all of our investments."[185] The self-reporting by these ESG managers is supported by the data:

> In 2006, when the UN-backed Principles for Responsible Investment (PRI) was launched, 63 investment companies (asset owners, asset managers, and service providers) with $6.5 trillion in assets under management (AUM) signed a commitment to incorporate ESG issues into their investment decisions. By April 2018, the number of signatories had grown to 1,715 and represented $81.7 trillion in AUM. According to a 2018 global survey by FTSE Russell, more than half of global asset owners are currently implementing or evaluating ESG considerations in their investment strategy.[186]

Interestingly, the survey also concluded that corporate managers tend to underestimate the extent to which their investors are committed to ESG investing. Corporate managers estimate that responsible investors constitute roughly 5 percent of their shareholder base when in fact that actual

182. *See* Horowitz, *supra* note 126.
183. *Id.*
184. *See* Robert G. Eccles & Svetlana Klimenko, *The Investor Revolution*, HARV. BUS. REV. (May 2019), https://hbr.org/2019/05/the-investor-revolution.
185. *Id.*
186. *Id.*

Electronic copy available at: https://ssrn.com/abstract=3439516

percentage is closer to 25 percent.[187] The disconnect between manager perception and the underlying investor reality is the space in which this new index-fund activism operates. To some extent, much of the activism we describe is dedicated to closing that gap, deploying the massive shareholder voting power of index funds to push companies to orient their activities in the direction their customers want. Finally, and most relevant for our purposes, the survey observes that, "the workforce is increasingly made up of Millennials, for whom ESG is central to any business analysis." One survey respondent summed it up: "They expect us to integrate sustainability as a natural part of our daily work."[188]

***

The weight of the evidence suggests we are at the beginning of a massive wealth transfer from Baby Boomers to Millennials and that Millennials' attitudes towards investment are sharply different from those of prior generations. In the next section, we show that the large index funds are creating a new values-driven corporate governance and argue that a complete picture of index funds' approach to corporate governance must take account of these incentives.

V. THE NEW MILLENNIALS' CORPORATE GOVERNANCE

The existing theory of index funds' approach to corporate governance, as developed in the literature, cannot explain why index funds have acted so aggressively to promote diversity on boards. Our argument is that the observed behavior of the big three index fund advisors across *all* governance matters, both conventional and social, can only be explained by enriching the incentive picture to account for index funds' pressure to respond to the social values of Millennial investors. Index funds act because it signals responsiveness to Millennials' values. Index funds will worry about governance when governance issues are salient (or can be made salient through marketing) to their investors. And it is no surprise that index funds are the leaders here: It is precisely because index funds cannot compete on returns that they face pressure to be particularly responsive to social issues. In an industry full of interchangeable indexed products, branding and customer affinity loom large.

187. *Id.*
188. *Id.*

Electronic copy available at: https://ssrn.com/abstract=3439516

A. INDEX FUNDS AND MILLENNIALS' SOCIAL VALUES: A HIGH STAKE COMPETITION

The existing literature correctly notes that index funds have, at most, fairly weak incentives to invest in governance, but in contrast to both Fisch et al.[189] and Kahan and Rock,[190] we argue that they face fierce, high stakes competition from each other over their ability to fulfill the social goals of their investors, particularly Millennials. This competition is one in which, as the Papa John's case indicates, if an advisor missteps, it could lose everything. If Millennials perceive a fund as not promoting social values, it may lose a branding advantage forever.

As discussed above, index funds cannot differentiate themselves from their indexed competitors by creating value through conventional governance interventions to generate superior returns.[191] But if index funds cannot gain an edge through enhanced performance, this does not mean that the big three will simply stand pat; they will seek a competitive edge elsewhere. Price competition is an obvious place to look, but the large index funds are already so inexpensive that competition on price is approaching a natural limit, and of course cutting prices reduces profitability. By aggressively and publicly staking out a progressive position on board diversity, index funds credibly signal that they are in tune with Millennial values and differentiate themselves from less aggressive competitors.

Each index fund faces pressure to make sure it is not perceived as less committed to social values than its competitors. To secure and enhance its reputation, each fund will seek to be a first mover on social goals, or, if caught being a second mover, to adopt a more robust policy than the first mover. To credibly signal their commitment, funds will pursue these goals through voting policies and other forms of activism, even at the cost of alienating management. Finally, we expect them to publicize evidence of those efforts and their methods for obtaining them. All of this is entirely consistent with index funds' observed behavior. The importance of this phenomenon should be emphasized: The aggregation of vast sums of money in index funds has given index funds substantial voting power. Index funds'

189. Bebchuk & Hirst, *supra* note 2.
190. *Id*.
191. *See infra* Section I.C.

Electronic copy available at: https://ssrn.com/abstract=3439516

status as essentially commoditized financial assets means that they must seek a competitive edge where they can find it.

The remarkable result is that the most important shareholders in our economy are now beholden to the social values of the up-and-coming generation of investors. Decades ago, shareholders were so dispersed and ineffective that managers ran roughshod of their interests, whereas now we appear to be entering a world in which funds cannot only discipline managers, but that discipline must be responsive to the non-economic preferences of investors. In recent years, much ink has been spilled lamenting the relative dominance of the corporate world over our politics—the classic tension between Wall Street and Main Street. But the political polls are not the only ballot boxes: investors may now be waking up to the reality that, to a significant degree, while Wall Street can put a thumb on Main Street's political scale, Main Street controls Wall Street's proxy.

This development may reshape corporate governance. The market for index fund assets is fiercely competitive, and the big three are enormous. Index fund advisors have incentives to identify areas where investor preferences are strong and develop engagement campaigns focused on those areas. Other funds will feel pressure to follow suit or risk losing investors. Index fund social activism may be about branding, but it is not cynical or superficial. Rather, it is a response to a complex, but robust, set of economic incentives. It is the market for asset management, and the need to be responsive to Millennial values that motivates index funds.

Another reason that index funds will be the leaders here is that they have fewer conventional money management worries than investors that try to beat the market. Because index funds are largely indifferent to returns, they are better positioned to respond to the preferences of their investors without worrying about whether those preferences might negatively affect firm value. If pressing firms to conduct themselves in a socially responsible way is a drag on share price, that is of little consequence to index funds that sell only market-tracking performance in any case.

However, these incentives to be responsive to investor demands sit within a nexus of other pressures. The existing consensus on index funds' incentives is not incorrect, just incomplete: Index funds really do have incentives to avoid confrontation with management and underinvest in stewardship, and they do not benefit substantially from higher returns in their

Electronic copy available at: https://ssrn.com/abstract=3439516

portfolio companies.[192] The fear of confronting management may explain index funds' more cautious approach to climate change so far. While Millennials care about both diversity and climate, the gender composition of a corporate board is a far less sensitive issue for most firms than their carbon footprint. Index funds intervene aggressively when the cost is low and tread lightly when it is not.

The current literature focuses on whether fund managers have incentives to invest in corporate governance to increase shareholder returns. As outlined in more detail in Section I.C, index fund incentives to invest in stewardship are limited.[193] First, even if an engagement improves returns, the improvement is likely to be quite small.[194] Second, increased returns inure to the benefit of all shareholders, but only the activist bears the cost.[195] Finally, there is also the threat of retaliation from corporate managers.[196] Thus, current literature on index funds argues that their activism will be minimal and focused on those cases in which it could generate high shareholder returns.

Our theory is a critical contribution to the literature because it explains observable fund behavior that otherwise remains puzzling. Current scholarship mostly focuses on the historical fact that index funds have remained passive. We do not challenge the historical view; we agree that, even today, funds remain passive across most of their portfolios with respect to most issues. But the existing literature, designed to explain the reticence of index funds, fails to explain the sharp move towards activism that we observe in certain areas by dismissing it as insignificant or by stressing that it is somehow anomalous or a quixotic departure from the norm. However, this move towards activism, though so far narrow in scope, is new, real, important, and a glimpse into the future. The existing literature's failure to

192. *See generally* Bebchuk & Hirst, *supra* note 2.

193. *Id.*

194. *Id.* at 2037 ("Index fund managers, however, are remunerated with a very small percentage of their assets under management and thus would capture a correspondingly small fraction of such increases in value. They therefore have much more limited incentives to invest in stewardship than their beneficial investors would prefer.").

195. *Id*. ("if stewardship by an index fund manager increases the value of a portfolio company, rival index funds that track the same index (and investors in those funds) will receive the benefit of the increase in value without any expenditure of their own.").

196. *Id.* ("we show that they have incentives to be excessively deferential—relative to what would best serve the interests of their own beneficial investors—toward the preferences and positions of the managers of portfolio companies.").

Electronic copy available at: https://ssrn.com/abstract=3439516

focus on it or explain it is rooted in the literature's historically narrow focus on returns alone. This new activism is not about returns, and it is therefore insufficient to try to explain it by focusing on returns. Millennial corporate governance is rooted in shareholder values, not shareholder value.

B. THE DYNAMICS OF INDEX FUND INCENTIVES: FIRST MOVER ADVANTAGE AND ESCALATING INTERVENTION

The most famous recent example of an index fund becoming a prominent first mover on a social issue was State Street Global Advisors' 2017 announcement of a new gender diversity voting policy in which it would vote against nominating committee chairs on boards that had no female directors.[197] In conjunction with this robust new policy, State Street also prominently unveiled the "Fearless Girl" statue on Wall Street.[198] Unveiled around the time of the Women's March, a protest against the election of Donald Trump, Fearless Girl rapidly became a cultural icon.[199] It obtained an enormous amount of overwhelmingly positive press coverage, becoming a tourist destination in lower Manhattan and the subject of countless social media posts.[200] It also introduced State Street and its voting policy to a new audience.

BlackRock and Vanguard were caught flatfooted by State Street's Fearless Girl marketing coup and its accompanying voting policy. There was little they could do to match that publicity, but now that State Street had so prominently raised the issue, they needed a response to answer to investors raising questions about where they stood on gender diversity. The answer quickly became, "we're doing more than State Street is." In 2018, BlackRock announced that it would vote against boards with fewer than two female directors, outdoing State Street's own policy targeting all-male boards.[201]

This literal one-upswomanship is enormously difficult to explain by focusing on returns alone. The data on gender diversity and returns is mixed

197. *See* Lubin & Krouse, *supra* note 60.

198. STATE STREET, *Fearless Girl*, *supra* note 70.

199. *See* Sapna Maheshwari, *Statute of Girl Confronts Bull, Captivating Manhattanites and Social Media*, N.Y. TIMES (Mar. 8, 2017), https://www.nytimes.com/2017/03/08/business/media/fearless-girl-statue-wall-street-womens-day.html.

200. *Id.*

201. *See* Sarah Krouse, *BlackRock: Companies Should Have at Least Two Female Directors*, WALL ST. J., (Feb. 2, 2018), https://www.wsj.com/articles/blackrock-companies-should-have-at-least-two-female-directors-1517598407.

Electronic copy available at: https://ssrn.com/abstract=3439516

at best and the data on one woman versus two women on boards is virtually nonexistent given the small sample size. Moreover, there is no evidence that the kinds of active funds that might plausibly compete with the indexes were pushing this particular issue in this particular way. The diversity voting policies applied across a large swath of investees with doubtful links to high-value interventions.

Finally, and most importantly, if announcing a new policy on gender diversity really is traditional activism focused on maximizing returns, then why not free ride? Why shouldn't BlackRock tell its clients the good news that because State Street is bearing the cost of activism at the same firms BlackRock invests in, it can pass those cost savings along to the clients? Wouldn't that be the rational thing to do from the perspective of returns? Far from free riding, BlackRock is increasing its own costs to engage in activism and make it more extreme than that of competitors, and further adding to its own costs by advertising and promoting that activism. In our view, the standard literature cannot explain either State Street's initial move into this space or BlackRock's subsequent escalation. There is little evidence that adopting such a policy helps (or hurts) returns. Here, too, our thesis explains what the existing literature does not.

C. MILLENNIAL INVESTORS AS A COUNTERWEIGHT TO MANAGERIAL RETALIATION

Another traditional explanation for index fund passivity is the threat of management retaliation.[202] Public company employees' 401(k) retirement funds are a critically important revenue source for index funds, and managers of those companies have a crucial source of leverage over index fund investors: final say over which funds to offer on their 401(k) platforms.

Activism tends to alienate corporate boards and managers. By definition, managers work at the companies daily, they and their boards have access to inside information unavailable to investors, and they are often highly-skilled and accomplished people. They often see activism as a threat to their leadership and authority and believe themselves best positioned to decide, for example, who should sit on the board. Among diversified investors, index funds and mutual funds generally have been far more passive than public pension funds and labor union funds, which file many

202. Bebchuk & Hirst at 2037.

Electronic copy available at: https://ssrn.com/abstract=3439516

more shareholder proposals and are also significantly more litigious than their index fund peers. At least part of the explanation for that activism gap lies in the fact that public pension funds and labor union funds are not simultaneously trying to solicit business from the very companies where they engage in activist strategies. Unlike at pension funds and labor funds, boards and managers can retaliate against index funds by removing them from their 401(k) platforms or never adding them in the first place.

That threat of retaliation has at least partially explained mutual fund passivity as can be shown by actual evidence.[203] For the most part, we agree with the existing literature that the threat of managerial retaliation is real and induces index fund passivity. For example, index funds rarely, if ever, file shareholder proposals. In contrast to the diversity and environmental activism, they have been comparatively silent on the governance front, frequently voting in support of executive pay packages. (It is difficult to imagine a better way to trigger managerial retaliation than voting against its pay). That silence and passivity is ironic, given that as between E, S, and G, governance reform has the strongest claim to be value enhancing.

Given the hostility to activism and the threat of managerial retaliation, we need an explanation for why the funds have become so active on these particular topics. As already argued, we do not think it can be explained by returns. Simply put, we think the index funds have identified socially responsible investment as a means of inducing Millennials to save and attracting them as clients and the fear of missing out on managing the next generation's wealth exceeds the fear of managerial retaliation, driving the observable activism and explaining ongoing passivity in other areas. Index funds remain passive on other issues of less importance to Millennials and are only active where it counts.

Simply put, we think the funds' activism on diversity and the environment reflects a straightforward cost-benefit calculation. The threat of missing out on Millennials and being named a bad actor outweighs the threat of managerial retaliation. Of course, it is true that the same forces to which the funds are responding reduce the risk of managerial retaliation—an all-male board likely would not retaliate against an investment fund that pushed

203. *See* Rasha Ashraf, Narayanan Jayaraman & Harley E. Ryan, *Do Pension-Related Business Ties Influence Mutual Fund Proxy Voting? Evidence from Shareholder Proposals on Executive Compensation*, 47 J. FIN. & QUANTITATIVE ANALYSIS 567, 587 (2012).

Electronic copy available at: https://ssrn.com/abstract=3439516

it to hire a woman precisely because such retaliation could backfire against the company, triggering a Papa John's-like debacle. That likely gives the funds added comfort in staking out these activist positions.

Apart from competitive pressures, the funds' social activism may have another purpose: inducing Millennials to invest in the first place. To date, Millennials have put less money into retirement funds than preceding generations.[204] Connecting their social goals to saving for personal retirement may also be a way that the funds have identified, collectively, to speak to this new generation of investors and induce them either to begin saving for retirement, to increase their contributions to their retirement funds, or both. Put differently, the threat of management retalitation has eroded also because millennials are investing less in 401k and more in other ESG focuse investments.

D. THE PROMISES AND PITFALLS OF MILLENNIAL CORPORATE GOVERNANCE

In arguing that index funds are responding to the preferences of customers in advancing board diversity and—to a lesser extent—the mitigation of climate change, it is important to emphasize that we do not regard index funds' behavior as cynical or insincere. An equilibrium in which index funds feel genuine market pressure to respond to the values of their customers is likely a more robust and stable equilibrium than one in which fund managers simply happen to share those values. So long as index funds are backing their marketing with real, effective action, identifying funds' social activism as a matter of seeking new customers is not meant to diminish its importance. In a sense, attention to social issues from institutional investors on behalf of retail clients will simply add to the list of stakeholders to whom modern managers, especially those of public-facing firms, will have to attend to. As noted above, firms already face pressure from customers and employees to demonstrate their bona fides when it comes to salient social issues. The effect of the developing dynamic in the index fund market will be to add investors to the list of constituencies that care about these issues.

204. *See BlackRock, Wells Fargo Reportedly Preparing ESG Funds for 401(k) Plans*, *supra* note 175 ("About two-thirds of millennials have saved nothing for retirement, according to a National Institute on Retirement Security report in February.").

Electronic copy available at: https://ssrn.com/abstract=3439516

1. The Promise of Index Fund Social Activism

In our view, increased attention to social issues is likely to be a positive development in the sense that the assets of many small investors will effectively be mobilized to promote issues that those investors care about. When this activism is well-targeted and effective, the result will be a tendency for companies to exhibit behavior that is more consistent with the widely shared values of the investor class, if not society at large. While index funds do not internalize the costs of social activism that might decrease share prices, investors do, and socially conscious investors are in a position to trade off their values against their concerns about returns. Index funds' behavior should be expected to reflect this trade off as aggregated across their customer base, as modified by the additional incentives that index funds have to not upset corporate management. While the net effect of this is naturally speculative, one would expect a modest increase in socially responsible behavior, even when costly, across a large number of firms.

Index fund activism will also expand the list of companies giving attention to risks associated with salient social issues. It will come as no surprise—for example—that a large manufacturer of consumer goods must worry about the treatment of workers in its supply chain or risk consumer backlash, but companies in extractive industries or business-to-business firms have generally had less to worry about. The market-wide holdings of index funds mean that any large firm could conceivably have to address concerns about social issues coming not from the customer base, but from their beneficial owners.

One important observation is that these effects are likely to be cumulative. Firms are simultaneously facing new pressures from customers, employees, and now investors as well. Firms that are not generally consumer-facing are often part of a supply chain for firms that are. Social media has increased the pace at which issues of social concern can become rallying points for stakeholders. Witness the timeframe in which an incendiary political comment from a talk show host can lead to calls for an advertiser boycott, for example. Increasingly, engagement—even indirectly—in unpopular commercial activities will create business risk that will steer firms away from anti-social conduct.

Electronic copy available at: https://ssrn.com/abstract=3439516

2. The Pitfalls of Index Fund Social Activism

Index fund activism is not risk-free. The literature is correct in arguing that index funds have only weak incentives to be concerned about returns. So long as Millennials' preferences for social interventions reflect well-thought out trade-offs between issues of social concern and firm value, then index funds can be expected to mirror these preferences. But it may well be the case that some social preferences of Millennials will have a more negative effect on firm value than anticipated, or that their preferred social interventions will be poorly thought out or not actually achieve the ends they seek, even as they have negative effects on firm value.

The challenge of index fund social activism is that index funds have weak incentives to sort value-creating, worthwhile interventions from questionable ones that might nevertheless catch the popular imagination. While active funds might resist pressure to implement governance interventions that would be value-destroying while generating little public benefit, perhaps by proposing alternatives, index funds—given their incentive structure—may be more inclined to give investors what they want, even if it is ill advised. Given the power of index funds as shareholders, this is a potential concern.

***

In our view, Millennial corporate governance is primarily a welcome development: investors' assets will be mobilized to achieve goals that those investors, collectively, find important. However, social activism is not without risks to social welfare, and corporate law scholars should be attentive to the potential problems discussed above.

VI. IMPLICATIONS

The effect of competition for Millennials' dollars on corporate governance is only beginning to be realized and is likely to evolve over time. At this point, much of what can be said is necessarily speculation. In identifying this important set of incentives, we hope to open a line of inquiry rather than have the final word on the matter. Nevertheless, it is possible to frame some of the important implications of Millennial corporate governance and provide a foundation for the debates to come.

In this Part, we discuss the normative consequences of index fund social activism. First, we discuss the implications for funds as corporate monitors.

Electronic copy available at: https://ssrn.com/abstract=3439516

We argue for a light regulatory touch when it comes to social activism, both from the Trump administration, which has attempted to rein in asset managers, and from those who advocate encouraging index funds to invest more in conventional corporate governance. Second, we discuss the implications for corporate law. While social activism as currently practiced can be accommodated within the existing framework of corporate law, the consequences of a base of shareholders pressing to promote social goals raises interesting questions about fiduciary duties.

A. IMPLICATIONS FOR INDEX FUNDS' STEWARDSHIP

It has been suggested,[205] as a result of index funds' weak incentives to invest in corporate governance, that index funds should not be permitted to vote as shareholders at all or that their votes should be mechanically linked to the votes of other non-management shareholders. The argument is that allowing large institutions with no economic stake in the shareholder votes to nevertheless sway the outcome will dilute the power of hedge fund activists and other share owners with real exposure to firm performance. In this provocative approach to solving the problem, index funds would simply be sidelined as important shareholders.

One of the contributions of our analysis is to throw into stark relief what would be lost with such an approach. If index funds are treated as non-entities when it comes to voting their proxy, then their social activism would have no leverage, except perhaps as a public advocacy. As described above, it was precisely State Street's and BlackRock's threat, backed by action, to vote against directors who did not show progress on gender diversity that pressed recalcitrant firms to act. Without the serious consequences of "no" votes for directors, it is not at all clear that firms would have responded to merely rhetorical pressure. After all, the lack of diversity has been a subject of discussion for years.

Another proposal to address index funds' perceived lack of governance diligence is to require index funds to pass through their voting rights to investors.[206] If index funds have poor incentives, then perhaps allowing investors to vote their own interests would solve the problem. This solution is perhaps more initially attractive in light of index fund social activism

205. Lund, *supra* note 3.
206. Lund, *supra* note 3, at 23.

Electronic copy available at: https://ssrn.com/abstract=3439516

because it would permit investors themselves to press their interests. In our view, though, handing proxies over to retail investors would be likely to greatly reduce the effectiveness of social activism campaigns because index fund shareholders would face a near-insurmountable collective action problem. One of the reasons that index fund social activism has been effective is that it has been focused on specific goals at specific times: State Street was able to make gender diversity *the* issue for boards in 2017, just as BlackRock is now pressing sustainability. By leveraging the full voting power of the fund to achieve a specific end, index funds are able to maximize their (and their investors') leverage. A pass-through voting arrangement would squander this advantage.

A number of options for increasing index funds' investment in stewardship have been suggested, including making index fund stewardship expenditures mandatory, passing through costs to investors, and prohibiting other business relationships with managers like managing 401(k) plans.[207] All of these reforms would make it easier for index funds to undertake costly shareholder oversight without disadvantaging themselves in a market that is extremely price sensitive as well as to reduce conflicts of interest that might stop them from challenging management. To be clear, these policies are meant to address the perceived underinvestment of index funds in stewardship with respect to traditional matters of shareholder value.

Our argument suggests that caution is warranted in regulating index fund stewardship. Funds' incentives are not as weak as they seem because funds have incentives to demonstrate governance diligence when such diligence is directly salient to investors. Since conventional matters of corporate governance are probably not salient, and in any case are subject to a substantial collective action problem, it is not unreasonable to think that a regulatory thumb on the scale is necessary with respect to some issues that investors are inattentive to. On the other hand, it is important to consider what the yardstick of effective stewardship should be. The evidence suggests that Millennials explicitly subordinate profits to other social values. This does not mean that sound corporate governance practices, in the traditional sense, are irrelevant to them, but it does mean that index fund stewardship should not be evaluated strictly with respect to its commitment to increasing share value. Indeed, corporate governance structures that press managers to

207. Bebchuck & Hirst, *supra* note 2, at 2118.

Electronic copy available at: https://ssrn.com/abstract=3439516

relentlessly pursue profits at the expense of social goals could be counterproductive for the interests of investors to whom both are important. As for regulations that would bar other business relationships with firms in index fund portfolios, eliminating this conflict of interest would make index funds more active on both conventional and social issues. Our contribution here is simply to point out that, at least with respect to social issues, the pursuit of Millennial investors is a counterweight to the threat of managerial retaliation.

We also object to the Trump administration's push against social activism, at least as applied to mutual fund investments.[208] While the guidance offered by the DOL was couched in terms of protecting investors by focusing asset managers on returns, our argument suggests that index fund social activism is undertaken precisely out of a desire to operationalize investors' preferences. In pressing funds to hew to the shareholder value maximization orthodoxy, the DOL is pressing funds to act contrary to their investors' preferences, and paradoxically couching that guidance in the language of fiduciary duty.

A lingering objection is that not all shareholders in index funds share Millennial values (needless to say, not all Millennials share them either), and there are surely many who might prefer a more conventional approach to corporate governance. Should we worry that their assets are being appropriated to press an agenda that they don't share? In our view, the appropriate venue to settle such disputes is the marketplace for assets. If social activism originates in the fierce competition among funds for assets to manage, then that market has every potential to solve any excesses that result. An investor genuinely chagrined at State Street's Fearless Girl campaign can simply move to another fund; they will find no shortage of options. If the big three fail to represent the aggregate preferences of investors, then new market entrants may seek assets offering different approaches to governance. Unless and until evidence of market failure arises, this new dynamic in the index fund market should be allowed to evolve.

208. Pension fund social activism is beyond the scope of this article, *but see* DAVID WEBBER, THE RISE OF THE WORKING CLASS SHAREHOLDER (2019) for a defense of activism in that context.

Electronic copy available at: https://ssrn.com/abstract=3439516

B. IMPLICATIONS FOR HEDGE FUND ACTIVISM

As discussed above, index funds have become the swing voters of hedge fund activism campaigns. Unlike index funds, hedge funds have huge monetary incentives to create value by intervening in corporate governance and can come and go as shareholders. The pressing question for hedge funds is whether the interventions they promote through their activist campaigns reflect long term value creation or merely a short term sugar-rush that lets hedge funds cash out while long term investors are left to clean up a long-term mess.[209] Since index funds are the quintessential long-term investor, they are well positioned to evaluate whether a proposed hedge fund intervention is a good idea. The problem is their weak incentives to invest much effort in making an informed decision. As a result, the suggested interventions in the current literature, outlined in the foregoing Part, are aimed at increasing their incentive to evaluate campaigns.

Understanding index funds' incentives to demonstrate adherence to a particular set of social values, though, provides new insight into index funds' approach to hedge fund activism. Many, though by no means all, interventions undertaken by hedge funds may create tension with the social goals of Millennials. Hedge funds may advocate plan closures, layoffs, outsourcing, offshoring, and automation. There is evidence that much of the value created by hedge funds for shareholders reflects wealth transfers from labor.[210] Under pressure to keep stock prices high to stave off activist campaigns, firms may be likely to slide on the longer-term values of environmental responsibility, sustainability, and workforce relations.

Index funds' incentives to court Millennials may induce them to resist hedge fund campaigns that create tension with those values. For example, BlackRock's public commitment to sustainability may well be aimed at putting certain types of hedge fund activists on notice that they should not expect BlackRock's support. It is of course difficult to attribute an index fund's decision to oppose a hedge fund activist campaign to a particular cause, but that is precisely our point: If commentators are not attentive to index funds' incentives toward social values, then opposition to hedge fund activism that is rooted in those values may be interpreted as pro-management bias instead. This would mistakenly create the impression that index funds

209. Barzuza and Tally.
210.

Electronic copy available at: https://ssrn.com/abstract=3439516

are asleep at the switch when in reality, they are acting to vindicate investors' interests, just not to maximize shareholder value.

C. THE CHALLENGE TO THE SHAREHOLDER VALUE PARADIGM

So far, index funds' activism around social values has been couched in the language of shareholder value, particularly in communications with management. State Street and BlackRock both cited an alleged consensus of research when launching their gender diversity campaigns, and action on environmental issues is framed in terms of investment risk. Their marketing is a different story: the Fearless Girl is standing defiantly, not holding a piggy bank. In fact, with respect to gender diversity in particular, our thesis is that index fund activism reflects a sincere commitment to social values, while the claimed profit motive is more tenuous. To be sure, our claim is not that index fund social activism cannot be defensibly framed in terms of value creation, the evidence is legitimately ambiguous at this point, but rather that shareholder value is not the true motivation. Put differently, if the empirical evidence mounted that firms that diversified boards in response to the Fearless Girl had measurable declines in stock price, would we expect the big three to reverse their demands?

But what is the consequence for corporate law when the largest shareholders internalize other values alongside profit maximization? Since the beginning of the corporate governance literature, the touchstone of good governance has been value-creation as measured by share price. Hundreds, if not thousands, of papers have used "Tobin's Q", stock price adjusted by firm book value, as the key measurement of effective governance. This method of thinking is so ingrained into our thinking about firms that even the most hotly contested debates over features of firm governance internalize value-creation as the appropriate metric.

The maximization of shareholder value is etched into law as well. There is of course *Dodge v. Ford*'s[211] language that:

> A business corporation is organized and carried on primarily for the profit of the stockholders. The powers of the directors are to be employed for that end. The discretion of directors is to be exercised in the choice of means to attain that end, and does not extend to a change in the end itself…

211. Dodge v. Ford Motor Company, 204 Mich. 459 (Mich. 1919).

Electronic copy available at: https://ssrn.com/abstract=3439516

The case is often cited for the proposition that boards and managers have a legal obligation to maximize shareholder value.[212] Similar language in the Delaware case *eBay v. Newmark* highlights the obligations of directors there:

> Having chosen a for-profit corporate form, the craigslist directors are bound by the fiduciary duties and standards that accompany that form. Those standards include acting to promote the value of the corporation for the benefit of its stockholders. The "Inc." after the company name has to mean at least that.[213]

Dozens of other decisions make similar assertions.

Nothing currently proposed or on the horizon for index fund social activism risks running afoul of corporate fiduciary duties, at least as a matter of creating liability. The business judgment rule gives blanket protection to any decision that can be framed, in good faith, as linked to shareholder value. Indeed, both *Dodge v. Ford* and *Newmark* are unique in that the defendants steadfastly refused to assert that their decisions were motivated by shareholder value when such assertions would have been at least facially plausible and the mere assertion of such reasons would have placed their decisions within the protection of the business judgement rule.

Nevertheless, when shareholders have sincere commitments to social values that may be in tension with profit maximization, the notion that the purpose of the corporation is to maximize profit comes under stress. Note the language in the quotations above: "for the profit of the stockholders" and "promote the value of the corporation for the benefit of its stockholders." In each case, the court treats the claim that *the firm is run for the benefit of the shareholders* as implicitly equivalent to the claim that *the firm must be run to profit the shareholders*. However, if the goals of shareholders incorporate values other than profit, then the latter does not follow automatically from the former.

As it happens, Delaware and other states have a corporate form that is designed to incorporate other goals. Public benefit corporations[214] are a specialized variant of the corporation that, while still for-profit, "is intended

212. Whether the case actually demands this reading is disputed. *See* LYNN STOUT, THE MYTH OF SHAREHOLDER VALUE: HOW PUTTING SHAREHOLDERS FIRST HARMS INVESTORS, CORPORATIONS, AND THE PUBLIC (2012).

213. Ebay Domestic Holdings v. Newmark, 16 A.3d 1, 34 (2010).

214. Del. Gen. Corp. L. 361 et seq.

Electronic copy available at: https://ssrn.com/abstract=3439516

to produce a public benefit or public benefits and to operate in a responsible and sustainable manner…A public benefit corporation shall be managed in a manner that balances the stockholders' pecuniary interests, the best interests of those materially affected by the corporation's conduct, and the public benefit or public benefits identified in its certificate of incorporation."[215] Unsurprisingly, Millennial-focused brands like Warby Parker and New Belgium Brewing are organized under public benefit corporation laws. No large public companies are organized as benefit corporations, though, and critics of index fund social activism might argue that it is therefore inappropriate to press these companies on social issues. Such an argument would effectively use the availability of the benefit corporation form as a cudgel to argue that conventional corporations must maximize profits. However, this is a misreading of the role of benefit corporations in the legal framework. To become a benefit corporation requires a supermajority vote, and for a benefit corporation to be acquired by an ordinary corporation also requires a supermajority vote. The benefit corporation form is essentially a takeover defense for firms that are consciously not value-maximizing and therefore might be vulnerable to activism aimed at increasing profits by abandoning their public mission.

The notion that a corporation ought to give attention to the social values of its investors, particularly when the value impact is ambiguous, is far different than consciously subordinating profit to a public mission. The latter is far removed, not just from the current state of index fund social activism, but from anything on the horizon. Our argument is simply that the proper way to settle debates over the goals of an ordinary corporation, at least so long as those goals qualify for the protection of the business judgment rule, is through the shareholder franchise. Investors seeking increased recognition of social goals in an ordinary, for-profit firm ought to be free to press their case and vote for managers who are sympathetic to those goals and those seeking shareholder value maximization can do the same. Neither regulators nor judges need to settle the issue of what it means to run a corporation "for the benefit of its stockholders."

As a final point, it is worth distinguishing the dynamic we identify from existing rivals to the shareholder value account of corporate law. Many states have "other constituency" statutes that allow managers to consider the

215. Del. Gen. Corp. L. 361.

Electronic copy available at: https://ssrn.com/abstract=3439516

interests of non-shareholders when making certain decisions. In Delaware, the *Unocal*[216] case permits firms facing a hostile takeover to consider its impact on non-shareholders, including the "community generally."[217] The stakeholder theory of the firm similarly pushes back against the notion of shareholders as the sole beneficiaries of the corporate form.[218] However, each of these alternatives to shareholder value maximization subordinates the interests of shareholders to some other goal or constituency. Indeed, the subtitle of professor Stout's book on the subject[219] is "How Putting Shareholders First Harms Investors, Corporations, and the Public."

Millennial corporate governance centered on shareholder values is subtly different than an "other constituency" account of running the firm. In index fund shareholder activism, shareholders are still the most important constituency, but it is not assumed that share value is the only value they care about. In this sense, this is a more conventional take on corporate governance than some of the extant alternatives. Nevertheless, a shareholder-centric theory of corporate law that incorporates social values—an "other values" rather than "other constituencies" approach—deserves deeper theorization.

VII. CONCLUSION

The ongoing debate over index funds' purported lack of activism has overlooked the dramatic ways in which index funds are, in fact activist. Index funds are outspoken leaders on social issues. But more important than the fact of index funds' social activism is the reason behind it: index funds face immense pressure from the next generation of investors to demonstrate commitment to the social values that Millennials have already shown are important to them. Given the fierce competition among the big three and the stakes of winning over the new generation of investors, these pressures are likely only to increase. The issue of social values in investment management and corporate decision making cannot be ignored. In integrating the phenomenon of index fund social activism into the larger debate over index funds as shareholders, we hope to begin the conversation regarding this new era in corporate governance.

216. Unocal Corp. v. Mesa Petroleum Co., 493 A.2d 946 (Del. 1985).

217. *Id.* at 955.

218. Margaret M. Blair and Lynn Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 248 (1999).

219. Stout, THE MYTH OF SHAREHOLDER VALUE, *supra* note 212.

Electronic copy available at: https://ssrn.com/abstract=3439516