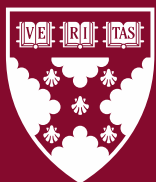


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Firm Purpose and Problem Wickedness: A Review of the Academic Literature

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FIRM PURPOSE & PROBLEM WICKEDNESS

A review of the academic literature

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Abstract

Our understanding of the firm's role in society has evolved greatly over the past 70 years, with more recent years seeing a sharp rise in interest for how firms can contribute more than profits to society – that is, have a purpose beyond profits. Businesses engaged in the pursuit of “purposeful” activities often engage with complex societal challenges, many of which have the characteristics of wicked problems, which are characterized by high conflict among stakeholders, high complexity as a result of multiple and interconnected variables, and high uncertainty where the information required for problem solving is missing or unknown (e.g., climate change, food insecurity, poverty). This literature review aims to lay the foundation for further research into the nature of purpose-driven firms and into the impact of wicked problem engagement on organizational and operational behaviors. We provide an understanding of how business leaders and firms come to engage in purpose-driven activities and the nature of such engagement. Further, we offer insight into the potential benefits of firm engagement with wicked problems.

Introduction

Over the last few years, there has been a focus on understanding the “purpose-driven company”, with scholars and business leaders touting the importance of purpose in enabling companies to grow. Most company leaders today believe that their firms must make a positive difference in the world, above and beyond maximizing shareholder value¹. Understanding this movement, the reasons for its growth, and the potential differences from “business as usual” is critical to understanding an emerging business paradigm – one in which profits do not come at the expense of others, or of broader social utility.

The pursuit of purpose-driven activities is not an entirely new phenomenon – it may be more accurate to think about it as the evolution of a series of movements (CSR, “Triple Bottom Line”, ESG, among others) that have expanded the scope of the firm beyond shareholder value. This evolution means that there is a history of academic investigation into “purpose-adjacent” behavior by firms. By reviewing this literature, we hope to better understand the reasons for this movement, the reasons for firm engagement in purpose-driven activities, and the types of behavior that we can expect to see from purpose-driven firms in the future.

Because the “purpose-driven company” is driven by goals of creating a positive difference in the world, its purpose is often tied to an environmental or social challenge like climate change (companies like Beyond Meat, Tesla, Allbirds, Land O’Lakes), equal economic opportunity (platforms like Uber or AirBNB that connect sellers to buyers with less friction; crypto was founded on this idea), equitable access to education (Coursera / Udacity, Microsoft / LinkedIn), or food security and nutritional access (Chipotle, PepsiCo, Kind / Mars). These types of challenges are often described as “wicked problems” – a specific type of problem that is difficult or impossible to solve due to its complex or interconnected nature. Because the pursuit of purpose so often drives engagement with these types of problems, it is worth exploring purpose-driven activities through this lens: specifically, can we learn anything about the nature of purpose-driven behavior when we see it as the behavior of an organization that fundamentally tackles a Wicked Problem? Moreover, it is possible that applying the lens of Wicked Problems to the approaches of businesses provides clarity or insight into the patterns of purpose-driven behavior we’ve seen to-date.

While many popular articles have been written on the topic of purpose-driven behavior, it is always helpful to understand the nature of current academic understanding. As such, the following paper explores the following areas of academic investigation in understanding the nature of firm purpose:

- **How did we get here?** An overview of the evolution of purpose at the firm level, exploring how and why firms engage in activities that are at least in part focused on generating positive impacts (above and beyond those generated by run-business activities)
- **How do firms get engaged in purpose-driven / wicked problems-related activities?** A characterization of how businesses are engaged in purpose-driven activities today, including intrinsic vs. external motivations, “types” of engagement behavior, and the role of ecosystem factors like regulators and investors

¹ (Joly, 2021)

- **What is the nature of purpose-driven engagement by firms?** A review of what it means for a firm to be involved in purpose-driven activities, including the nature of “success” in pursuing a purpose outside of shareholder value maximization
- **Why is introducing purpose to a firm different than the “run-business” paradigm of maximizing shareholder value?** An overview of the “wicked problems” approach to thinking about problems (and why wicked problems are different from more traditional business problems), and a mapping of common firm purpose initiatives to wicked problems

As a note – it has been strongly suggested that purpose-driven firms may outperform their peers for a variety of reasons. We have left the review of such research for another paper – this paper is firmly focused on understanding the pursuit of purpose and the changes in behavior that we may expect to see as a result.

Process & methods

The team combined both structured searches and broader literature review to determine the appropriate materials to include in this literature review. Because the literature on wicked problems and business is extensive and not well-connected, we used several key search terms to ensure we are capturing a wide range of disciplines, perspectives, and research studies. We searched for “wicked problems,” “ESG,” “corporate social responsibility,” “sustainability and business,” “business and SDGs,” “shared value,” and “purpose-driven business” for published journal articles. We limited the scope of research to thematic areas reasonably related to wicked problems and business. We reviewed quality of the results by looking at citations, journal accreditation, and author credentials. Each article was then reviewed to determine relevance. Some articles pointed to additional references which we then searched online, including business magazines, books, and reports from international bodies and NGOs. We used several key literature reviews and authors to guide our search, including books by George Serafeim and Alex Edmans (two of the most prolific researchers in this space).

After this “top down” approach, we also took a tactical approach to filling in the remaining gaps with existing research. Where we found “holes” in logic, we did our best to supplement the literature review with specific searches to test the necessary hypotheses. The team made sure to include both the research that most strongly supported our theses as well as those that may contradict the perspective detailed above. Papers were only excluded from the review if later findings demonstrated contradictory results that were explained as the result of a societal shift (e.g., the perspectives of investors on the value of ESG involvement by businesses may rationally have changed over time).

The evolution of purpose in the firm

The present state of purpose in the firm

Most firm leaders have made it clear that they believe their firms must care about their impact on the world, beyond focusing on generating profits. In *Fortune*'s 2019 survey of the *Fortune* 500 CEOs, only 7% agreed with the statement that their firms should “mainly focus on making profits and not be distracted by social goals.”² Additionally, in an HBR Analytic Services survey of 474 executives, there was a strong

² (Murray, 2019)

acknowledgement of what firms may gain from being purpose-driven: 89% said strong purpose drives employee satisfaction, 84% said purpose could affect the firm's ability to transform, and 80% said purpose helps increase consumer loyalty.³ The survey also found only 46% of executives reported that their firm currently runs in a purpose-driven way, while 44% reported their firm is trying to develop a purpose-driven nature.⁴

The concept of being purpose-driven has become a popular way of describing firms who care about the benefit of all stakeholders, beyond just the shareholders, which involves engaging in activities for societal good. In 2019, the Business Roundtable announced a new Statement on the Purpose of a Corporation, signed by 181 CEOs, "who commit to lead their companies for the benefit of all stakeholders – customers, employees, communities and shareholders."⁵ In that same year, Larry Fink (Founder, Chairman, and CEO of BlackRock) emphasized in his annual letter to CEOs that profit and purpose could work together: "Profits are in no way inconsistent with purpose—in fact, profits and purpose are inextricably linked. Profits are essential if a company is to effectively serve all of its stakeholders over time—not only shareholders, but also employees, customers, and communities."⁶ Along these lines, by examining the link between profit and societal good, Kramer finds that a purpose-driven culture can shape the "very tissue that creates genuine and meaningful differentiation" for firms.⁷

Businesses are beginning to engage in incremental purpose-driven activities. First, firms reporting on purpose-driven activities has increased. 92% of the S&P 500 Index companies and 70% of Russell 1000 companies published sustainability reports in 2020, up from 90% and 65% in 2019 respectively.⁸ These reports usually include goals and plans to address environmental, social, and economic sustainability topics. This represents significant engagement growth since 2011, when only 20% of S&P 500 firms published ESG-related reports.⁹

Additionally, firms are starting to make some substantive purpose-driven changes, especially when they have a clear business benefit. Ritala et al. found that corporations have increasingly engaged in sustainable value creation over time, specifically in responsible use of resources (reducing energy and raw material consumption, recycling what they do use, and using renewable energy sources) rather than social and economic activities. By analyzing press releases of S&P 500 companies for key words related to sustainable business models, they also find firms focus on sustainable activities that create economic and operational value, i.e., activities that can reduce monetary costs or affect subsidies. These findings suggest that corporations are currently more likely to look towards incremental changes that make business sense vs. investing in radically different business models with more ambiguous long-term payoffs.¹⁰

³ (Services, 2015)

⁴ (Services, 2015)

⁵ (Business Roundtable, 2019)

⁶ (Fink, Purpose & Profit, 2019)

⁷ (Kramer, 2020)

⁸ (Governance & Accountability Institute, Inc, 2021)

⁹ (Governance & Accountability, Inc, 2020)

¹⁰ (Ritala, et al., 2018)

Overview of the evolution of purpose in the firm

Business and social/environmental impact has evolved over the past 70+ years. What began as philanthropy to give back to their communities, morphed into corporate social responsibility (CSR), despite Milton Friedman's strong objection to these activities as inappropriate and unjustifiable. Businesses began to recognize strategic CSR and the ways that CSR can create competitive advantage and growth opportunities. Businesses faced increasing pressure from governing bodies to take on more responsibility. The United Nations defined sustainable development in 1987, and corporate sustainability (environmental and social) caught on. Ideas like stakeholder capitalism and the "triple bottom line" took hold, urging businesses to consider more than just shareholders in their decision-making processes. In 2011, Creating Shared Value (CSV) was proposed as a replacement to CSR which was critiqued for being too narrow and separated from civil society. Most recently, the field of Environmental, Social, and Governance (ESG) investing advanced the idea of companies measuring and reporting their impact on social and environmental issues in a similar standardized manner to financial accounting.

1950s: From philanthropy to the early days of corporate social responsibility (CSR)

Early efforts of socially responsible leaders made significant contributions to their local communities through philanthropic efforts (investing money, time, resources, etc.).¹¹ The period after WWII and the 1950s ushered in adaptation and changing attitudes towards the discussion of corporate social responsibilities.¹² In 1953, Bowen defined the social responsibilities of business executives as "the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society."¹³

1960s: CSR continues to take form

In 1960, Davis argued that businesspeople have economic and human values obligations to society and thought that social responsibility could have economic returns for the firm to some extent. He indicated that the "social responsibilities of businessmen need to be commensurate with their social power."¹⁴

1970s: CSR draws criticisms while continuing to build momentum

The discussions of the 50s and 60s continued into the 70s, though with some new push back. In 1971, the Committee for Economic Development acknowledged that the social contract between business and society was evolving¹⁵: society was asking businesses to take on broader responsibilities beyond contributing products/services, employment, and economic growth.¹⁶ For example, society urged businesses to develop a greater awareness of matters such as "environmental conservation; hiring and relations with employees; and more rigorous expectations of customers for information, fair treatment, and protection from injury."¹⁷

¹¹ (Marinetto, 2006)

¹² (Agudelo, Johannsdottir, & Davidsdottir, 2019)

¹³ (Bowen, 1953)

¹⁴ (Davis, 1960)

¹⁵ (Committee for Economic Development, 1971)

¹⁶ (Agudelo, Johannsdottir, & Davidsdottir, 2019)

¹⁷ (Committee for Economic Development, 1971)

Milton Friedman led the criticism with *The Social Responsibility of Business is to Increase its Profits*, published in 1970, in which he argued that corporate social responsibility activities were an inappropriate use of company's resources that would be spending someone else's money for a general social interest.¹⁸ Similarly, in 1975, Preston and Post argue that corporations have a public responsibility that is limited by clear boundaries, anything outside is not an obligation for the firm and is inefficient.¹⁹ They argued that companies are only responsible for the direct consequences of their business activities and not improving social problems.²⁰

1980s: Governments back off but other institutions continue with an added focus on stakeholders and sustainability

In the 1980s, while governments took a step back from regulating corporate behavior, communities and interest groups still had social expectations of firms. The term stakeholder became more common as scholars researched business ethics and ways to operationalize CSR so that businesses could answer to shareholders, employees, and consumers.²¹ In 1984, Edward Freeman and Jeanne Liedtka wrote about stakeholder capitalism stemming from the long history of business as an important element of society rather than a purely economic entity. Stakeholder capitalism is based on four principles: the principle of stakeholder cooperation says that "value is created because stakeholders can jointly satisfy their needs and desires"; the principle of complexity claims that "human beings are complex creatures capable of acting from many different values"; the principle of continuous creations says that "business as an institutions is a source of the creation of value"; and the principle of emergent competition says that "competition emerges from a relatively free and democratic society so that stakeholders have options."²²

Towards the end of the decade, sustainability began to have its own moment as a corporate responsibility. In 1987, the World Commission on Environment and Development defined sustainability as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs," sustainability aims to secure intergenerational equity.²³

1990s: Influenced by Corporate Sustainability, the Triple Bottom Line is introduced; CSR, Stakeholder Capitalism, and Corporate Sustainability continue

Triple Bottom Line

The Triple Bottom Line was first conceived by Elkington in 1994 as a sustainability framework to balance social, environmental, and economic impact. The triple bottom line concept became popular in the late 1990's as a practical approach to sustainability and it has remained important because economic goals need to be balanced by social and environmental goals and positive behavior.²⁴

¹⁸ (Friedman M. , 1970)

¹⁹ (Preston & Post, 1975)

²⁰ (Agudelo, Johannsdottir, & Davidsdottir, 2019)

²¹ (Carroll A. , A history of corporate social responsibility: concepts and practices, 2008)

²² (Freeman & Liedtka, 1997)

²³ (World Commission on Environment and Development (WCED), 1987)

²⁴ (Agudelo, Johannsdottir, & Davidsdottir, 2019)

CSR

In 1991, Wood defined three dimensions of Corporate Social Performance (CSP): first, the principles of corporate social responsibility; second, the processes of corporate social responsiveness; and third; the outcomes of all corporate behavior as social impacts, programs, and policies.²⁵ Also in 1991, Carroll presented the “Pyramid of CSR,” as the four main responsibilities of any company: 1) economic responsibilities are the foundation, 2) legal responsibilities, 3) ethical responsibilities, and 4) philanthropic responsibilities.²⁶

In 1992, the association, Business for Social Responsibility (BSR), was founded which initially included 51 companies.²⁷ Later in 1996, Burke and Logsdon identified five dimensions of strategic CSR which are essential for achieving the business objectives as well as for value creation: 1) centrality, CSR’s proximity to the company’s mission and objectives; 2) specificity, the ability to gain specific benefits for the firm; 3) proactivity, the ability to create policies anticipating social trends; 4) voluntarism, actions not influenced by external requirements; and 5) visibility, CSR’s relevance for internal and external stakeholders.²⁸

Stakeholder capitalism

In 1995, Donaldson and Preston argued that the three aspects of stakeholder theory (its descriptive accuracy, instrumental power, and normative validity) are mutually supportive and that the normative base of the theory—which includes the modern theory of property rights—is fundamental.²⁹

Corporate Sustainability

To help businesses, in 1992, The Business Council for Sustainable Development published *Changing Course*, a practical introduction to new methods of running businesses to support the realities of the environment and the needs of human development.³⁰ In 1996, ISO (International Standards Organization) 14001 was formally adopted as a voluntary international standard for corporate environmental management³¹ In 1999, Dow Jones launches Sustainability Indexes, tools to provide guidance to investors looking for profitable companies that follow sustainable development principles.³² The Global Reporting Initiative (GRI) was established in 1997 to create an accountability framework for companies to display to their stakeholders their responsible environmental practices.³³

2000s: ESG and Shared Value are introduced; CSR and Stakeholder Capitalism continue

²⁵ (Wood, 1991)

²⁶ (Carroll A. , The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders, 1991)

²⁷ (Business for Social Responsibility, 2022)

²⁸ (Burke & Logsdon, 1996)

²⁹ (Donaldson & Preston, 1995)

³⁰ (Schmidheiny, 1992)

³¹ (ISO, n.d.)

³² (Naqvi & Jus, 2019)

³³ (Atkins, 2020)

Environmental, Social, and Governance (ESG)

ESG investing is a term that is often used interchangeably with sustainable investing, socially responsible investing, mission-related investing, or screening.³⁴ ESG issues were first mentioned in the 2006 UN Principles for Responsible Investment (PRI) report. In PRI's first year, 63 investment companies signed on with \$6.5 trillion in assets under management (AUM) incorporating ESG issues.³⁵ The initiative has grown dramatically, as of June 2021, there are 4,000 UN PRI signatories representing over \$110 trillion in AUM.³⁶ In 2009, GRI shifted from its founding focus on sustainability to focusing on ESG issues and implementing the newer term.³⁷

Shared Value

Shared value was first introduced in the 2000s as a replacement for CSR. In 2006, Porter and Kramer critiqued CSR for being too fragmented and disconnected from business and strategy, with business leaders focusing on the frictions between business and civil society.³⁸ Porter and Kramer introduced shared value to encourage firms to see the mutual dependencies of firms and society, such that firms take actions that provide value for both sides.³⁹ Otherwise, a firm's temporary gain at the expense of society will eventually undermine the long-term prosperity of both.⁴⁰

With this concept of shared value, there is the concept of benefit (or "B") corporations that create value for non-shareholding stakeholders. Certified B Corporations are social enterprises verified by B Lab based on how they create value for non-shareholding stakeholders, such as their employees, the local community, and the environment. The first generation of B Corporations was certified in 2007.⁴¹

CSR

In July 2000, the United Nations Global Compact (UNGC), a pact made to adopt sustainable and socially responsible policies, was launched, gathering 44 global companies, 6 business associations, and 2 labor and 12 civil society organizations.⁴² Between 2001 and 2004 the European Commission held several conferences on CSR which then led to CSR as a strategic element for the European Commission's Plan of the General Direction of Business.⁴³ In 2002, the International Organization for Standardization's (ISO) Committee on Consumer Policy created international certifications for CSR.⁴⁴ In 2008, Heslin and Ochoa analyzed 21 exemplary CSR practices and found that strategic CSR (SCSR) practices follow seven common principles: cultivate the needed talent, develop new markets, protect labor welfare, reduce the environmental footprint, profit from by-products, involve customers, and green the supply chain.⁴⁵

³⁴ (MSCI, 2022)

³⁵ (Atkins, 2020)

³⁶ (Segal, 2021)

³⁷ (Atkins, 2020)

³⁸ (Porter & Kramer, *Strategy & Society*, 2006)

³⁹ (Porter & Kramer, *Strategy & Society*, 2006)

⁴⁰ (Porter & Kramer, *Strategy & Society*, 2006)

⁴¹ (Kim, Karlesky, Myers, & Schifeling, 2016)

⁴² (Agudelo, Johannsdottir, & Davidsdottir, 2019)

⁴³ (Eberhard-Harribey, 2006)

⁴⁴ (Agudelo, Johannsdottir, & Davidsdottir, 2019)

⁴⁵ (Heslin & Ochoa, 2008)

Stakeholder Capitalism

In 2001, Freeman argued that corporations have a responsibility towards suppliers, consumers, employees, stockholders, and the local community and should be managed accordingly.⁴⁶ A. L. Friedman and Miles agreed that the relation between corporations and their stakeholders is dynamic and has different levels of influence on the firm.⁴⁷

Following the financial crisis of 2007-2008, stakeholder or “inclusive” capitalism was brought up again to address flaws in current capitalist systems, assumptions, and institutions. Sachs et al. describe the role of the firm in addressing societal issues such as the 2008-2009 global financial crisis through stakeholder governance.⁴⁸

2010s: Without new categories of thought, concepts present in the 2000s carry on

CSR

In 2015, CSR Europe, with 10,000 companies in its network, launched the Enterprise 2020 Manifesto with the purpose to set the direction of businesses in Europe and play a leading role in developing an inclusive sustainable economy.⁴⁹ In 2016, Chandler expands SCSR previous models to encompass five major components: 1) CSR’s integration into the company’s strategic planning process and culture; 2) understanding that all company actions are directly related to the core operations; 3) a stakeholder perspective is necessary; 4) mid- and long-term perspectives incorporating all key stakeholders is necessary; and 5) firms should try to optimize the value created.^{50,51}

Pressure for firms to be socially responsible continued to trickle down from the UN to national governments to firms through policies and regulation. In 2015, the UN updated the Millennium Development Goals to 17 Sustainable Development Goals (SDGs). The SDGs cover a wide range of areas, from climate change to the eradication poverty and hunger, as well as the fostering of innovation and sustainable consumption. The SDGs are interconnected, so addressing one goal almost certainly involves tackling issues of another one.⁵²

Stakeholder Capitalism

In 2013, conscious capitalism is introduced, which encompasses stakeholder capitalism. John Mackey, co-founder and co-CEO of Whole Foods, and Raj Sisodia, Bentley University marketing professor, coined the term “conscious capitalism” in their book *Conscious Capitalism: Liberating the Heroic Spirit of*

⁴⁶ (Freeman R. , 2001)

⁴⁷ (Friedman & Miles, 2002)

⁴⁸ (Sybille Sachs, 2011)

⁴⁹ (CSR Europe, 2016)

⁵⁰ (Agudelo, Johannsdottir, & Davidsdottir, 2019)

⁵¹ (Chandler, 2016)

⁵² (UNDP, 2022)

Business. The four guiding principles are: higher purpose, stakeholder orientation, conscious leadership, and conscious (corporate) culture.^{53,54}

ESG

The Sustainability Accounting Standards Board (SASB) began in 2011 to develop standards that display both sustainability and financial fundamentals. Jean Rogers, the creator of the framework, stated the goal was so “investors could compare performance on critical social and environmental issues, and capital could be directed to the most sustainable outcomes.”⁵⁵ To help inform investors’ decisions, SASB Standards identify the sustainability information that is financially material for the firm (material to understanding how an organization creates enterprise value).⁵⁶

Based on a study of Russell 1000 firms publishing sustainability reports in 2020, the GRI (introduced in 1997) and SASB reporting standards are almost equally adopted, with 52% and 53% of firms using each standard respectively.⁵⁷ In 2021, another standard was introduced. The International Sustainability Standards Board (ISSB) was announced at the COP26 UN Climate Change Conference to develop global reporting standards.⁵⁸

Shared Value

In 2011, Porter and Kramer continue to argue that businesses need to adopt the Creating Shared Value (CSV) framework instead of CSR. CSV is in reaction to the conventional narrow-viewed business strategies which generally don’t consider the broad factors that influence their long-term success. Porter and Kramer argue that CSR is outdated and limited, and only came to be to improve a company’s reputation. Porter and Kramer established three ways for creating shared value: by reconceiving products and markets, by redefining productivity in the value chain, and by creating supportive industry clusters where the company operates.⁵⁹

How firms get engaged in purpose-driven activities

Why businesses become purpose-driven

Business initiative to be purpose-driven is influenced by a number of extrinsic factors (e.g., motives relating to financial outcomes, competitive advantage, pressure from employees and shareholders, increased government involvement) and intrinsic factors (ethical and philanthropic motives, altruistic motives). A 2019-2020 cross-sectional survey of 71 business representatives⁶⁰ involved in cross-sector social partnerships found that the top drivers for involvement were related to (1) having a positive impact on environmental and community sustainability, (2) building new relationships and networking, (3) increasing community engagement, (4) sharing their own experiences, and (4) improving firm

⁵³ (Conscious Capitalism, Inc, 2021)

⁵⁴ (Mackey & Sisodia, 2013)

⁵⁵ (Rogers, 2019)

⁵⁶ (SASB, 2022)

⁵⁷ (Governance & Accountability Institute, Inc, 2021)

⁵⁸ (IFRS, 2021)

⁵⁹ (Porter & Kramer, Creating shared value, 2011)

⁶⁰ (49% senior executives; 30% middle managers; and 11% junior staff, external advisors, and others)

reputation.⁶¹ Firms that have both intrinsic and extrinsic motives to pick up a social cause may have deeper engagement strategies and correspondingly improved outcomes.⁶²

Some studies have found that extrinsic factors were primary motivators for many firms. Particularly, larger firms may take external, economically oriented motives into greater consideration than smaller firms.⁶³ In a 2003 survey of 500 UK business directors, business directors stated that employees, external to leadership, (82%) and customers (81%) were important stakeholders in encouraging the organization to think about its social and environmental impacts.⁶⁴ In 2004, The Economist Intelligence Unit surveyed 136 executives on the main drivers of corporate responsibility's increased importance and found the top five drivers were greater shareholder focus on corporate responsibility (cited by 29% of respondents), greater pressure from regulators (29%), recent corporate scandals (29%), greater media focus on corporate responsibility (24%), and the opportunity to gain a competitive advantages (24%).⁶⁵ CSR activities may rise with firms' performance, as firms may have additional resources that allow them to engage in / spend more on CSR activities.⁶⁶

In some cases, while extrinsic factors led, an intrinsic sense of responsibility was close behind. Results of a 2012 survey of 473 Dutch executives suggest that executives are motivated by financial (extrinsic), ethical (intrinsic), and altruistic (intrinsic) motives to take responsibility for the labor, environmental, and social aspects of their business. Bansal & Roth interviewed 53 firms in the UK and Japan on "why companies go green" and identified three motivations: (1) to be competitive, (2) to demonstrate legitimacy, and (3) a sense of ecological responsibility.⁶⁷

In some cases, intrinsic motives lead. Firms in Africa that choose to incorporate goals of alleviating poverty into their business purpose typically have intrinsic motives rather than extrinsic ones⁶⁸ One study found that for both social and environmental aspects of CSR, intrinsic motives are stronger than the extrinsic.⁶⁹

Minulla and Miles combine two theoretical frameworks for corporate social responsibility (Van Marrewijk and Carroll's) to illustrate corporate motives for CSR at ambition levels that increase from 1 to 5:⁷⁰

Ambition level (5 being most ambitious)	The firm's source of motivation:
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⁶¹ (Ordonez-Ponce, Clarke, & MacDonald, 2021)

⁶² (Lashitew & van Tulder, Why do firms choose to fight poverty? The motivation behind inclusive business practices in Africa, 2020)

⁶³ (Lashitew & van Tulder, Why do firms choose to fight poverty? The motivation behind inclusive business practices in Africa, 2020)

⁶⁴ (Joseph, 2003)

⁶⁵ (Economist Intelligence Unit, 2005)

⁶⁶ (Harrison Hong, 2012)

⁶⁷ (Bansal & Roth, 2000)

⁶⁸ (Lashitew & van Tulder, Why do firms choose to fight poverty? The motivation behind inclusive business practices in Africa, 2020)

⁶⁹ (Graafland & Mazereeuw-van der Duijn Schouten, 2012)

⁷⁰ (Munilla & Miles, 2005)

1: Compliance-driven CSR	Its legal duty to society, social obligation, and see it as the cost of doing business
2: Profit-driven CSR	Its economic incentives to gain competitive advantage
3: Caring CSR	Its ethical and philanthropic goals to balance the triple bottom line of profits, people, and planet
4: Synergistic CSR	Its economic, legal, ethical, and philanthropic values that support creating a sustainable corporation
5: Holistic CSR	Its economic, legal, ethical, and philanthropic values that believe establishing CSR as part of the corporate culture will benefit the firm, similar to when firms adopt a quality orientation

How businesses decide which societal challenges to engage in

There are few studies that look at *how* businesses decide which societal challenges to engage in. van Zanten and van Tulder surveyed 81 European and North American Financial Times Global 500 companies to understand how multinational enterprises decided on their engagement with the SDGs. They found that enterprises engaged more with SDG targets that are actionable within their value chain operations and more with targets that avoid harm vs do good.⁷¹ While it's unclear whether firms use the following tool, Eden and Wagstaff propose an SDG materiality matrix, to determine which of the 17 UN SDGs matter to an enterprise's performance and strategy.⁷² The matrix is based on quality of evidence for the target, salience of the target to the enterprise, actionability of the target by the enterprise, and ethicality of the target for the MNE.⁷³

How systematic movements by financial institutions have influenced firm behavior, and how investors have changed their priorities

In 2011, Eccles et al. leveraged data from Bloomberg to demonstrate investors' interest in ESG data, specify differences in areas of interest by country and investor type, and predict a growing market interest in nonfinancial information.⁷⁴ The predication of a growth in interest has proven to be largely accurate. In 2020, sustainable funds netted double the 2019 total and nearly 10 times the 2018 total net flows.⁷⁵ The number of PRI investor signatories increased 26% and assets under management increased 17% from 2020 to 2021.⁷⁶ Canadian ESG assets under management grew 48% from 2017 to 2019.⁷⁷

Presently, investors are seeking increased transparency and accountability with respect to firm ESG activity and firm impact on long-term shareholder value. Investors are increasingly holding corporations

⁷¹ (van Zanten & van Tulder, 2018)

⁷² (Eden & Wagstaff, 2021)

⁷³ (Eden & Wagstaff, 2021)

⁷⁴ (Eccles, Serafeim, & Krzus, 2011)

⁷⁵ Morning Star Global Sustainable Fund Flows Report

⁷⁶ https://dwtzyx6upklss.cloudfront.net/Uploads/y/o/i/pri_annualreport_2021_web_346706.pdf

⁷⁷ (2020 Canadian Responsible Investment Trends Report, 2020)

accountable of diversity and inclusion, responses to current events (i.e., COVID-19, political activity) and requesting executive compensation create accountability for executing on ESG commitments.⁷⁸

Fears related to the performance of sustainable investments have fallen. According to a 2021 institutional investor survey, 38% of institutions had performance concerns, down from 48% in 2019 and 45% in 2020. At the same time, only 8% of investors surveyed said they did not believe in the benefits of sustainable investing, down from 23% of investors in 2018.⁷⁹ Likewise, many types of investors seem to exhibit higher “willingness to pay” (i.e., lower returns) on impact funds (compared to traditional VC funds) – a 2021 study shows that investors may accept 2.5-3/7% lower IRRs ex ante compared to traditional funds,⁸⁰ suggesting that financial performance isn't the determining factor for investment decisions.

Because of this increased engagement, large investors are well-positioned to act as “stewards of the commons” who drive individual firms to engage in good behavior such as pre-competitive⁸¹ collaborations. Financial institutions have updated proxy voting policies with the aim of influencing board diversity⁸² and other ESG policies.⁸³ Evidence suggests that firms are responsive to such engagement efforts from financial institutions. Firms’ disclosures and lobbying efforts are found to be greater aligned with ESG issues highlighted in institutional mandates.⁸⁴ Coordinated activism among institutional investors has been found to increase firms’ ESG and CSR engagement and performance.^{85 86} A 2021 study examining the impact of activist engagement on ESG performance found that firms successfully complying with activist ESG demands experienced improved ESG ratings and a boost in sales.⁸⁷ Shareholders demanding sustainable practices and long-term orientation has increased substantially.^{88 89} Likewise, financial institutions have reduced their exposure to firms that produce high carbon emissions over time, which result in a higher cost of capital for high-emissions firms, such that they are driven to innovate towards being greener.⁹²

⁷⁸ (Peter Reali, 2021)

⁷⁹ (Institutional Investor Study, 2021)

⁸⁰ (Barber, Morse, & Yasuda, 2021)

⁸¹ (Serafeim G. , Investors as Stewards of the Commons?, 2018)

⁸² (Goldman Sachs Asset Management Updates Its Proxy Voting Policies To Increase Ethnic And Gender Diversity Expectations For Public Company Boards, 2021)

⁸³ (Fink, The Power of Capitalism, 2022)

⁸⁴ (Andrea Pawliczek, 2021)

⁸⁵ (Elroy Dimson, Coordinated Engagements, 2018)

⁸⁶ (Tamas Barko, 2021)

⁸⁷ (Tamas Barko, 2021)

⁸⁸ (Flammer, Corporate social responsibility and shareholder reaction: The environmental awareness of investors, 2013)

⁸⁹ (Flammer, Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach, 2015)

⁹⁰ (Flammer & Bansal, Does a long-term orientation create value? Evidence from a regression discontinuity, 2017)

⁹¹ (Judith Walls, 2012)

⁹² (Choi, Gao, Jiang, & Zhang, 2022)

Research has found that “activist” hedge funds that implement changes at target companies can increase the productivity of target firms, potentially by reallocating capital to more effective avenues while reducing employee hours (but maintaining stagnant wages), creating long-term changes.⁹³

Some actions by large institutional investors have been less successful. In 2006, with large institutional investors, the United Nations introduced the Principles of Responsible Investment (PRI). Later, a study that compared firms in funds that did and did not sign the PRI between 2013-2017 found that the ESG scores of firms in funds that signed the PRI did not improve after signing, and PRI funds’ financial returns were lower than funds that did not sign.⁹⁴ This evidence along with other research has indicated that the UN’s PRI is not successful at integrating ESG considerations into all signatory’s investment decisions.⁹⁵

How movements by the government impact business involvement in purpose-driven initiatives

Government attempts to guide firms through ESG regulation is increasing. In 2020, 48 national governments (including China, Canada, France, Germany, the US, and the UAE) plus the EU introduced 151 new regulations (i.e., laws, guidelines, suggested standards, etc.) for issuers and investors regarding ESG issues, primarily to meet the challenges of the climate crisis and enhance transparency around corporate governance.⁹⁶ 151 new regulations in 2020, is up from 103 in 2019, 53 in 2018, and 32 in 2010.⁹⁷ But how impactful is regulation? The following section presents research that has found government regulations effective at forcing some businesses to “clean up their act” and even innovate proactively in anticipation of impending regulations.

The Environmental Protection Agency (EPA), Consumer Product Safety Commission (CPSC), the Equal Employment Opportunity Commission (EEOC), and the Occupational Safety and Health Administration (OSHA) were created in the 1970s in large part to address and regulate businesses and their societal impact.⁹⁸ A 2013 study found a positive influence between greater regulatory and normative pressures and a company’s likelihood of innovating to address environmental issues.⁹⁹

Regulation can drive investment and innovation into purpose-driven problem-solving. For example, the 1970 U.S. Clean Air Act forced automakers to adopt two important new technologies to meet the new emission standards. Gerard and Lave’s research identifies the following three factors that were critical to the government’s regulation successfully driving the adoption of new technology by businesses: agency credibility to enforce standards, competitive pressure to drive industry R&D, and uncertainty about technological development.¹⁰⁰ Additionally, research finds that multinational companies that have “high exposure” to more stringent international environmental regulations tend to produce more green patent applications.¹⁰¹ Regulation can also force firms to improve the reliability of their information and update

⁹³ (Brav, Jiang, & Kim, 2015)

⁹⁴ (Ranja Gibson, 2021)

⁹⁵ (Sakis Kotsantonis, 2016)

⁹⁶ (MSCI, 2022)

⁹⁷ (MSCI, 2022)

⁹⁸ (Carroll A. , 2015)

⁹⁹ (Pascual Berrone, 2013)

¹⁰⁰ (David Gerard, 2005)

¹⁰¹ (Kim, Pantzalis, & Zhang, 2021)

internal procedures and governance, specifically when the regulation is regarding disclosure of non-financial information.¹⁰²

Recent regulation will further test the government's ability to influence firms effectively. In March 2022, the U.S. Securities and Exchange Commission (SEC) proposed rule changes that would require SEC-registered firms to make climate-related disclosures in materials prepared for investors.¹⁰³ These disclosures would include information on climate-related risks and climate-related financial statement metrics.¹⁰⁴ This proposal has been called a notable landmark in accelerating the amount and quality of climate disclosures by firms.¹⁰⁵

As an alternative to regulation, Walls explores how judicial action can be a potential strategy to address the wicked problem of climate change. Walls cites a 2015 case, filed in The Hague District Court by an environmental non-profit on behalf of 886 Dutch citizens, which ruled that the Dutch government's stance on climate change was illegal and ordered the government to cut greenhouse gas emissions by at least 25% by 2020, relative to 1990 levels.¹⁰⁶ This decision went through appeals and was ultimately held up in Dec. 2019 by the Netherland's Supreme Court.¹⁰⁷ One immediate impact of the court ruling was that, in March 2019, the Dutch government closed a coal-fired power plant four years early.¹⁰⁸ The case has also had the impact of accelerating climate change litigation around the world, led by NGOs.¹⁰⁹

How big social movements impact the role that businesses take in purpose-driven initiatives

There is some evidence that businesses respond to long-term social movements – ones that seem to have “staying power” – but short-term firm responses to such social movements are historically uneven and can range from reputation-management to active retaliation against those involved.

Firms respond to social movements (particularly when specifically called out in the form of protest, boycott, or legal action) in several ways, including symbolically to manage their image and reputation, increasing donations to philanthropic causes, conceding to activist demands (or changing behavior), doing nothing at all, or even worse, retaliating against activists.¹¹⁰ Social norms also impact the behavior of large institutional investors, which results in those firms facing additional pressure to engage in positive societal initiatives. While “sin stocks” – those for companies involved in alcohol, tobacco, gambling, etc. – have higher returns, they have less institutional ownership and analyst coverage than comparable stocks, suggesting that social norms can impact the willingness of large institutional investors.¹¹¹

¹⁰² (Selena Aureli, 2020)

¹⁰³ (SEC, 2022)

¹⁰⁴ (SEC, 2022)

¹⁰⁵ (Cifrino & Hollinger, 2022)

¹⁰⁶ (Walls, 2018)

¹⁰⁷ (Urgenda Foundation v. State of the Netherlands, n.d.)

¹⁰⁸ (Bart Meijer, 2019)

¹⁰⁹ (Lopik, 2021)

¹¹⁰ (Soule, 2018)

¹¹¹ (Hong & Kacperczyk, 2009)

Georgallis' 2016 paper identifies and explains three mechanisms through which social movements drive businesses to engage in social initiatives. The three mechanisms are: (1) influencing key stakeholders' expectations and demands for firms' social responsibility, (2) using conflict or collaboration to shape firms' reputation and legitimacy therefore modifying the costs and benefits of a firm engaging in social issues, and (3) triggering employees' values which affects managerial cognition.¹¹² These three mechanisms can be viewed as occurring at the ecosystem ("field-level" in the paper), firm, and individual level respectively.

Externally, media attention may influence firms to engage with CSR. Borghesi et al (2014) find a positive correlation between the level of media scrutiny surrounding firms and firms' CEO and the level of CSR investment.¹¹³ Likewise, a 2020 study finds that increased public attention is associated with increased female board representation, especially in firms that, even before the public attention, prioritized gender equality in their culture.¹¹⁴

Internally, perceived competitive advantage in terms of long-term profitability can help actions based on social movements gain more traction at a firm.¹¹⁵ Firms may also act based on social movements depending on how politically active they are. A 2019 study found that for S&P 500 firms, firms that are less politically active are more likely to agree with proposals from socially oriented shareholders and social activists.¹¹⁶ Politically active firms can use their political activity to buffer or deflect activism and support the corporate status quo. In this study corporate political activity includes both financial and relational activities, and activism is focused on social and environmental firm practices.

The nature of firms' purpose-driven activities

The "types" of involvement that businesses can engage in

Multiple academics propose maturity models / typologies of business involvement in purpose-driven activities; a common thread in these typologies is to highly rate involvement that is perceived as "transformative" (i.e., the development of new products and new business models to support purpose-driven business growth) compared to "operational" or "compliance-driven."

For example, Henderson suggests there are three particularly promising business models: 1) forestalling risk (preventing brand damage/preserving the license to operate), 2) increasing operational efficiency, and 3) selling to the environmental niche.¹¹⁷ Similarly, according to Serafeim (2020), companies evolve through three stages before achieving sustainable innovation: 1) compliance, 2) operational effectiveness, and 3) growth and innovation.¹¹⁸

With a slightly different approach, Ioannou and Serafeim (2019) differentiate between common vs. unique sustainability actions. Common actions are those that the industry has converged upon whereas unique have a high degree of novelty in their industry. Actions are classified based on three variables: 1) low

¹¹² (Georgallis, 2017)

¹¹³ (Richard Borghesi, 2014)

¹¹⁴ (Mariassunta Giannetti, Forthcoming)

¹¹⁵ (Bansal & Roth, 2000)

¹¹⁶ (Michael Hadani, 2019)

¹¹⁷ (Henderson, Making the Business Case for Environmental Sustainability, 2015)

¹¹⁸ (Serafeim G. , 2020)

market uncertainty, 2) low regulatory uncertainty, and 3) high practice novelty to determine whether the actions are common or unique. Unique sustainability actions are significantly and positively associated with both accounting measures of performance and market valuations.¹¹⁹

Alex Edmans suggests that truly responsible businesses eschew a “pie-splitting mentality” in favor of a “pie-growing approach” in which a company’s primary objective is social value, with profits “coming along” as a byproduct of successfully creating positive societal value.¹²⁰ Edmans redefines “trustworthy businesses” as those who use their expertise and resources to address societal challenge and contrasts businesses that treat CSR as an “ancillary” function, using their profits to “make up for” the harm that they create to society, with those who embed social good into their core business. Per Edmans, mature businesses must also actively work to ensure that outcomes are Pareto-optimal – that is, no stakeholders are harmed in the making of the social good – or at least, decisions about trade-offs are guided by the business’ social purpose rather than financial optimization.

While many of these frameworks focus within the firm, firms may also participate in “pre-competitive collaborations,” i.e., companies coming together to develop standards, generate data, create knowledge, and/or fuel product development around a specific ESG area.

However, these academic typologies typically focus solely on the impact the firm can generate as a single entity (potentially discounting, for example, the impact that operational efficiencies can have when perpetuated throughout a full business ecosystem), and fail to incorporate findings that show that, when “dirty” businesses are forced to innovate to be compliant with new government regulations, they develop high volumes of high-quality product innovations in response. This purely intra-firm model may therefore require an “intersectional” / ecosystem-driven lens to truly ensure it captures the transformative potential of different business activities.

How do businesses determine their “type” of involvement?

Stakeholder pressure is agreed upon to be often underlying firms’ determination of their type of involvement. Additionally, institutional pressure and expected business outcomes will also play a role at determining how firms get involved with purpose-driven activities.

One study identified two forms of involvement a firm might exhibit: alignment to a (1) symbolic or (2) substantive self-regulatory code.¹²¹ In this case, they determined the UN Global Compact to be a symbolic regulatory code and the Global Reporting Initiative to be a substantive self-regulatory code.¹²² Their analysis found that the type of stakeholder pressure and the availability of resources for response were the two key variables in determining the type of involvement a firm took on.¹²³ In aggregate, stakeholder pressure was associated with substantive involvement, but for three out of eight dimensions

¹¹⁹ (Ioannou & Serafeim, 2019)

¹²⁰ (Edmans, *Grow the Pie: How Great Companies Deliver Both Purpose and Profit*, 2020)

¹²¹ (Perez-Batres, Doh, Miller, & Pisani, 2012)

¹²² (Perez-Batres, Doh, Miller, & Pisani, 2012)

¹²³ (Perez-Batres, Doh, Miller, & Pisani, 2012)

of stakeholder pressure, the association was to symbolic involvement.¹²⁴ There was a positive association between resource discretion and substantive action.¹²⁵

Another study found that differing CSR strategies (obstructionist, defensive, accommodative, and proactive) are a result of both institutional and stakeholder pressures.¹²⁶ Institutions primarily shape the incentive structure that is associated with different CSR strategies and stakeholder pressure will either amplify or buffer the institutional pressure.¹²⁷ Lastly, Clementino and Perkins find that firms in Italy respond to ESG ratings in one of four ways: passive conformity, passive resistance, active conformity, or active resistance to ESG rating agencies' guidelines.¹²⁸ These response types varied based on (a) the firm's understanding of how stakeholders, primarily investors, would respond to a better ESG score, and (b) the firm's belief that changes made as a response to ratings would contribute to business outcomes.¹²⁹ The primary motivation for passive conformity was to attract investors, while the motivations for active conformity was to attract investors and to engage in activities that were most strategic for business outcomes.¹³⁰

What "success" looks like for purpose-driven activities

How do we define or measure the "success" of business approaches to purpose-driven activities?

Academics have not yet aligned on the appropriate metrics to understand the success of a business's approach to purpose-driven initiatives; many elide the issue by either leveraging data from external weighting agencies, which can be highly variable between agencies and may not be reliable; or simply relying on announcements of activity as a proxy. This is in large part because different businesses often choose to take on different aspects of societal challenges in a way that makes them difficult to compare. In addition, scores provided by rating agencies primarily reflect inputs to ESG initiatives rather than the outcomes or impact of the investment. While some academics have offered generalizable frameworks for measuring success or impact of business's approach to purpose-driven initiatives, their application remains limited.

ESG ratings vary considerably across rating agencies and are often considered not a reliable definition of success. The multidimensionality of sustainability performance and absence of standards on what constitutes success can also give rise to inconsistent measurement, leading to ESG scores that vary greatly.¹³¹ ¹³² Ratings may also be subjective in some cases, as a rater's overall view of a firm can influence the measurement of certain categories.¹³³

¹²⁴ (Perez-Batres, Doh, Miller, & Pisani, 2012)

¹²⁵ (Perez-Batres, Doh, Miller, & Pisani, 2012)

¹²⁶ (Lee M. , 2011)

¹²⁷ (Lee M. , 2011)

¹²⁸ (Clementino & Perkins, 2021)

¹²⁹ (Clementino & Perkins, 2021)

¹³⁰ (Clementino & Perkins, 2021)

¹³¹ (Florian Berg, 2019)

¹³² (Christensen, Serafeim, & Sikochi, 2022)

¹³³ (Florian Berg, 2019)

Standards for measuring organizations' social impact are underdeveloped.¹³⁴ Rawhouser et al. (2019) reviewed 71 papers that offered measurement frameworks and found issues along the lines of multisector approaches being limited by data quality/availability, single sector measurements facing the downside of generalizability, lack of alignment on measuring social impact activities or outcomes, and lack of agreement on the definition of social impact.¹³⁵

Serafeim et al. (2020) find that most ESG performance scores primarily reflect inputs into a process rather than outcomes. In other words, measures represent efforts of investments rather than the outcome itself. This presents challenges in connecting inputs to outcomes, especially with a likely time lag between the input and outcome, raising doubts about the usefulness of the measures. Further, it is easier to adopt a policy rather than demonstrate an outcome, which has led to competitors imitating each other in terms of setting similar targets and policies but not improving outcomes.¹³⁶ Likewise, Bouman et al. (2013) reviewed the literature and concluded that most studies reviewed the effect of partnerships for social purpose on outputs, not on outcomes or impact.¹³⁷ As partnerships are frequently discussed as solutions (or at least, part of the solution) to societal challenges, it reiterates the difficulty in attributing concrete outcomes to specific interventions, particularly with the long and variable timescale inherent in purpose-driven problem solving.

As ESG scores are unreliable indicators of performance, there have been several attempts at developing frameworks for measuring the success of businesses engaging with societal challenges without solely relying on ESG scores. Edmans (2020) uses employee satisfaction scores as a measure of "social good" and future stock returns as a measure of successful financial performance¹³⁸ Porter and Kramer adopt a shared value approach, arguing that generating economic value in a way that simultaneously drives social/environmental value constitutes a successful approach to value creation.¹³⁹

van Tulder et al. (2016) developed an "impact value chain" to monitor and evaluate cross-sector partnerships that aim to solve economic, social, and environmental problems through collaboration and providing social goods.¹⁴⁰ The impact value chain consists of six elements total that are divided between a process or "internal" phase and a result or "external" phase.¹⁴¹ The process phase includes four elements: 1) establishing the mission, 2) identifying the resources and capabilities that will be inputs, 3) executing activities and implementing structure through which the inputs are leveraged, and 4) gathering the output which are results that can be measured and assessed directly (e.g., profits, members, legitimacy, exposure, etc.).¹⁴² After the process phase, the result phase contains two elements: 1) assessing outcomes (e.g., benefits or changes for individuals, communities, or society), and 2) assessing

¹³⁴ (Rawhouser, Cummings, & Newbert, 2019)

¹³⁵ (Rawhouser, Cummings, & Newbert, 2019)

¹³⁶ (Grewal & Serafeim, 2020)

¹³⁷ (Bouman, Frierson, Gielen, & Wilms, 2013)

¹³⁸ (Edmans, *Grow the Pie: How Great Companies Deliver Both Purpose and Profit*, 2020)

¹³⁹ (Porter & Kramer, *Creating shared value*, 2011)

¹⁴⁰ (van Tulder, Seitanidi, Crane, & Brammer, 2016)

¹⁴¹ (van Tulder, Seitanidi, Crane, & Brammer, 2016)

¹⁴² (van Tulder, Seitanidi, Crane, & Brammer, 2016)

impacts, i.e., ultimate changes positive and negative, intended or unintended.¹⁴³ This approach is useful for teasing out steps that often get lumped together. Especially at the end of the value chain, it is helpful to recognize the difference between (a) outputs that occur internally and are able to be directly measured, versus (b) outcomes that occur externally and are harder to measure, and (c) impacts that also occurs externally and are not only hard to measure but also can take a while to observe.

Elements of organizational approaches

Although the difficulty in defining success can make it challenging to identify common elements in successful approaches, there are some trends in the approaches that organizations take while addressing purpose-driven challenges. Organizations that integrate social and environmental policies into their business model and adopt a long-term orientation approach tend to be more successful in addressing social and environmental issues.¹⁴⁴ ¹⁴⁵ Setting an ambitious target is also an element of a successful approach, as ambitious targets are more likely to be met than modest or realistic ones.¹⁴⁶

Serafeim has offered frameworks for successful approaches to tackling purpose-driven initiatives. According to Serafeim, in order to find and execute on worthwhile and sustainable ESG innovations, firms must adopt a five-pronged approach¹⁴⁷: 1) Find and adopt the most strategic (and forward-looking) ESG practices; 2) Create good ESG goals and accountability structures, including metrics and financial incentives; 3) Ensure accountability starts at the “highest levels of the organization”(e.g., potential board involvement, linking executive pay to outcomes) supported from the bottom up by a culture around corporate purpose; 4) Make “the right” operational changes: Firms typically need to centralize to move from “compliance” to “efficiency” stage and then decentralize to progress to “growth and innovation.” This requires ultimately “designing for trust” (but book does not say how); and 5) Communicate effectively to investors and the world.

Serafeim also lays out four “pillars” of sustainable behavior: outcomes-based incentives, education of the next generation of leaders, a government-maintained information environment, and continual transparency through analysts (firms must not only set goals but also measure how their outcomes measure up against them and be willing to adapt their behavior to enable meeting those goals).¹⁴⁸

Serafeim et al (2018) identify three principles for creating successful strategies that drive inclusive, sustainable, and profit-generating ecosystems.¹⁴⁹ First, companies should search for systemic, multisector opportunities that benefit not only themselves but also others. Second, companies need collaborative partnerships across sectors. Third, seed and scale-up financing from organizations with an

¹⁴³ (van Tulder, Seitanidi, Crane, & Brammer, 2016)

¹⁴⁴ (Eccles, Ioannou, & Serafeim, 2014)

¹⁴⁵ (Flammer & Bansal, Does a long-term orientation create value? Evidence from a regression discontinuity, 2017)

¹⁴⁶ (Freiberg, Grewal, & Serafeim, 2021)

¹⁴⁷ (Serafeim G. , 2020)

¹⁴⁸ (Grewal & Serafeim, 2020)

¹⁴⁹ (Robert Kaplan, 2018)

aligned mission will better support the firm than financing from organizations under pressure to generate short-term financial returns and minimize risk.¹⁵⁰

Edmans suggests that leaders should consider three principles, described in Table 1, to understand whether decisions will both “grow the pie” and grow profits simultaneously: multiplication, comparative advantage, and materiality.¹⁵¹

Table 1: Success Principles for Growing the Pie

Principle	Satisfied if?	Implication
Multiplication	Social benefit > private cost	Activity delivers net social value – it is more cost-effective for the business to take this action than to just pay the cost to the stakeholder who would benefit
Comparative Advantage	Social benefit > social cost	Activity creates value – this firm can have a bigger impact on the issue than other firms – the “stay in your lane” idea that’s reflected in Serafeim’s idea of materiality (and our 2 by 2) – and is typically based on either direct control of an activity or expertise
Materiality¹⁵²	Social benefit > Social cost AND activity benefits material stakeholders	Activity creates profits through creating value – activity can either create profits for material business stakeholders (investors, employees, suppliers) and/or via intrinsic materiality – stakeholders the business cares about as a matter of principle, as decided by a combination of investors, leaders, and employees

Elements of unsuccessful approaches

Organizations that do not integrate ESG or purpose into their business models tend to perform worse with respect to environmental and social issues. Gulati (2022) differentiates between deep purpose and “purpose-as-win-win-only” practices of companies. The latter focuses only on those opportunities to maximize both profit and social good, thereby avoiding tough tradeoffs. When push comes to shove,

¹⁵⁰ (Robert Kaplan, 2018)

¹⁵¹ (Edmans, *Grow the Pie: How Great Companies Deliver Both Purpose and Profit*, 2020)

¹⁵² Note Edmans’ definition of materiality differs from that proposed by Serafeim – where Serafeim focuses on the ability of the action to generate value or innovation for the firm in question, Edmans defines materiality based on the stakeholders being impacted

these companies usually choose to maximize shareholder value over social value and pursue social value projects only when the economic payoffs are clear.¹⁵³

Simply donating to charity is not enough, and the market is especially concerned with “improper” donations. When companies announce donations to charities where their directors act as insiders, their stock price drops by 0.87% (potentially due to a concern that directors who drive money towards their own philanthropic interests may otherwise be behaving in ways that further their goals rather than those of the firm).¹⁵⁴ Corporate donations to charities that are affiliated with the firm’s independent directors (i.e., external board members) may be used to incentivize lax monitoring of firm performance and fundamentals, with CEO compensation being 9.4% higher, on average, at firms that donate to organizations affiliated with their directorship.¹⁵⁵

In addition, approaches that fail to consider the full complexity of an issue are likely to fail. McMillan and Overall (2016) review existing decision-making models of organizational theory and critique existing models within the context of societal challenges. The authors find that existing decision-making models are characterized by an underlying assumption of reasonable stability, focusing on problems that are known and understood and can be addressed using conventional tools of linear analysis. The authors argue that existing strategic management and decision-making models cannot address such complex problems.¹⁵⁶

A systematic review of “Base of Pyramid” (BOP) approaches – those that emphasize the ability of large multinational corporations to serve the poor by simply developing products and services that target their needs – finds that most of these approaches either fail to generate profits effectively or to alleviate poverty in their target markets. BOP approaches are too simplistic of a solution to account for the complexity of a purpose-driven initiative. Evolutions of the BOP approach expand the focus to sustainable development and enabling innovation ecosystems (rather than simply developing individual innovations) but have not been empirically studied or proven to be successful.¹⁵⁷

Firm purpose through the lens of wicked problems

What is a wicked problem?

The term wicked problem was first used in the context of urban planning and policy in 1973. Since then, many researchers have expanded upon the definition of wicked problems and applied the problem framework to several policy and social science issues, most notably in environmental policy. The term “wicked problem” is used to describe problems like climate change, food insecurity, global access to equitable and quality education, etc. While the term “wicked problem” has inspired research in many fields, the term has created confusion, as it lacks analytical precision and has been used in many different

¹⁵³ (Gulati, *Deep Purpose: The Heart and Soul of High-Performance Companies*, 2022)

¹⁵⁴ (Masulis & Reza, 2015)

¹⁵⁵ (Cai, Xu, & Yang, 2021)

¹⁵⁶ (McMillan & Overall, 2016)

¹⁵⁷ (Dembek, Sivasubramaniam, & Chmielewski, 2020)

ways. Academics recently have focused on developing a more precise understanding of what constitutes a wicked problem.

The term has been used less frequently in business literature. One significant article comes from Camillus in 2008 when he wrote “Strategy as a Wicked Problem,” published in HBR. Camillus emphasizes that, inherent in the definition of wicked problems, success is hard to measure as you never “solve” wicked problems, rather one can address, ameliorate, or mitigate them. Several leadership approaches have been proposed to address wicked problems which usually describe the importance of partnerships, collaboration, test-and-measure, and “clumsy approaches” which allow for flexibility in execution.

Origins of the term ‘wicked problem’

Horst Rittel, a design planner at UC Berkeley in the Architecture department, first discussed the idea of wicked problems in a 1967 seminar when he used the term to describe a class of ill-formulated social system problems, characterized by confusing information, numerous clients and decision-makers with conflicting values, and solutions that result in unintended ramifications.¹⁵⁸

The term “wicked problem”, later formally coined by design theorists Horst Rittel and Melvin Webber in 1973, was initially used in the context of urban planning and policy to describe the complexities of addressing planning and social policy problems. They argue that wicked problems are those that cannot be definitively described, lack an objective definition of equity, and lack optimal solutions in terms of definitive and objective answers.¹⁵⁹

Rittel and Webber described 10 characteristics of wicked problems, which continue to be cited heavily in literature today:¹⁶⁰

1. There is no definitive formulation of a wicked problem
2. Wicked problems have no stopping rule
3. Solutions to wicked problems are not true-or-false, but good-or-bad
4. There is no immediate and no ultimate test of a solution to a wicked problem
5. Every solution to a wicked problem is a ‘one-shot operation’; because there is no opportunity to learn by trial-and-error, every attempt counts significantly
6. Wicked problems do not have an enumerable (or exhaustively desirable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan
7. Every wicked problem is essentially unique
8. Every wicked problem can be considered to be a symptom of another problem
9. The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem’s resolution
10. The planner has no right to be wrong

¹⁵⁸ (Churchman, 1967)

¹⁵⁹ (Rittel & Webber, 1973)

¹⁶⁰ (Rittel & Webber, 1973)

Since 1973, the use of the term 'wicked' problems increased substantially, particularly throughout the 1990s and 2000s. In 2010, there were as many citations of Rittel and Webber's paper in one year as there had been across the entire decade of the 1990s.¹⁶¹

However, many academics critique the use of the term 'wicked problem,' arguing that it lacks analytical precision and is used as a buzzword to describe any problem that is complex and challenging to solve.¹⁶²
¹⁶³ ¹⁶⁴ ¹⁶⁵ ¹⁶⁶ Recent research has focused on developing a more precise understanding of what constitutes a wicked problem. Academics today tend to align on three wicked problem dimensions: stakeholder conflict, complexity, and uncertainty.

Wicked problems in policy and social science literature

Social science and policy academics have focused on developing a more analytically precise definition of the term wicked problems. Broadly, academics agree that problem wickedness is a matter of degree (rather than a dichotomy as originally proposed by Rittel and Horst) often suggesting that wickedness exists across three main dimensions: conflict (intergroup/stakeholder conflict), complexity (many variables that are interconnected), and uncertainty (low knowability).

The majority of policy research citing using the term wicked problems is within the field of environmental policy, as environmental problems are considered to be classic examples of wicked problems.¹⁶⁷ McBeth et al. argue that environmental problems are wicked due to a lack of policy solutions, and the lack of policy solutions is a result of the wicked nature of the problem, which they describe as involving multiple, competing interests, high levels of uncertainty, and proposed solutions that fail to resolve or may even intensify policy conflict.¹⁶⁸

More recent research has conceptualized wickedness as a matter of degree. Alford and Head (2017) argue that complex problems vary in the extent of their wickedness. The authors breakdown complex problems into two dimensions – the problem itself and the stakeholders involved – and identify factors for each that, when present, contribute to a problem's wickedness. Three factors concerning the problem itself contributes to the problem wickedness: 1) the inherently complexity, where the problem involves many contradictions and dilemmas and problem remedies cause other problems; 2) the problem is unclear, having hidden or disguised information and intangible phenomena, and 3), the solution is unclear, involving multiple variables and requiring iterative discovery. The second dimension concerns the stakeholders involved, where 1) knowledge among stakeholders is fragmented, and the framing of

¹⁶¹ (Crowley & Head, 2017)

¹⁶² (Head & Alford, 2013)

¹⁶³ (Peters, 2017)

¹⁶⁴ (Turnbull & Hoppe, 2019)

¹⁶⁵ (Kirschke, Franke, Newig, & Borchardt, 2019)

¹⁶⁶ (Alford & Head, 2017)

¹⁶⁷ (Crowley & Head, 2017)

¹⁶⁸ (Mark K. McBeth, 2004)

knowledge distorts the understanding of the problem; 2) stakeholders have conflicting interests; and 3) power is not distributed evenly among stakeholders.¹⁶⁹

Kirschke, Franke, Newig, and Borchardt (2019) also consider problem wickedness varies across dimensions. Their research empirically evaluated water-related problems in Germany across five dimensions: number and heterogeneity of goals, number of variables, variable dynamics, interconnections between the variables, and informational uncertainty. Based on factor analysis, they found that the dimensions could be reduced to three underlying factors: system complexity, goal conflict, and informational uncertainty.¹⁷⁰

These themes of conflict, complexity, and uncertainty are mirrored in several papers. Bannink and Trommel (2019) argue that a conflict on the normative dimension, combined with complexity on the factual dimension, leads to problems that are wicked. Any normatively preferred solution that an actor may propose involves its own factually "correct" justification; however, the justification brings forth dispute from other actors. Many actors put forth conflicting truth claims and preferences. The dispute is possible because of the factual uncertainty of the issue.¹⁷¹ Although Termeer et al (2019) take on a highly critical view of the term wicked problem, even suggesting that the field of policy reject the term altogether, they propose a path forward that involves analyzing problems across three dimensions: conflict, complexity, and uncertainty.¹⁷²

Wicked problems as defined in economic literature

The term wicked problems in economic literature is most often used in the context of economic policy and is associated with complexity economics. Most economic literature draws from policy literature in describing wicked problems and focuses on applications of economic theory in addressing such problems (see next sections).

Conventional economic theory viewed agents in the economy as rational decision makers, facing well-defined problems and arriving at optimal behavior in equilibrium with the outcome their behavior creates. Starting in the 1990s, economists began to explore the economy as a complex, evolving system. Complexity economics materialized from this exploration, which assumes that agents differ, have imperfect information about other agents, and are constantly exploring, reacting, and changing their actions in response to the outcome they create.¹⁷³

Batie (2008) argues normal science assumptions and approaches as inadequate for addressing wicked problems, and instead argues that applications of post-normal science and complexity economics should inform policies designed to address wicked problems. He summarizes the main elements of a wicked problem as 1) lack of a common definition of the problem, 2) differing stakeholder opinions about the

¹⁶⁹ (Alford & Head, 2017)

¹⁷⁰ (Kirschke, Franke, Newig, & Borchardt, 2019)

¹⁷¹ (Bannink & Trommel, 2019)

¹⁷² (Termeer, Dewulf, & Biesbroek, A critical assessment of the wicked problem concept: relevance and usefulness for policy science and practice, 2019)

¹⁷³ (Arthur, 2021)

problem and causes, 3) lack of “stopping rule” aka no definitive solution, and 4) the problem’s nature is highly uncertain in regard to system components and outcomes.¹⁷⁴ Van Bueren et al. (2003) add a network perspective for explaining agent behavior, arguing that institutional barriers, cognitive differences, and interaction dynamics impede collective action and contribute to problem wickedness.¹⁷⁵

Wicked problems as defined in the field of ethics

Bauman explains that entanglement, multiple causality, and multiple time scales are key elements of wicked problems.¹⁷⁶

Wicked problems as defined in the field of technology/engineering

There exists a long theory of computational complexity between computer science and mathematical theory.¹⁷⁷ One foundational concept is the ability to measure complexity based on the computational resources required, which are understood to be some amount of time and space.¹⁷⁸ From this measurement of complexity by the time and space required to compute comes a strict hierarchy for problems. At the base is the difference between class P and NP problems. Class P problems have solutions that are easy to find, while class NP problems have solutions that are so hard to find that it requires an impossibly long time to solve directly, but it is easy to check if something is the solution.¹⁷⁹

Looking at engineering design theory, Farrell and Hooker (2013) argue that Rittel and Webber’s 10 wicked problem characteristics can be summarized to three dimensions, common to both design and science: 1) agent finitude, 2) system complexity, and 3) problem normativity.¹⁸⁰

Wicked problems as defined in business literature

References to wicked problems in business literature became more prevalent starting in the late 2000s and throughout the 2010s. In 2008, John Camillus, a professor at the Katz Graduate School of Business, explained how executives can tell if they’re dealing with a wicked strategy problem. In a 15-year study involving 22 companies, he identified five key criteria for determining whether a problem is wicked: 1) the problem involves numerous stakeholders with conflicting priorities; 2) the roots of the problem are tangled; 3) the problem changes with every attempt at addressing it; 4) the problem is novel or one that the executive has never before encountered; and 5) there is no way to evaluate whether a remedy will work.¹⁸¹

In the 2010s, an increasing number of studies examining the role of business in tackling wicked problems and theoretical management frameworks were published. Reinecke and Ansari (2015) argued that businesses are increasingly responsible for taming wicked problems as a result of shifting boundaries

¹⁷⁴ (Batie, 2008)

¹⁷⁵ (Van Bueren, Klijn, & Koppenjan, 2003)

¹⁷⁶ (Bauman, 2017)

¹⁷⁷ (Fortnow, 2004)

¹⁷⁸ (Hartmanis & Stearns, 1965)

¹⁷⁹ (Goldreich, 2010)

¹⁸⁰ (Farrell & Hooker, 2013)

¹⁸¹ (Camillus, Strategy as a Wicked Problem, 2008)

between public and private responsibilities.¹⁸² Camillus (2016) further described three mega-forces that interact to produce wicked problems in the business environment: the inescapability of globalization, the requirement of innovation, and the importance of shared value.¹⁸³

A wicked problem definition based on common themes across the literature

We find that the literature converges on wicked problems being defined by three core dimensions: conflict, complexity, and uncertainty. Wicked problems are characterized by high conflict among stakeholders with multiple perspectives beliefs, interests, goals, etc.;¹⁸⁴ high complexity as a result of multi-causal and multi-dimensional, interconnected variables;¹⁸⁵ and high uncertainty where the information required for problem solving is missing or unknown.¹⁸⁶ Identifying that wicked problems are high across three dimensions also reflects that the concept of wickedness is a matter of degree.

Common purpose-driven firm initiatives are aimed at tackling wicked problems

While there is variety in the goals of purpose-driven firms, there are some common challenges that firms strive to address to give themselves purpose beyond serving shareholders. Common challenges purpose-drive firms try to address are climate change^{187,188}, food insecurity¹⁸⁹, poverty¹⁹⁰, and other UN SDGs.¹⁹¹

While the UN SDGs have been identified as wicked problems,¹⁹² climate change, food insecurity, etc. have also individually been identified as wicked problems. For example, in his paper on what should be included in successful climate change legislation, Richard Lazarus explains how trying to address climate change is a wicked problem.¹⁹³ Candel et al. identify food insecurity as a wicked problem in their research on the European Commission's ability to cope with wicked problems.¹⁹⁴ In another case, Childs and Lofton focus specifically on the wicked problem of absenteeism within education inequality.¹⁹⁵

Business problems as wicked problems

While most canonically explored wicked problems are broad, societal challenges, we can see similar characteristics and structures in business problems today. Some business problems can be also wicked

¹⁸² (Reinecke & Ansari, 2015)

¹⁸³ (Camillus, The wicked challenge of the business environment, 2016)

¹⁸⁴ (Alford & Head, 2017), (Kirschke, Franke, Newig, & Borchardt, 2019), (Bannink & Trommel, 2019), (Termeer & Dewulf, A small wins framework to overcome the evaluation paradox of governing wicked problems, 2019)

¹⁸⁵ (Kirschke, Franke, Newig, & Borchardt, 2019), (Termeer & Dewulf, A small wins framework to overcome the evaluation paradox of governing wicked problems, 2019)

¹⁸⁶ (Termeer & Dewulf, A small wins framework to overcome the evaluation paradox of governing wicked problems, 2019), (Peters, 2017), (Bannink & Trommel, 2019)

¹⁸⁷ (Jennifer Howard-Grenville, 2014)

¹⁸⁸ (Pollitt, 2015)

¹⁸⁹ (Ralph Hamann, 2011)

¹⁹⁰ (Gerard George A. M., 2012)

¹⁹¹ (Gerard George J. H.-G., 2016)

¹⁹² (Eden & Wagstaff, 2021)

¹⁹³ (Lazarus, 2009)

¹⁹⁴ (Candel, Breeman, & Termeer, 2015)

¹⁹⁵ (Childs & Lofton, 2021)

problems. The globalization and innovation made possible by technology in recent years has led to a more interconnected world where business decisions have larger impacts and externalities which can lead to business problems having more traits of a wicked problem.¹⁹⁶

One helpful illustration of this is comparing the problem Walmart faces in trying to grow its business in the 2000s versus when it was just one store in 1962 or 24 stores in Arkansas in 1967.¹⁹⁷ In the 2000s, to grow Walmart had to navigate many stakeholders with different values and priorities, some of its prior strengths becoming new weaknesses, different potential solutions posing threats to other objectives, etc. – making growth a wicked problem.¹⁹⁸ In contrast, Walmart did not face all those dynamics in the 1960s and so growth was only a business problem not a wicked problem.¹⁹⁹ Other examples of business problems being wicked problems from the literature are PPG trying to diversify into new industries and countries,²⁰⁰ and Tavistock Group trying to transform 7,000 undeveloped acres into a sustainable city centered around a healthcare innovation hub.²⁰¹ All these business problems that can also be considered wicked problems involve stakeholders with different perspectives and incentives, changing and sometimes contradictory requirements, and traditional approaches such as breaking down the issue or gathering more data can't resolve the problem.

Business problems that are considered wicked problems stand in contrast to business problems that are less wicked, or closer to “tame” on the spectrum. A few examples of tame business problems are “discovering a vaccine for smallpox, analyzing the chemical components of air pollution, and lowering the prime interest rate.”²⁰² While each of these problems are analytically complex, they lack core elements of the wicked problem definition: they can often be solved in relative isolation from other problems (not multi-causal or entangled), and there is often consensus on why these problems need to be solved (reduced levels of conflict).²⁰³ Thus, for these complex but not wicked problems, common analytical methods and problem-solving approaches can be applied to increasingly reduce uncertainty and make progress.²⁰⁴

Approaches firms can use to tackle wicked problems

There is an extensive literature on the solving of complex problems, both specifically for wicked problems and more broadly from complex policy problems. Across the works, a consensus emerges around a few themes: iteration and adaptability, cross-disciplinary collaboration and learning, and creative, decentralized decision making. These themes align well with elements of successful approaches to purpose-driven firm activities reviewed earlier. For success, we saw outcome-based incentives being important, which can tie into iterative approaches, collaboration was also highlighted, and the need for creativity was present because conventional approaches are less successful.

¹⁹⁶ (Camillus, *The wicked challenge of the business environment*, 2016)

¹⁹⁷ (Camillus, *Strategy as a Wicked Problem*, 2008)

¹⁹⁸ (Camillus, *Strategy as a Wicked Problem*, 2008)

¹⁹⁹ (Camillus, *Strategy as a Wicked Problem*, 2008)

²⁰⁰ (Camillus, *Strategy as a Wicked Problem*, 2008)

²⁰¹ (Edmondson, 2016)

²⁰² (King J. , 1993)

²⁰³ (King J. , 1993)

²⁰⁴ (King J. , 1993)

Academics emphasize the importance of an iterative approach when addressing wicked problems. Kwakkel, Walker, and Haasnoot discuss two approaches to cope with the wickedness of public policy problems: robust decision making (RDM) and dynamic adaptive policy pathways (DAPP), which address different aspects of problem wickedness. RDM is an iterative approach which tests across numerous scenarios to facilitate trade-off analysis and iterative learning about a policy problem. DAPP recognizes that the future is uncertain and so plans need to be adaptable, involving strategic vision with a framework to guide future actions based on the results of short-term actions.²⁰⁵ Gunderson and Light (2006) argue that dealing with complex systems with multiple uncertainties requires adaptive forms of experimentation and governance.²⁰⁶ Termeer et al. (2013) outline an integrative approach for wicked problem solving with four governance capabilities: 1) reflexivity, i.e., the capability of dealing with multiple frames; 2) resilience, i.e., the capability to adjust actions to uncertain changes; 3) responsiveness, i.e., the capability to respond to changing agendas and expectations; and 4) revitalization, i.e., the capability to unblock stagnations.²⁰⁷

Approaches for tackling wicked problems involve strategies for driving collaboration across stakeholders and disciplines. Some academics argue that governance approach to tackling wicked problems can enhance collaboration. Van Bueren et al. (2003) focus on network governance and look at the nuances in wickedness in terms of the varying circumstances of cognitive, strategic, and institutional uncertainty. Because interdependent actors have a collective action problem, the uncertainties involved in wicked problems can only be addressed through network-based cooperation to enhance and intensify interactions between stakeholders.²⁰⁸ Roberts (2000) focuses on collaborative governance, suggesting that acting as a collective accomplishes more than acting as independent agents, and driving coordination among agents requires institutions of governance.²⁰⁹ Torfing et al. (2013) coin the term “interactive governance” for joint efforts to address wicked problems. They suggest that there are three different types of interactive governance – quasi-markets, partnerships, and networks – and argue that each are complex and process-based (rather than linear and grounded in existing institutions), focus on the pursuit of common objectives in the face of stakeholder conflict, and are decentered such that no one is in control as to induce actors to engage with other actors.²¹⁰

Drawing on methodologies from psychology, information systems, business management, and military strategy, Game et al. recommend addressing wicked problem of conservation through defining clear objectives, using scenarios, emphasizing pattern analysis, and ensuring greater scope of the problem for creative and decentralized decision making.²¹¹ Others have added distributed decision-making, incorporating diverse opinions, pattern-based predictions, tradeoff-based objectives, and reporting of failures as needed to address the elements of the wicked problem of conservation.²¹²

Changes in behavior we might see from firms who are tackling wicked problems

²⁰⁵ (Kwakkel, Walker, & Haasnoot, 2016)

²⁰⁶ (Gunderson & Light, 2006)

²⁰⁷ (Termeer, Dewulf, & Breeman, 2013)

²⁰⁸ (Van Bueren, Hans Klijn, & Koppenjan, 2003)

²⁰⁹ (Roberts, 2000)

²¹⁰ (Torfing, Peters, Pierre, & E, 2013)

²¹¹ (Game, Meijaard, Shell, & McDonald-Madde, 2013)

²¹² (Mason, et al., 2018)

To understand how firms who are purpose-driven and tackling wicked problems may change because of these efforts, we looked towards literature on the indirect outcomes of firms' CSR, ESG, and sustainability initiatives.

Over time, firms have come to view CSR as strategic for sustainability because of risk reduction benefits, strengthened reputation, and other competitive advantages (e.g., increased employee motivation, above industry average sales performance).²¹³ When evaluating results of CSR efforts, employee motivation often emerges as a main benefit.²¹⁴ Superior performance on CSR strategies has also been found to result in better access to financing, as firms that perform better on social and environmental dimensions of CSR have enhanced stakeholder engagement (which reduces agency costs) and increased transparency (which reduces informational asymmetry).²¹⁵

Similar to findings based on CSR engagements, researchers have found that businesses experience improved accounting performance, improved governance, and increased institutional ownership after successful ESG engagements.²¹⁶ For example, in a 2018 study commissioned by the UNEP Finance Initiative and the UN Global Compact, researchers found that three ESG engagement dynamics create distinct types of value for companies (and investors): (1) communicative dynamics, i.e., communicative value through the exchange of information, (2) learning dynamics, i.e., learning value through diffusion of ESG knowledge, and (3) political dynamics, i.e., political value through facilitating diverse relationships (internal and external).²¹⁷

According to a 2019-2020 cross-sectional survey of 71 business representatives involved in cross-sector social partnerships looking at benefits of engaging in sustainability partnerships, businesses achieved beneficial outcomes in five forms of capital: organizational, human, sustainability, financial, and physical.²¹⁸ Table <X> below shows the top two most valuable outcomes in each category of capital (the value scale goes from 1 to 5 with 1 being the most valuable.).

Table <X>: Sustainability Partnership Outcomes²¹⁹

Type of capital	Outcome	Value
Organizational	Built new relationships	1.99
	Networking	2.06

²¹³ (Lars Isaksson, 2014)

²¹⁴ (Chung Hee Kim, 2013)

²¹⁵ (Beiting Cheng, 2014)

²¹⁶ (Elroy Dimson, Active Ownership, 2015)

²¹⁷ (Gond, et al., 2018)

²¹⁸ (Ordonez-Ponce, Clarke, & MacDonald, 2021)

²¹⁹ (Ordonez-Ponce, Clarke, & MacDonald, 2021)

Human	Shared own experiences	2.00
	Gained knowledge/learning	2.09
Sustainability	Contributed positively to environmental challenges	2.01
	Contributed positively to community sustainability	2.10
Physical	Improved processes	3.30
	Increased resources	3.46
Financial	Made new business	3.33
	Developed new products/services	3.34

From the literature on the indirect outcomes of firms' CSR, ESG, and sustainability initiatives, we observe various positive result across the business. However, it is still common for business leaders to face the question of whether engaging in wicked problems will come at the cost of business success. Additionally, what is required for engagements with wicked problems to lead to neutral or positive business outcomes? While it has been strongly suggested that purpose-driven firms may outperform their peers, we've left the review of research addressing that hypothesis and potential mechanisms for another paper.

Discussion

In starting this literature review, we hoped to better understand the nature of purpose-driven firms. What, if anything, makes them different from more traditional firms, with purely shareholder focus? In the process, we learned:

It is possible to “do purpose well” – or conversely, to “do purpose badly”: As firms gained more experience with the notion of the purpose-driven firm, it became clear that successfully driving purpose takes more than mere philanthropy. Over the decades, different academics have proposed different frameworks for describing and structuring firm purpose and to help guide firms towards more successful outcomes. Today, firms are often described as more or less purposeful based on their level of business engagement, which can range on a spectrum from “transactional” or “operational” to “integrated” or “transformative”. These typologies examine the level of engagement, change, and innovation that each firm brings while attempting to pursue its purpose. One potential area for improvement in this understanding of what it means to do purpose well involves the business ecosystem: most typologies and characterizations of behavior focus only on internal action or investment and ignore the potential for businesses to learn from and engage with the ecosystems around them. However, if purpose-driven

initiatives are truly Wicked Problems, then firms must deliberately engage as part of an ecosystem – it's not enough to focus internally.

Successful firms are driven by a combination of intrinsic and extrinsic factors: Firms describe both intrinsic and extrinsic motivation for engaging in purpose-driven initiatives – which reflects a balance of altruism and profit orientation. Edmans “growing the pie” description of the most successful firms mirrors Adam Grant’s description of “otherish givers” – those who have the most success recognize that it is possible to innovate and create new value, and in the process, take more value for yourself.

Engaged firms follow specific patterns, as do unsuccessful ones: Engaged firms very often take concrete change management steps to driving purpose-driven initiatives. They are able to create concrete, measurable goals and hold each other accountable to meeting them. They are also able to successfully navigate the change process and accept the potential short-term impacts of introducing new operational changes in order to meet a long-term goal. Unsuccessful businesses instead take a “shallow” approach, with typical failure modes including a lack of stakeholder understanding, poor understanding of the problem’s complexity, and failing to change business models and operations to support the purposeful initiative.

Purpose-driven firms are actually tackling Wicked Problems: Common “firm purposes” such as climate change, food insecurity, and economic inequality can all be described as Wicked Problems – problems that have a high (and unusual) combination of stakeholder conflict, complexity, and uncertainty. These problems are substantially different from simply “difficult” problems, which may score highly in only one dimension, because typical approaches to solving a high-conflict problem, for example, may not work in cases which also feature high uncertainty. This means that, by taking on an additional purpose orientation, firms are selecting to tackle problems that may force them to develop new approaches to problem-solving.

In today’s climate, however, an increasing number of business problems are taking on elements of Wickedness. Increasingly, businesses face run-of-business situations that feature high stakeholder conflict, high complexity, and highly uncertain environment. In the face of challenges like a multi-year pandemic, a war in the Ukraine, or the imminent impact of climate change on global supply chains, business leaders must be able to navigate conflicting recommendations and learn rapidly from their environments to drive their teams to success.

It seems possible, therefore, that purpose-driven firms – those who deliberately tackle Wicked Problems – may have learned problem-solving skills and forged partnerships that translate into additional business benefits. We have explored the links between tackling Wicked Problems and business performance elsewhere; however, the research has yet to establish a potential mechanism for driving those outcomes (if indeed there are improved outcomes). Establishing this link and understand how (if at all) purpose-driven firms become more successful overall is critical for both an improved understanding of organizational and operational behavior, and for a more pragmatic business leader, looking to navigate an increasingly Wicked world.

APPENDIX

Common ESG measurements and standards

A common criticism of ESG is the lack of standardization. Below are some ESG measurements and standards:

- Carbon Disclosure Project (CDP)
- Taskforce on Climate-related Financial Disclosures (TCFD)
- Workforce Disclosure Initiative (WDI)
- UN Sustainable Development Goal (SDG) alignment
- Some notable ESG rating agencies:
 - MSCI
 - Sustainalytics
 - RepRisk
 - ISS Environmental and Social QualityScore
 - Dow Jones Sustainable Indices (DJSI)
 - Bloomberg Professional Services
 - FTSE Russell
 - Vigeo Eiris

BIBLIOGRAPHY

(2020). *2020 Canadian Responsible Investment Trends Report*. Responsible Investment Association.

Adams, L., Alter, T., Parkes, M., Reid, M., & Woolnough, A. (2019). Political economics, collective action and wicked socio-ecological problems: A practice story from the field. *Gateways: International Journal of Community Research and Engagement*.

Agudelo, M. A., Johannsdottir, L., & Davidsdottir, B. (2019). A literature review of the history and evolution of corporate social responsibility. *International Journal of Corporate Social Responsibility*.

Alberta Guili, L. K. (2014). Are Red or Blue Companies More Likely to go Green? Politics and Corporate Social Responsibility. *Journal of Financial Economics*, 158-180.

Alex Cheema-Fox, B. R. (2021). Corporate Resilience and Response During COVID-19. *Journal of Applied Corporate Finance*, 24-40.

Alexander Dyck, K. L. (2021). Renewable Governance: Good for the Environment? *SSRN Online Publication*.

Alford, J., & Head, B. (2017). Wicked and less wicked problems: a typology and a contingency framework. *Policy and Society*.

Allen Ferrell, H. L. (2016). Socially Responsible Firms. *European Corporate Governance Institute, Finance Working Paper No. 432/2014*.

Allen, J. (2013). The wicked problem of chemicals policy: opportunities for innovation. *Journal of Environmental Studies and Sciences*.

Amir Amel-Zadeh, G. S. (2018). Why and How Investors Use ESG Information: Evidence from a Global Survey. *Financial Analysts Journal*, 87-103.

Amir Ikram, M. F. (2021). Internal Corporate Responsibility as a Legitimacy Strategy for Branding and Employee Retention: A Perspective of Higher Education Institutions. *Journal of Open Innovation Technology Market and Complexity*.

Andrea Pawliczek, A. N. (2021). A new take on voice: the influence of BlackRock's 'Dear CEO' letters. *Review of Accounting Studies*, 1088-1136.

DRAFT
12-Apr-23

- Andreas Hoepner, I. O. (2018). ESG Shareholder Engagement and Downside Risk. *European Corporate Governance Institute*, Finance Working Paper No. 671/2020.
- AP News. (2019, November 4). *Consumer Purchase Habits Change to Favor Environmentally Conscious Brands*. Retrieved from <https://apnews.com/press-release/business-wire/business-environment-4799d063cdb74e0992645a7f77658888>
- Arthur, W. (2021). Foundations of complexity economics. *Nature Reviews Physics*, 136-145.
- Artmann, M. (2015). Managing urban soil sealing in Munich and Leipzig (Germany)—From. *Land Use Policy*, 21-37.
- Atkins, B. (2020, June 8). *Demystifying ESG: Its History & Current Status*. Retrieved from Forbes: <https://www.forbes.com/sites/betsyatkins/2020/06/08/demystifying-esgits-history--current-status/>
- B Lab. (2022). *Programs & Tools Overview*. Retrieved from <https://www.bcorporation.net/en-us/programs-and-tools>
- Bannink, D., & Trommel, W. (2019). Intelligent modes of imperfect governance. *Policy and Society*.
- Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*.
- Barbara Gray, J. S. (2013). Sustainability Through Partnerships: Capitalizing on Collaboration. *Network for Business Sustainability*.
- Barber, B., Morse, A., & Yasuda, A. (2021). Impact investing. *Journal of Financial Economics*, 162-185.
- Barnard, J. (1997). Corporate Philanthropy, Executives' Pet Charities and the Agency Problem. *New York Law School Law Review*.
- Bart Meijer, J. N. (2019, March 7). *Dutch to close Amsterdam coal-fired power plant four years early*. Retrieved from Reuters: <https://www.reuters.com/article/us-netherlands-energy/dutch-to-close-amsterdam-coal-fired-power-plant-four-years-early-rtl-idUSKCN1QO1JE>
- Batie, S. (2008). Wicked Problems and Applied Economics. *Amer. J. Ag. Econ.*
- Bauman, W. (2017). The Ethics of Wicked Problems: Entanglement, Multiple Causality and Rainbow Time. *Worldviews*.
- Beiting Cheng, I. I. (2014). Corporate Social Responsibility and Access to Finance. *Strategic Management Journal*, 1-23.

DRAFT
12-Apr-23

- Belen Fernandex-Feijoo, S. R. (2012). Does Board Gender Composition affect Corporate Social Responsibility Reporting? *International Journal of Business and Social Science*.
- Belen Fernandez-Feijoo, S. R.-B. (2014). Women on Boards: Do They Affect Sustainability Reporting? *Corporate Social Responsibility and Environmental Management*, 351-364.
- Bennedsen, M. D. (2016). Corporate governance and green innovation. *Journal of Environmental Economics and Management*, 54-72.
- Bennett, B., Bettis, J. C., Gopalan, R., & Milbourn, T. (2017). Compensation goals and firm performance. *Journal of Financial Economics*, 307-330.
- Bhattacharya, Z. L. (2006). Corporate Social Responsibility, Customer Satisfaction, and Market Value. *Journal of Marketing*, 1-18.
- Bing Yu, S. W. (2022). Do Ethical Companies Have High Stock Prices or High Returns? *Journal of Risk and Financial Management*.
- Bouman, S., Friperon, R., Gielen, M., & Wilms, P. (2013). *Public-Private Partnerships in developing countries. Systematic Literature Review*. The Hague: Policy and Operations Evaluation (IOB) Dutch Ministry of Foreign Affairs.
- Bowden, J., & Green, P. (2014). A moral compass framework for resolution of wicked problems in doctoral education and supervision. *Quality Assurance in Education*.
- Bowen, H. (1953). *Social responsibilities of the businessman*. University of Iowa Press.
- Brav, A., Jiang, W., & Kim, H. (2015). The real effects of hedge fund activism: Productivity, asset allocation, and labor outcomes. *The Review of Financial Studies*, 2723-2769.
- Burbano, V. C. (2016). Social Responsibility Messages and Worker Wage requirements: Field Experimental Evidence from Online Labor Marketplaces. *Organization Science*.
- Burke, L., & Logsdon, J. (1996). How corporate social responsibility pays off. *Long Range Planning*.
- Business & Sustainable Development Commission. (2017). *Better Business Better World*. London: Systemiq & UN Foundation.
- Business for Social Responsibility. (2022, March 4). *Our Story*. Retrieved from Business for Social Responsibility: <https://www.bsr.org/en/about/story>
- Business Roundtable. (2019, August 19). *Business Roundtable Redefines the Purpose of a Corporation to Promote 'An Economy That Serves All Americans'*. Retrieved from

<https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans>

- Cai, Y., Xu, J., & Yang, J. (2021). Paying by donating: Corporate donations affiliated with independent directors. *The Review of Financial Studies*, 618-660.
- Camillus, J. (2008). Strategy as a Wicked Problem. *Harvard Business Review*.
- Camillus, J. (2016). The wicked challenge of the business environment. *International Journal of Business Environment*.
- Cao, R., & Iansiti, M. (2022). Data-Driven Firm Productivity: The Importance of Technological Architecture. *Harvard Business School Research Paper*.
- Carroll, A. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*.
- Carroll, A. (2008). A history of corporate social responsibility: concepts and practices. In A. Andrew Crane, D. Matten, J. Moon, & D. Siegel, *The Oxford handbook of corporate social responsibility* (pp. 19-46). New York: Oxford University Press.
- Carroll, A. (2015). Corporate social responsibility: The centerpiece of competing and complementary frameworks. *Organizational Dynamics*.
- Cécile Churet, R. G. (2014). Integrated Reporting, Quality of Management, and Financial Performance. *Journal of Applied Corporate Finance*, 56-64.
- Chams, N., & Garcia-Blandon, J. (2019). On the importance of sustainable human resource management for the adoption of sustainable development goals. *Resources, Conservation & Recycling* 141, 109-122.
- Chandler, D. (2016). *Strategic corporate social responsibility: sustainable value creation*. SAGE Publications.
- Chava, S. (2014). Environmental Externalities and Cost of Capital. *Journal of Management Science*, 2223-2247.
- Choi, D., Gao, Z., Jiang, W., & Zhang, H. (2022). Global Carbon Divestment and Firms' Action. *SSRN*.
- Christensen, D. M., Serafeim, G., & Sikochi, A. (2022). Why is Corporate Virtue in the Eye of the Beholder? The Case of ESG Ratings. *The Accounting Review*.

DRAFT
12-Apr-23

- Chung Hee Kim, H. S. (2013). The effect of Corporate Social Responsibility (CSR) on employee motivation: A cross-national study. *The Ponzan University of Economics Review*.
- Churchman, C. (1967). Wicked Problems. *Management Science*.
- Cohen, L., Gurun, U., & Nguyen, Q. (2020). The ESG-innovation disconnect: Evidence from green patenting. *National Bureau of Economic Research*.
- Committee for Economic Development. (1971). Social responsibilities of business corporations. USA: *Committee for Economic Development*.
- Conscious Capitalism, Inc. (2021). *Conscious Capitalism Philosophy*. Retrieved from <https://www.consciouscapitalism.org/philosophy>
- Crowley, K., & Head, B. (2017). The enduring challenge of 'wicked problems': revisiting Rittel and Webber. *Policy Sciences*.
- CSR Europe. (2016). *CSR Europe Report 2016*.
- David Gerard, L. B. (2005). Implementing technology-forcing policies: The 1970 Clean Air Act Amendments and the introduction of advanced automotive emissions controls in the United States. *Technological Forecasting and Social Change*, 761-778.
- David Waldman, D. S. (2006). Components of CEO transformational leadership and corporate social responsibility. *Journal of Management Studies*, 1703-1725.
- Davis, K. (1960). Can business afford to ignore social responsibilities? *California Management Review*.
- Daviter, F. (2017). Coping, taming or solving: alternative approaches to the governance of wicked problems. *Policy Studies*.
- de Jong, M. (2021). Inclusive capitalism. *Global Public Policy and Governance*.
- Dees, J. G., Anderson, B. B., & Wei-Skillern, J. (2002). *Pathways to social impact: Strategies for scaling out successful social innovations*. Boston: Division of Research, Harvard Business School.
- Delmas, M. (2013). Environmental Standards and Labor Productivity: Understanding Mechanisms that Sustain Sustainability. *Journal of Organizational Behavior*.
- Dembek, K., Sivasubramaniam, N., & Chmielewski, D. (2020). A Systematic Review of the Bottom/Base of the Pyramid Literature: Cumulative Evidence and Future Directions. *Journal of Business Ethics*, 365-382.

- Dentoni, B. &. (2015). Cross-sector Partnerships and the Co-creation of Dynamic Capabilities for Stakeholder Orientation.
- Derwall, J., Gunster, N., Bauer, R., & Koedjik, K. (2005). The Eco-Efficiency Premium Puzzle. *Financial Analysts Journal*, 51-63.
- Desa, G., & Koch, J. L. (2014). Scaling Social Impact: Building Sustainable Social Ventures at the Base-of-the-Pyramid. *Journal of Social Entrepreneurship*, 146-174.
- Dixon-Fowler, D. J. (2009). CEO International Assignment Experience and Corporate Social Performance. *Journal of Business Ethics*, 473-489.
- Donaldson, T., & Preston, L. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *The Academy of Management Review*.
- Dylan Minor, J. M. (2011). CSR as Reputation Insurance: Primum Non Nocere. *California Management Review*, 40-59.
- Eberhard-Harribey, L. (2006). Corporate social responsibility as a new paradigm in the European policy: how CSR comes to legitimate the European regulation process. *Corporate Governance: The international journal of business in society*.
- Eccles, R., Ioannou, I., & Serafeim, G. (2014). The Impact of Corporate Sustainability on Organizational Processes and Performance. *Management Science*, 2835-2857.
- Economist Intelligence Unit. (2005). *The Importance of Corporate Responsibility*. The Economist.
- Eden, L., & Wagstaff, M. (2021). Evidence-based policymaking and the wicked problem of SDG 5 Gender Equality. *Journal of International Business Policy*.
- Edmans, A. (2011). Does the Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices. *Journal of Financial Economics*, 621-640.
- Edmans, A. (2012). The Link between Job Satisfaction and Firm Value, with Implications for Corporate Social Responsibility. *Academy of Management Perspectives*, 1-19.
- Edmans, A. (2020). *Grow the Pie: How Great Companies Deliver Both Purpose and Profit*. New York City: Cambridge University Press.
- Edmans, A., Fang, V. W., & Lewellen, K. A. (2017). Equity vesting and investment. *The Review of Financial Studies*, 2229-2271.

DRAFT
12-Apr-23

- Edmans, A., Heinle, M. S., & Huang, C. (2016). The real costs of financial efficiency when some information is soft. *Review of Finance*, 2151-2182.
- Edmans, A., Li, L., & Zhang, C. (2014). Employee satisfaction, labor market flexibility, and stock returns around the world. *National Bureau of Economic Research*.
- El-Haddadeh, R. e. (2021). Value Creation for Realising the Sustainable Development Goals: Fostering Organisational Adoption of Big Data Analytics. *Journal of Business Research*, 402-410.
- Elroy Dimson, O. K. (2015). Active Ownership. *The Review of Financial Studies*, 3225-3268.
- Elroy Dimson, O. K. (2018). Coordinated Engagements. *SSRN Electronic Journal*.
- Erhemjamts, L. a. (2013). Corporate social responsibility and its impact on firm's investment policy, organizational structure, and performance. *Journal of Business Ethics*, 395-412.
- Esther Whieldon, R. C. (2021, April 6). *ESG funds beat out S&P 500 in 1st year of COVID-19; how 1 fund shot to the top*. Retrieved from S&P Global Market Intelligence:
<https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/esg-funds-beat-out-s-p-500-in-1st-year-of-covid-19-how-1-fund-shot-to-the-top-63224550>
- Farrell, R., & Hooker, C. (2013). Design, science and wicked problems. *Design Studies*.
- Fenn, T., & Hobbs, J. (2015). Wicked ethics in Design. *7th International DEFSA Conference Proceedings*.
- Fink, L. (2019, January 23). *Purpose & Profit*. Retrieved from
<https://corpgov.law.harvard.edu/2019/01/23/purpose-profit/>
- Fink, L. (2022). *The Power of Capitalism*. Retrieved from BlackRock:
<https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>
- Fischer, F. (1993). Citizen participation and the democratization of policy expertise: From theoretical inquiry to practical cases. *Policy Sciences*.
- Flammer, C. (2013). Corporate social responsibility and shareholder reaction: The environmental awareness of investors. *Academy of Management Journal*, 758-781.
- Flammer, C. (2015). Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach. *Management Science*, 25499-2568.
- Flammer, C. (2021). Corporate green bonds. *Journal of Finance Economics*, 499-516.

- Flammer, C., & Bansal, P. (2017). Does a long-term orientation create value? Evidence from a regression discontinuity. *Strategic Management Journal*, 1827-1847.
- Flammer, C., & Kacperczyk, A. (2019). Corporate social responsibility as a defense against knowledge spillovers: Evidence from the inevitable disclosure doctrine. *Strategic Management Journal*, 1243-1267.
- Flammer, C., & Luo, J. (2017). Corporate social responsibility as an employee governance tool: evidence from a quasi-experiment. *Strategic Management Journal*, 163-183.
- Flammer, C., Hong, B., & Minor, D. (2019). Corporate governance and the rise of integrating corporate social responsibility criteria in executive compensation: effectiveness and implications for firm outcomes. *Strategic Management Journal*, 1097-1122.
- Florian Berg, J. F. (2019). Aggregate Confusion: The Divergence of ESG Ratings. *SSRN Online Journal*.
- Florian Habermann, F. B. (2021). Corporate Social Performance and the Likelihood of Bankruptcy: Evidence from a Period of Economic Upswing. *Journal of Business Ethics*.
- Fortnow, L. (2004). A Short History of Computational Complexity. *The Computational Complexity Column*.
- Freeman, E., & Liedtka, J. (1997). Stakeholder capitalism and the value chain. *European Management Journal*.
- Freeman, R. (2001). A stakeholder theory of the modern corporation. *Perspectives in Business Ethics* *Sie*.
- Freiberg, D., Grewal, J., & Serafeim, G. (2021). Science-Based Carbon Emissions Targets. *Harvard Business School Working Paper*.
- Friedman, A., & Miles, S. (2002). Developing stakeholder theory. *Journal of management studies*.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*.
- FSG. (2019). *Purpose Playbook: Putting Purpose into Practice with Shared Value*. FSG.
- Fyke, J., & Buzzanell, P. (2013). The Ethics of Conscious Capitalism: Wicked Problems in Leading Change and Changing Leaders. *Human Relations*.
- Game, E., Meijaard, E., Shell, D., & McDonald-Madde, E. (2013). Conservation in a Wicked Complex World: Challenges and Solutions. *Conservation Letters*.

DRAFT
12-Apr-23

Gartenberg, C., Prat, A., & Serafeim, G. (2019). Corporate Purpose and Financial Performance. *Organization Science*, 1-18.

Gary F. Peters, A. M. (2019). The Influence of Corporate Sustainability Officers on Performance. *Journal of Business Ethics*, 1065-1087.

Georgallis, P. (2017). The Link Between Social Movements and Corporate Social Initiatives: Toward a Multi-level Theory. *Journal of Business Ethics*, 735-751.

Gerard George, A. M. (2012). Innovation for Inclusive Growth: Towards a Theoretical Framework and a Research Agenda. *Journal of Management Studies*, 661-683.

Gerard George, J. H.-G. (2016). Understanding and Tackling Societal Grand Challenges Through Management Research. *Academy of Management Journal*, 1880-1895.

Geyer-Klingeborg, M. H. (2019). It is merely a matter of time: A meta-analysis of the causality between environmental performance and financial performance. *Business Strategy and the Environment*, 257-273.

Glass, C. &. (2016). Do Women Leaders Promote Sustainability? Analyzing the Effect of Corporate Governance Composition on Environmental Performance. *Business Strategy and the Environment*, 495-511.

Global Reporting Initiative & Support the Goals. (2021). *State of Progress: Business Contributions to the SDGs*.

Goldman Sachs Asset Management Updates Its Proxy Voting Policies To Increase Ethnic And Gender Diversity Expectations For Public Company Boards. (2021, December 2). Retrieved from Goldman Sachs Asset Management: https://www.gsam.com/content/gsam/us/en/advisors/about-gsam/news-and-media/2021/Goldman_Sachs_stewardship.html#:~:text=Forty%2Dsix%20percent%20of%20directors,effect%20on%20March%201%2C%202022.

Gomez-Mejia, P. B. (2009). Environmental Performance and Executive Compensation: An Integrated Agency-Institutional Perspective. *Academy of Management Journal*, 103-126.

Gond, J.-P., O'Sullivan, N., Slager, R., Homanen, M., Viehs, M., & Mosony, S. (2018). *How ESG Engagement Creates Value for Investors and Companies*. UNEP & UN Global Compact.

Governance & Accountability Institute, Inc. (2021). *2021 S&P 500 + Russell 1000: Examining 2020 sustainability reporting in focus*.

- Governance & Accountability, Inc. (2020). *2020 Flash Report Russell 1000: Trends on the sustainability reporting practices of the Russell 1000 Index companies.*
- Graafland, J., & Mazereeuw-van der Duijn Schouten, C. (2012). Motives for Corporate Social Responsibility. *De Economist.*
- Grant, A. (2008). Does Intrinsic Motivation Fuel the Prosocial Fire? Motivational Synergy in Predicting Persistence, Performance, and Productivity. *Journal of Applied Psychology.*
- Gras, D., Conger, M., Jenkins, A., & Gras, M. (2020). Wicked problems, reductive tendency, and the formation of (non-)opportunity beliefs. *Journal of Business Venturing.*
- Gray, M. M. (2013). W(h)ither Ecology? The Triple Bottom Line, the Global Reporting Initiative, and Corporate Sustainability Reporting. *Journal of Business Ethics*, 13-29.
- Gregor Dorfleitner, S. U. (2017). Patience pays off - corporate social responsibility and long-term stock returns. *Journal of Sustainable Finance & Investment*, 1-26.
- Grewal, J., & Serafeim, G. (2020). Research on Corporate Sustainability: Review and Directions for Future Research. *Foundations and Trends in Accounting.*
- Grewal, J., Hauptmann, C., & Serafeim, G. (2021). Material Sustainability Information and Stock Price Informativeness. *Journal of Business Ethics*, 513-544.
- Grewatsch, S., Kennedy, S., & Bansal, P. (2021). Tackling wicked problems in strategic management with systems thinking. *Strategic Organization.*
- GRI, UN Global Compact, & WBCSD. (2015). *SDG Compass: The guide for business action on the SDGs.* United Nations.
- Grint, K. (2008). Wicked Problems and Clumsy Solutions: the Role of Leadership. *Clinical Leader.*
- Grover, P., Kumar Kar, A., & Ilavarasan, P. V. (2019). Impact of corporate social responsibility on reputation--Insights from tweets on sustainable development goals by CEOs. *International Journal of Information Management.*
- Gulati, R. (2022). *Deep Purpose: The Heart and Soul of High-Performance Companies.* New York: Harper Business.
- Gulati, R., Lavie, D., & Singh, H. (2009). The Nature of Partnering Experience and the Gains from Alliances. *Strategic Management Journal.*

- Gunderson, L., & Light, S. (2006). Adaptive management and adaptive governance in the everglades ecosystem. *Policy Sci*, 323-334.
- Gunnar Friede, T. B. (2015). ESG and financial performance: aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance and Investment*, 210-233.
- Halling, M., Yu, J., & Zechner, J. (2021). Primary Corporate Bond Markets and Social Responsibility. *Swedish House of Finance* , Research Paper No. 20-13.
- Harker Steel, A., & Bergstrom, J. (2018). Tacking Wicked Problems in Applied Economics: An Application to the Bears Ears National Monument. *Agriculture & Applied Economics Association Annual Meeting*.
- Harrison Hong, J. K. (2012). Financial constraints on corporate goodness. *National Bureau of Economic Research*, Working Paper 18476.
- Hautamaki, A., & Oksanen, K. (2016). Sustainable Innovation: Solving Wicked Problems through Innovation. *Open Innovation: Bridging Theory and Practice*.
- Head, B., & Alford, J. (2013). Wicked Problems: Implications for Public Policy and Management. *Administration & Society*.
- Heimer, C. (2013). 'Wicked' ethics: Compliance work and the practice of ethics in HIV research. *Social Science & Medicine*.
- Henderson, R. (2015). Making the Business Case for Environmental Sustainability. In R. Henderson, R. Gulati, & M. Tushman, *Leading Sustainable Change: An Organizational Perspective* (pp. 22-47). Oxford, UK: Oxford University Press.
- Henderson, R. (2021). Innovation in the 21st Century. *Management Science*.
- Henisz, W. (2019). ESG, Material Credit Events, and Credit Risk. *Journal of Applied Corporate Finance*.
- Heslin, P., & Ochoa, J. (2008). Understanding and developing strategic corporate social responsibility. *Organizational Dynamics*.
- Hochberg, Y. V., & Lindsey, L. (2010). Incentives, targeting, and firm performance: An analysis of non-executive stock options. *The Review of Financial Studies*, 4148-4186.
- Hong, H., & Kacperczyk, M. (2009). The price of sin: The effects of social norms on markets. *Journal of financial economics*, 15-36.

DRAFT
12-Apr-23

- Hong, L. a. (2016). Corporate Governance and Executive Compensation for Corporate Social Responsibility. *Journal of Business Ethics*, 199-213.
- Idoya Ferrero-Ferrero, M. Á.-I.-T. (2015). Integrating Sustainability into Corporate Governance: An Empirical Study on Board Diversity. *Corporate Social Responsibility and Environmental Management*, 193-207.
- IFRS. (2021, November 3). *An update on the ISSB at COP26*. Retrieved from <https://www.ifrs.org/news-and-events/news/2021/11/An-update-on-the-ISSB-at-COP26/>
- Inkpen, A. (2002). Learning Through Joint Ventures: A Framework of Knowledge Acquisition. *Journal of Management Studies*.
- (2021). *Institutional Investor Study*. Schroders.
- (2021). *Investing for Impact*. International Finance Corporation.
- Ioannis Ioannou, S. X. (2016). The Effect of Target Difficulty on Target Completion: The Case of Reducing Carbon Emissions. *Accounting Review*.
- Ioannou, I., & Serafeim, G. (2019). Corporate Sustainability: A Strategy? *Harvard Business School Accounting & Management Unit Working Paper No. 19-065*.
- ISO. (n.d.). *ISO 14000 Family Environmental Management*. Retrieved from <https://www.iso.org/iso-14001-environmental-management.html>
- Jacquelyn Humphrey, D. L. (2012). Does it cost to be sustainable? *Journal of Corporate Finance*, 626-639.
- Jae-Joon Han, H. J. (2016). Empirical study on relationship between corporate social responsibility and financial performance in Korea. *Asian Journal of Sustainability and Social Responsibility*, 61-76.
- James, K., & Bakker, P. (2021, June 15). *Better together: How SDG Sector Roadmaps can help to unlock transformation*. Retrieved from WBCSD: <https://www.wbcsd.org/Overview/News-Insights/WBCSD-insights/Better-together-How-SDG-Sector-Roadmaps-can-help-to-unlock-transformation>
- Jennifer Howard-Grenville, S. B. (2014). Climate Change and Management: From the Editors. *Academy of Management Journal*, 615-623.
- Ji Li, J. H. (2011). The effects of employee training on the relationship between environmental attitude and firms' performance in sustainable development. *The International Journal of Human Resource Management*, 1-14.

DRAFT
12-Apr-23

- Jing-Wen Huang, Y.-H. L. (2017). Green Innovation and Performance: The View of Organizational Capability and Social Reciprocity. *Journal of Business Ethics*, 309-324.
- Jizi, M. (2017). The Influence of Board Composition on Sustainable Development Disclosure. *Business Strategy and the Environment*, 640-655.
- Jody Grewal, E. R. (2015). Market Reaction to Mandatory Nonfinancial Disclosure. *SSRN Electronic Journal*.
- John Nofsinger, J. S. (2019). Institutional Investors and Corporate Social Responsibility. *Journal of Corporate Finance*, 700-725.
- Joseph, E. (2003). *A New Business Agenda for Government*. London: Institute for Public Policy Research.
- Judith Walls, P. B. (2012). Corporate governance and environmental performance: is there really a link? *Journal of Strategic Management*, 885-913.
- Kacperczyk, C. F. (2016). The Impact of Stakeholder Orientation on Innovation: Evidence from a Natural Experiment. *Journal of Management Science*, 1982-2001.
- Ketter, W., Peters, M., Collins, J., & Gupta, A. (2015). Competitive Benchmarking: An IS Research Approach to Address Wicked Problems with Big Data and Analytics. *ERIM report series research in management Erasmus Research Institute of Management*.
- Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate Sustainability: First Evidence on Materiality. *Accounting Review*, 1697-1724.
- Khan, A. S., & Neis, B. (2010). The rebuilding imperative in fisheries: Clumsy solutions for a wicked problem? *Progress in Oceanography*, 341-356.
- Kim, E. H., & Ouimet, P. (2014). Broad-based employee stock ownership: Motives and outcomes. *The Journal of Finance*, 1273-1319.
- Kim, I., Pantzalis, C., & Zhang, Z. (2021). Multinationality and the value of green innovation. *Journal of Corporate Finance*.
- Kim, S., Karlesky, M., Myers, C., & Schifeling, T. (2016). Why Companies Are Becoming B Corporations. *Harvard Business Review*.
- King, B. G., & Soule, S. A. (2007). Social Movements as Extra-Institutional Entrepreneurs: The Effect of Protests on Stock Price Returns. *Administrative Science Quarterly*.

- Kirschke, S., Franke, C., Newig, J., & Borchardt, D. (2019). Clusters of water governance problems and their effects on policy delivery. *Policy and Society*, 255-277.
- Kjell Arne Brekke, K. N. (2008). Attracting responsible employees: Green production as labor market screening. *Resource and Energy Economics*, 509-526.
- Klintman, M. (2010). Dealing with values that differ across concerned consumer groups and policy makers -- values as elements in societal concerns. In *Policy Responses to Societal Concerns in Food and Agriculture*. OECD Publishing.
- Kramer, M. (2020). Driving profit and doing good: The transformoinal power of purpose. *Journal of Brand Strategy*.
- Kronthal-Sacco, R., & Whelan, T. (2021). *Sustainable Market Share Index*. New York: NYU Stern Center for Sustainable Business.
- Kuokkanen, H., & Sun, W. (2020). Companies, Meet Ethical Consumers: Strategic CSR Management to Impact Consumer Choice. *Jounral of Business Ethics*, 403-423.
- Kwakkel, J., Walker, W., & Haasnoot, M. (2016). Coping with the Wickedness of Public Policy Problems: Approaches for Decision Making under Deep Uncertainty. *Water Resource Planning and Management*.
- Kwang-Ho Kim, M. K. (2015). Effects of Corporate Social Responsibility on Corporate Financial Performance: A Competitive-Action Perspective. *Jornal of Management*.
- Ladika, T., & Sautner, Z. (2020). Managerial short-termism and investment: Evidence from accelerated option vesting. *Review of Finance*, 305-344.
- Lars Isaksson, T. K. (2014). Corporate social responsibility: Why bother? *Organizational Dynamics*, 64-72.
- Lashitew, A. A., & van Tulder, R. (2020). Why do firms choose to fight poverty? The motivation behind inclusive business practices in Africa. In J. N. Muthuri, M. G. Arnold, S. Gold, & X. Rueda, *Base of the Pyramid Markets in Africa: Innovation and Challenges to Sustainability* (pp. 23-48). New York: Routledge.
- Lashitew, A. A., Bals, L., & Van Tulder, R. J. (2020). Inclusive Business at the Base of the Pyramid: The Role of Embeddedness for Enabling Social Innovations. *Journal of Business Ethics*, 421-448.
- Laura Mervelskemper, D. S. (2016). Enhancing Market Valuation of ESG Performance: Is Integrated Reporting Keeping its Promise? *Business Strategy and the Environment*, 536-549.

- Lauren Cohen, U. G. (2021). The ESG - Innovation Disconnect: Evidence from Green Patenting. *European Corporate Governance Institute – Finance Working Paper No. 744/2021*.
- Lazarus, R. (2009). Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future. *Cornell Law Review*.
- Le Pennec, M., & Raufflet, E. (2018). Value Creation in Inter-Organizational Collaboration: An Empirical Study. *Journal of Business Ethics*.
- Lee, M. (2011). Configuration of External Influences: The Combined Effects of Institutions and Stakeholders on Corporate Social Responsibility Strategies. *Journal of Business Ethics*.
- Lee, M. J.-W. (2015). CEO compensation and corporate social responsibility. *Journal of Multinational Financial Management*, 46-65.
- Leon Seltzer, L. S. (2020). Climate Regulatory Risks and Corporate Bonds. *ERN: Other Econometrics: Applied Econometric Modeling in Microeconomics - Microeconomic Models of the Environment (Topic)*.
- Levin, K., Cashore, B., Bernstein, S., & Auld, G. (2012). Overcoming the tragedy of super wicked problems: constraining our future selves to ameliorate global climate change. *Policy Science*.
- Li Cai, J. C. (2016). Corporate Environmental Responsibility and Firm Risk. *Journal of Business Ethics*, 563-594.
- Li, Z. S. (2017). Gender Diversity on Boards and Firms' Environmental Policy. *Business Strategy and The Environment*, 306-315.
- Lilienfeld-Toal, U. v., & Ruenzi, S. (2014). CEO ownership, stock market performance, and managerial discretion. *The Journal of Finance*, 1013-1050.
- Lins, K., Servaes, H., & Tamayo, A. (2017). Social Capital, Trust, and Firm Performance: The Value of Corporate Social Responsibility during the Financial Crisis. *The Journal of Finance*, 1785-1824.
- Liskovich, H. H. (2015). Crime, Punishment and the Halo Effect of Corporate Social Responsibility. *National Bureau of Economic Research, Working Paper 21215*.
- Liu, C.-L., Ghauri, P. N., & Sinkovics, R. R. (2010). Understanding the impact of relational capital and organizational learning on alliance outcomes. *Journal of World Business*, 237-249.
- Lopik, S. (2021, December 28). *The Second Anniversary of the Urgenda Climate Ruling: A Day to Celebrate?* Retrieved from Strasbourg Observers:

<https://strasbourgobservers.com/2021/12/28/the-second-anniversary-of-the-urgenda-climate-ruling-a-day-to-celebrate/>

- Lund, J. (2012). Provoking More Productive Discussion of Wicked Problems. *Journal of Water Resources Planning and Management*.
- M. Guerci, G. R. (2015). The Impact of Human Resource Management Practices and Corporate Sustainability on Organizational Ethical Climates: An Employee Perspective. *Journal of Business Ethics*, 325-342.
- Maaloul, A., Zeghal, D., Amar, W. B., & Mansour, S. (2021). The Effect of Environmental, Social, and Governance (ESG) Performance and Disclosure on Cost of Debt: The Mediating Effect of Corporate Reputation. *Corporate Reputation Review*.
- Mackey, J., & Sisodia, R. (2013). *Conscious Capitalism: Liberating the Heroic Spirit of Business*. Harvard Business Review Press.
- Malhotra, N., Clavier, B., & Bailard, E. (n.d.). *The Impact Compass*. Stanford Graduate School of Business Center for Social Innovation.
- Manner, M. (2010). The Impact of CEO Characteristics on Corporate Social Performance. *Journal of Business Ethics*, 53-72.
- Margolis, J., & Walsh, J. (2003). Misery Loves Companies: rethinking Social Initiatives by Business. *Administrative Science Quarterly*, 268-305.
- María D. Odriozola, E. B.-D. (2017). Is Corporate Reputation Associated with Quality of CSR Reporting? Evidence from Spain. *Corporate Social Responsibility and Environmental Management*, 121-132.
- Mariassunta Giannetti, T. Y. (Forthcoming). Public Attention to Gender Equality and the Demand for Female Directors. *Journal of Financial and Quantitative Analysis*.
- Marinetti, M. (2006). The Historical Development of Business Philanthropy: Social Responsibility in the New Corporate Economy. *Business History*.
- Mark K. McBeth, E. A. (2004). Public opinion for sale: The role of policy marketers in Greater. *Policy Sciences*, 319-338.
- Martinez-Ferrero, J., & Garcia-Meca, E. (2020). Internal corporate governance strength as a mechanism for achieving sustainable development goals. *Sustainable Development*, 1-10.

- Mason, T., Pollard, C., Chimalakonda, D., Guerrero, A., Kerr-Smith, C., Milheiras, S., . . . Bunnefeld, N. (2018). Wicked conflict: Using wicked problem thinking for holistic management of conservation conflict. *Conservation Letters*.
- Masulis, R., & Reza, S. W. (2015). Agency problems of corporate philanthropy. *The Review of Financial Studies*, 592-636.
- McMillan, C., & Overall, J. (2016). Wicked problems: turning strategic management upside down. *Journal of Business Strategy*.
- Mhlanga, R., Gneiting, U., & Agarwal, N. (2018). *Walking the Talk: Assessing companies' progress from SDG rhetoric to actoin*. London, UK: Oxfam.
- Michael Hadani, J. P. (2019). Social movements and corporate political activity: Managerial responses to socially oriented shareholder activism. *Journal of Business Research*, 156-170.
- Morais, F., Kakabadse, A., & Kakabadse, N. (2020). Leading through discontinuous change: A typology of problems and leadership approaches in UK boards. *Long Range Planning*.
- Morrison, E. (2011). Employee Voice Behavior: Integration and Directions for Future Research. *Academy of Management Annals*.
- Morse, A., Nanda, V., & Seru, A. (2011). Are incentive contracts rigged by powerful CEOs? *The Journal of Finance*, 1779-1821.
- MSCI. (2020, Sep 14). *Assessing Company Alignment with UN SDGs*. Retrieved from <https://www.msci.com/www/blog-posts/assessing-company-alignment/02085389620>
- MSCI. (2022, March 4). *ESG 101: What is Environmental Socila and Governance*. Retrieved from <https://www.msci.com/esg-101-what-is-esg>
- MSCI. (2022). *Who will regulate ESG?* Retrieved from <https://www.msci.com/who-will-regulate-esg>
- Munilla, L., & Miles, M. (2005). The Corporate Social Responsibility Continuum as a Component of Stakeholder Theory. *Business and Society Review*.
- Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*.
- Naqvi, M., & Jus, M. (2019). *The Benchmark that Changed the World: Celebrating 20 Years of the Dow Jones Sustainability Indices*. S&P Global.

- Nelson, J., Jenkins, B., & Gilbert, R. (2015). *Business and the Sustainable Development Goals*. Cambridge: Harvard Kennedy School: Corporate Social Responsibility Initiative.
- Noordegraaf, M., Douglas, S., Bos, A., & Klem, W. (2017). How to evaluate the governance of transboundary problems? Assessing a national counterterrorism strategy. *Evaluation*.
- Oh, K.-S., Han, J. R., & Park, S. R. (2021). The Influence of Hotel Employees' Perception of CSR on Organizational Commitment. *Sustainability*.
- Ordonez-Ponce, E., Clarke, A., & MacDonald, A. (2021). Business contributions to the sustainable development goals through community sustainability partnerships. *Sustainability Accounting, Management and Policy Journal*.
- Orlitzky, M., Schmidt, F., & Rynes, S. (2003). Corporate Social and Financial Performance: A Meta-analysis. *Organization Studies*, 403-441.
- Park, M. N. (2017). Self-claimed sustainability: Building social and environmental reputations with words. *Sustainable Production and Consumption*, 46-57.
- Pascual Berrone, A. F.-M. (2013). Necessity as the mother of 'green' inventions: Institutional pressures and environmental innovations. *Strategic Management Journal*, 891-909.
- Patrick Bolton, M. K. (2020). Do investors care about carbon risk? *National Bureau of Economic Research*, Working Paper 26968.
- Pattberg, P., & Widerberg, O. (2016). Transnational multistakeholder partnerships for sustainable development: Conditions for success. *Ambio*.
- Perez-Batres, L., Doh, J., Miller, V., & Pisani, M. (2012). Stakeholder Pressures as Determinants of CSR Strategic Choice: Why do Firms Choose Symbolic Versus Substantive Self-Regulatory Codes of Conduct? *Journal of Business Ethics*.
- Peter Reali, J. G. (2021, April 25). *ESG: Investors Increasingly Seek Accountability and Outcomes*. Retrieved from Harvard Law School Forum on Corporate Governance: <https://corpgov.law.harvard.edu/2021/04/25/esg-investors-increasingly-seek-accountability-and-outcomes/>
- Peters, B. (2017). What is so wicked about wicked problems? A conceptual analysis and a research program. *Policy and Society*.
- Ping-Sheng Koh, C. Q. (2013). Firm litigation risk and the insurance value of corporate social performance. *Strategic Management Journal*.

DRAFT
12-Apr-23

- Pizzi, S., Caputo, A., Corvino, A., & Venturelli, A. (2020). Management research and the UN Sustainable Development Goals (SDGs): a bibliometric investigation and systematic review. *Journal of Cleaner Production*.
- Pollitt, C. (2015). Wickedness will not wait: climate change and public management research. *Public Money & Management*, 181-186.
- Pornsit Jiraporn, N. J. (2013). Does Corporate Social Responsibility (CSR) Improve Credit Ratings? Evidence from Geographic Identification. *Financial Management*, 505-531.
- Porter, M., & Kramer, M. (2006). Strategy & Society. *Harvard Business Review*.
- Porter, M., & Kramer, M. (2011). Creating shared value. *Harvard Business Review*.
- Preston, L., & Post, J. (1975). *Private management and public policy: the principle of public responsibility*. Pearson Education Inc.
- Pyykko, H., Suohemi, M., & Walter, S. (2021). Approaching Sustainability Transition in Supply Chains as a Wicked Problem: Systematic Literature Review in Light of the Evolved Double Diamond Design Process Model. *Processes*.
- Rachel Bocquet, C. L. (2013). Are firms with different CSR profiles equally innovative? Empirical analysis with survey data. *European Management Journal*, 642-654.
- Ralph Hamann, S. G. (2011). The role of business and cross sector collaboration in addressing the 'wicked problem' of food insecurity. *Journal of Development Southern Africa*.
- Ramani, S. (2021). *Policy Brief: How should policymakers tackle 'wicked' problems? From designing solutions to building legitimacy*. United Nations University.
- Ranabahu, N. (2020). 'Wicked' solutions for 'wicked' problems: Responsible innovations in social enterprises for sustainable development. *Journal of Management & Organization*.
- Ranja Gibson, S. G. (2021). Do Responsible Investors Invest Responsibly? *Finance Working Paper*.
- Rawhouser, H., Cummings, M., & Newbert, S. (2019). Social Impact Measurement: Current Approaches and Future Directions for Social Entrepreneurship Research. *Entrepreneurship Theory and Practice*.
- Reinecke, J., & Ansari, S. (2015). Taming Wicked Problems: The Role of Framing in the Construction of Corporate Social Responsibility. *Journal of Management Studies*.
- Reza, R. M. (2015). Agency problems of corporate philanthropy. *Review of Financial Studies*, 592-636.

DRAFT
12-Apr-23

- Richard Borghesi, J. F. (2014). Corporate socially responsible investments: CEO altruism, reputation, and shareholder interests. *Journal of Corporate Finance*, 164-181.
- Ritala, P, Huotari, P., Bocken, N., Albareda, L., & Puumalainen, K. (2018). Sustainable business model adoption among S&P 500 firms: A longitudinal content analysis study. *Journal of Cleaner Production*.
- Rittel, H., & Webber, M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*.
- Robert Eccles, G. S. (2011). Market Interest in Nonfinancial Information. *Journal of Applied Corporate Finance*, 113-127.
- Robert Kaplan, G. S. (2018). Inclusive Growth: Profitable Strategies for Tackling Poverty and Inequality. *Harvard Business Review*.
- Roberts. (2000). Wicked problems and network approaches to resolution. *International Public Management Review*.
- Rogers, J. (2019, May). *Seven Years of SASB*. Retrieved from The Reporting Times, the Center for Corporate Reporting.
- Rosati, F., & Faria, L. G. (2019). Business contribution to the Sustainable Development Agenda: Organizational factors related to early adoption of SDG reporting. *Corporate Social Responsibility and Environmental Management*.
- Rosenau, P. (1999). Introduction: The Strengths and Weaknesses of Public-Private Policy Partnerships. *American Behavioral Scientist*.
- Roth, P. I. (2020). Directors and Corporate Sustainability. *SSRN Online Publication*.
- Roth, P. I. (2021). Directors And Corporate Sustainability. *SSRN Online Publication*.
- Rouen, E. (2020). Rethinking measurement of pay disparity and its relation to firm performance. *The Accounting Review*, 343-378.
- Rui Albuquerque, Y. K. (2019). Corporate Social Responsibility and Firm Risk: Theory and Empirical Evidence. *Management Science*, 4451-4469.
- Sadok Ghou, O. G. (2011). Does corporate social responsibility affect the cost of capital? *Journal of Banking & Finance*, 2388-2406.
- Sadowski, J., Seager, T., Selinger, E., Spierre, S., & Whyte, K. (2013). An Experiential, Game-Theoretic Pedagogy for Sustainability Ethics. *Sci Eng Ethics*.

DRAFT
12-Apr-23

- Saiia, D., Carroll, A., & Buchholtz, A. (2003). Philanthropy as Strategy: When Corporate Charity "Begins at Home". *Business & Society*.
- Sakis Kotsantonis, C. P. (2016). ESG integration in investment management: Myths and realities. *Journal of Applied Corporate Finance*, 10-16.
- Sandra A. Waddock, S. B. (1997). The corporate social performance/financial performance link. *Strategic Management Journal*.
- SASB. (2022, March 4). *How the SASB Standards fit into the reporting ecosystem*. Retrieved from <https://www.sasb.org/standards/materiality-finder/>
- SASB. (n.d.). *Materiality Finder*. Retrieved from <https://www.sasb.org/standards/materiality-finder/>
- Schmidheiny, S. (1992). *Changing Course: A Global Business Perspective on Development and the Environment*. Cambridge: MIT Press.
- Scott Jeffrey, S. R. (2018). Corporate social responsibility behaviors and corporate reputation. *Social Responsibility Journal*.
- SDG Fund. (n.d.). *From MDGs to SDGs*. Retrieved from <https://www.sdgfund.org/mdgs-sdgs>
- Segal, M. (2021, June 14). *PRI Reaches 4,000 Signatories as Interest in ESG Investing Proliferates Across Sectors and Regions*. Retrieved from ESG Today: <https://www.esgtoday.com/pri-reaches-4000-signatories-as-interest-in-esg-investing-proliferates-across-sectors-and-regions/>
- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: a meta-analytic review. *Journal of Applied Psychology*, 981.
- Selena Aureli, M. D. (2020). Nonfinancial reporting regulation and challenges in sustainability disclosure and corporate governance practice. *Business Strategy and the Environment*.
- Sen, S., Du, S., & Bhattacharya, C. (2016). Corporate social responsibility: a consumer psychology perspective. *Current Opinion in Psychology*, 70-75.
- Serafeim, G. (2015). Integrated Reporting and Investor Clientele. *Journal of Applied Corporate Finance*.
- Serafeim, G. (2018). Investors as Stewards of the Commons? *Journal of Applied Corporate Finance*, 8-17.
- Serafeim, G. (2020). Public Sentiment and the Price of Corporate Sustainability. *Financial Analysts Journal*, 26-46.

- Serafeim, G. (2020). Social-Impact Efforts That Create Real Value. *Harvard Business Review*.
- Serafeim, G. (2022 (pre-print)). *Profit + Purpose*. New York City: HarperCollins Leadership.
- Serafeim, I. I. (2015). The Impact of Corporate Social Responsibility on Investment Recommendations: Analysts' Perceptions and Shifting Institutional Logics. *Strategic Management Journal*, 1053-1081.
- Silvestri, L., & Gulati, R. (2013). Weaving Sustainability into the Organization's Fabric: A Framework for Organizational Renewal. *Harvard Business School Working Papers*.
- Silvestri, L., & Gulati, R. (2015). From Periphery to Core: A Process Model for Embracing Sustainability. In R. Henderson, R. Gulati, & M. Tushman, *Leading Sustainable Change: An Organizational Perspective*. Oxford, UK: Oxford University Press.
- Simone Schriger, A. B. (2021). Hierarchy of qualities in global health partnerships: a path towards equity and sustainability. *BMJ Global Health*.
- Soule, S. A. (2018). Social movements and Their Impact on Business and Management. *Oxford Research Encyclopedia*.
- Stahl, C. (2012). A demonstration of the necessity and feasibility of using a clumsy decision analytic approach on wicked environmental problems. *Integrated Environmental Assessment and Management*.
- Starks, L. T., Venkat, P., & Zhu, Q. (2017). Corporate ESG profiles and investor horizons. *SSRN*.
- Stefano Dell'Atti, A. T. (2017). Corporate Social Responsibility Engagement as a Determinant of Bank Reputation: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management*, 589-605.
- Stephen Brammer, A. M. (2007). The contribution of corporate social responsibility to organizational commitment. *The International Journal of Human Resource Management*, 1701-1719.
- Sweeting, B. (2018). Wicked problems in design and ethics. In P. Jones, & K. Kijima, *Systemic design: Theory, methods, and practice* (pp. 119-143). Tokyo: Springer Japan.
- Sybille Sachs, E. R. (2011). Stakeholder Governance as a Response to Wicked Issues. *Journal of Business Ethics*.
- Tamas Barko, M. C. (2021). Shareholder Engagement on Environmental, Social, and Governance Performance. *Journal of Business Ethics*.

- Taparia, H. (2021, July 14). *The World May Be Better Off Without ESG Investing*. Retrieved from Stanford Social Innovation Review: <https://doi.org/10.48558/PC0C-TV52>
- Termeer, C., & Dewulf, A. (2019). A small wins framework to overcome the evaluation paradox of governing wicked problems. *Policy and Society*.
- Termeer, C., Dewulf, A., & Biesbroek, R. (2019). A critical assessment of the wicked problem concept: relevance and usefulness for policy science and practice. *Policy and Society*, 167-179.
- Termeer, C., Dewulf, A., & Breeman, G. (2013). Governance Capabilities for Dealing Wisely with Wicked Problems. *Administration & Society*.
- Termeer, C., Dewulf, A., Karlsson-Vinkhuyzen, S., Vink, M., & Vliet, M. (2016). Coping with the wicked problem of climate adaptation across scales: The five R governance capabilities. *Landscape and Urban Planning*.
- Torfiing, J., Peters, B., Pierre, J., & E, S. (2013). Interactive Governance: Advancing the paradigm. *Public Administration*, 1071-1082.
- Turnbull, N., & Hoppe, R. (2019). Problematizing 'wickedness': a critique of the wicked problems concept, from philosophy to practice. *Policy and Society*, 315-337.
- Turnheim, B., Berkhout, F., Geels, F., Hof, A., McMeekin, A., Nykvist, B., & van Vuuren, D. (2015). Evaluating sustainability transitions pathways: Bridging analytical approaches to address governance challenges. *Global Environmental Change*.
- UN Global Compact. (n.d.). *Home page*. Retrieved from <https://www.unglobalcompact.org/>
- UNDP. (2022, March 4). *What are the Sustainable Development Goals?* Retrieved from <http://www.undp.org/content/undp/en/home/sustainable-development-goals.html>
- Urgenda Foundation v. State of the Netherlands*. (n.d.). Retrieved from Sabin Center for Climate Change Law: <http://climatecasechart.com/climate-change-litigation/non-us-case/urgenda-foundation-v-kingdom-of-the-netherlands/>
- Urmanaviciene, A., Chantzi, K., & Tambari, B. (2021). Challenges of cross-sectoral collaboration of social enterprises in Baltic states. *European Journal of Social Impact and Circular Economy*.
- Van Bueren, E., Hans Klijn, E., & Koppenjan, J. (2003). Dealing with Wicked Problems in Networks: Analyzing an Environmental Debate from a Network Perspective. *Journal of Public Administration Research and Theory*.

- Van Bueren, E., Klijn, E., & Koppenjan, J. (2003). Dealing with Wicked Problems in Networks: Analyzing an Environmental Debate from a Network Perspective. *Journal of Public Administration Research and Theory*.
- van Tulder, R. (2018). *Business and the sustainable development goals: A framework for effective corporate involvement*. New York: UN.
- van Tulder, R., Seitanidi, M. M., Crane, A., & Brammer, S. (2016). Enhancing the Impact of Cross-Sector Partnerships. *Journal of Business Ethics*.
- van Tulder, R., Seitanidi, M. M., Crane, A., & Brammer, S. (2016). Enhancing the Impact of Cross-Sector Partnerships: Four Impact Loops for Channeling Partnership Studies. *Journal of Business Ethics*.
- van Zanten, J. A., & van Tulder, R. (2018). Multinational enterprises and the Sustainable Development Goals: an institutional approach to corporate engagement. *Journal of International Business Policy*.
- Varone, F., Nahrath, S., Aubin, D., & Gerber, J.-D. (2013). Functional regulatory spaces. *Policy Sciences*.
- Verweij, M., Douglas, M., Ellis, R., Engel, C., Hendriks, f., Lohmann, S., . . . Thompson, M. (2006). Clumsy Solutions for a Complex Word: The Case of Climate Change. *Public Administration*, 817-843.
- Waddock, Meszoely, Waddell, & Dentoni. (2015). The complexity of wicked problems in large scale change. *Journal of Organizational Change*, 993-1012.
- Walker, G., Daniels, S., & Emborg, J. (2008). Tackling the tangle of environmental conflict: complexity, controversy, and collaborative learning. *Emergence: Complexity and Organization*.
- Walls, H. (2018). Wicked problems and a 'wicked' solution. *Globalization and Health*.
- Warner, M., & Sullivan, R. (2004). *Putting partnerships to work*. Sheffield, UK: Greenleaf.
- Wexler, M. (2009). Exploring the moral dimensions of wicked problems. *International Journal of Sociology and Social Policy*.
- Wong, J. B., & Zhang, Q. (2022). Stock market reactions to adverse ESG disclosure via media channels. *The British Accounting Review*.
- Wood, D. (1991). Corporate social performance revisited. *The Academy of Management Review*.
- Woodford, D., Richardson, D., Maclsaac, H., Mandrak, N., van Wigen, B., Wilson, J., & Weyl, O. (2016). Confronting the wicked problem of managing biological invasions. *NeoBiota*.

- World Business Council for Sustainable Development. (2013). *Measuring socio-economic impact: a guide for business*. Geneva: WBCSD.
- World Commission on Environment and Development (WCED). (1987). *Our Common Future*. New York: Oxford University Press.
- Yeonwoo Do, S. K. (2020). Do Higher-Rated or Enhancing ESG of Firms Enhance Their Long-Term Sustainability? Evidence from Market Returns in Korea. *Sustainability*, 1-22.
- Young, S., & Caisey, V. (2010). Mind shift, mode shift: A lifestyle approach to reducing car ownership and use based on behavioural economics and social marketing. *Perspectives in Public Health*.
- Yunshuo Liu, S. L. (2021). Does perceived corporate social responsibility motivate hotel employees to voice? The role of felt obligation and positive emotions. *Journal of Hospitality and Tourism Management*, 182-190.
- Zhang, D. T. (2018). Do Shareholders Benefit from Green Bonds?
- Zhang, L. G. (2015). Firms' earnings smoothing, corporate social responsibility, and valuation. *Journal of Corporate Finance*, 108-127.
- Zia ur Rehman, A. K. (2020). Corporate social responsibility's influence on firm risk and firm performance: the mediating role of firm reputation. *Corporate Social Responsibility and Environmental Management*, 2991-3005.
- Zijp, M., Posthuma, L., Wintersen, A., & Devilee, J. S. (2016). Definition and use of Solution-focused Sustainability Assessment: A novel approach to generate, explore and decide on sustainable solutions for wicked problems. *Environment International*.