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Keywords

Pension Investing, ESG, Externality, Principal, Agent.

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Whether labeled sustainable, responsible, or ESG investing, sustainable investing is growing into its moment, with pensions and other institutional investors playing important roles. Although once quite separate, environmental, social, and governance (ESG) concerns are converging, as pensions and other investors increasingly treat these strands as three parts of a whole. In addition, once quite separate, sustainability considerations are also being increasingly integrated into institutions' overall investment processes.

In our view, convergence and integration are becoming irreversible trends, as pensions and institutional investors around the world expand their sustainable investing capabilities or require their managers to do so. Several suggestive indicators include the following:

- In 2006, 63 asset owners, managers and service providers around the world, representing about US$6.5 trillion, signed on to the UN's first Principles of Responsible Investment (PRI). In 2021, the UN PRI had over 4,000 signatories, of which over 300 are asset owners or managers representing about US$100 trillion (UN PRI 2021a). Another estimate puts actual sustainably-managed global assets at about US$40 trillion (Opima 2020).[1]
- In 1995, US institutions managed about $2 billion using a variety of E, S and G criteria, whereas by 2020, ESG AUM in the US had grown to over $17 trillion, a compound annual growth rate of about 14 percent (US SIF 2020).
- Japan's GPIF, with over US$1.5 trillion AUM, is now requiring its fund managers to integrate environmental and social concerns into security selection (GPIF 2020).
- The European Union has been engaged in a multiyear program to increase ESG disclosure by public companies, and to require institutional investors to incorporate sustainable investing principles and practices into their investment programs (EC 2018b).

- In the US, CalPERS, the California public employee defined benefit plan, has long been a leader in ESG convergence and integration; and TIAA, an early innovator among defined contribution plans with separate social choice funds and a strong governance program, is considering how to bring sustainable investing criteria to bear on its entire investment portfolio.
- Among asset managers, BlackRock announced in 2020 that it is in the process of reorienting its entire $7 billion plus investment portfolio to incorporate sustainable investment criteria, while Capital Group has integrated ESG-based securities analysis into its investments. Many other asset managers preceded those actions or are following suit (Williamson 2020).

Four Forces Driving Convergence and Integration

Next, we identify four forces behind these trends toward convergence and integration in sustainable investing.

Economic transformation, movements, and organizations. Social movements and government programs intended to ameliorate the worst of the effects of industrialization are well-known and long recognized. In the last few decades, reemergence of wealth and income inequality, increasing industrial concentration and globalization, identification of climate change, and other environmental and social effects have stimulated regional and global movements and independent organizations to advocate and pressure government regulators and companies to address negative consequences.

Information and analysis. Better data and research on environmental and social issues, including increased disclosure by companies, have enabled governments, independent organizations and shareholders to understand the case for companies to act on ESG considerations. This has also enabled the creation of multiple measurement systems for evaluating companies according to ESG criteria.

Institutional ownership. Pension and mutual fund ownership of public securities grew several-fold over the last several decades, so that by 2020, pensions accounted for over 60 percent of the US$ 20 trillion in assets among the world's top 100 asset owners (Hall et al. 2020). Sovereign wealth funds accounted for most of the rest. Recognizing the growing size of institutional holdings, pension participants, mutual fund investors, and governments began increasingly to pressure those institutions to engage with the companies they own.

Stakeholder, rather than simply shareholder orientation. While the legitimacy of a stakeholder view of corporate responsibility varies by country and region, wider acceptance of a broad definition of stakeholders to include all of those affected by company actions has been growing. This is true both in the US, where by the late 20th century a narrow shareholder view dominated, and in Europe, where employees in many EU countries have long been recognized as legitimate stakeholders.

These forces have contributed to a more comprehensive approach by institutions to ESG investing across the developed world and, in turn, to changes in the way many companies behave and report. Yet complete convergence and full integration into the investment process by pensions and other investors remains incomplete, given numerous environmental, social, and governance considerations.

Current ESG Challenges for Pensions

If the trend toward convergence and integration is to continue, it will depend on several challenges that are actively being addressed and debated.

Goals and objectives. There has been a sea change regarding two basic issues: pensions' fiduciary responsibility with respect to sustainability versus investment returns, and companies' responsibility to shareholders versus broader stakeholders. However, neither issue has, of yet, been fully resolved.

Analytics. As other papers in this volume illustrate, there is far from universal agreement on how to define environmental, social, and governance factors. This is important both for what companies disclose regarding their activities along ESG dimensions, as well as practices for and impacts on investment analysis of companies. A variety of disclosure standards and measurement systems has been developed over the past several decades, yet there remains disagreement on what factors to consider, how to define those factors precisely, and what weight should be given to each factor.

The investment toolbox. Investors are developing their own preferred mix of ESG investment tools or approaches, including negative screening to exclude certain companies, industries, or countries; positive screening to include companies, or both. Additionally, many pension managers seek to identify best-in-class investing within industries; impact investing to further specific ESG goals; engagement and voting on ESG matters; and integration of ESG factors into the securities analysis and portfolio construction process. The fastest growing of all approaches is ESG integration into the investment process (EC 2020c).

Global standards and practices. Pensions and other institutions operate within regional and global systems, which include a variety of other powerful public and non-government organizations regulating or advocating sustainability policies and practices, all of which can vary across countries and regions.

Although the trends toward ESG convergence and integration are unmistakable, pensions and other institutions cannot simply adopt universal goals and standards, common valuation metrics, and off-the-shelf engagement programs. For example, even with general agreement on reducing carbon emissions, institutions must still determine by how much and by when which companies can or will contribute to reductions, and which companies will do so efficiently. In other words, investors must identify and prioritize their ESG objectives, define specific metrics, and apply them to security selection, while simultaneously creating and managing sustainability programs.

This paper traces the evolution of ESG investing as it has evolved into a more, but not completely integrated, framework. We begin by laying out a conceptual framework based on the concept of the 'universal owner,' whom we define as a long-term global investor in a position to benefit from evaluating and acting on ESG principles through improvements in corporate governance, and by reducing harmful externalities. We then document the development of practical approaches to achieving sustainability that, today, consist of a formidable set of tools with which to evaluate companies and influence their behavior. We also examine the critical public policy issues affecting sustainable investing, for example how definitions of fiduciary duty differ with respect to sustainable investing, and how these in turn affect pensions in different countries and regions. We also illustrate how frameworks, definitions, tools, and public policies have begun to converge. We conclude by considering sustainable investing challenges that pensions and other institutional investors will face in the years ahead.

A Conceptual Framework

While ESG, sustainable, responsible, and impact investing each have somewhat different connotations, they all reflect the United Nations Principles for Responsible Investment (UN PRI) ‘strategy and practice to incorporate environmental, social and governance factors in investment decisions and active ownership’ (UN PRI 2021 a,b; UN PRI 2020). While the UN PRI goes on to list six specific principles, the seeming simplicity of this basic definition that treats environmental, social, and governance as three parts of a whole raises important questions, such as: how are the three parts of ESG related; what exactly are the factors that need to be incorporated; who is responsible for investment decisions; and to whom is the investment decision maker responsible?

Universal owner. Environmental, social, and governance objectives have not always been treated as an integrated whole. Today what brings them closer together is the concept of the ‘universal owner,’ a pension or another institution that by intention or requirement invests long-term in widely diversified holdings throughout the global economy (Urwin 2011), and that can speak with a unified voice (Clark and Hebb 2004). These institutions must manage total market exposure, for example, by recognizing that environmental and social costs are unavoidable since they affect the portfolio through insurance premiums, taxes, inflated input prices, unrest, and instability, which in turn can generate costs reducing returns for some investments. Examples include environmental degradation, poverty, pandemics, and many others. Looming over all of this, poor company governance can lead to short-termism, insufficient attention to pertinent environmental and social issues, and suboptimal decisions that reduce long-term performance. As we will see, universal owners have played a major role in patterns and policies for sustainable investing today, acting both individually and in consortia, including with the UN PRI and independent as well as industry groups.

Besides universal owners, other stakeholders may also have an interest in sustainable and responsible corporate practices. The most influential of these are governments, which, even more than universal owners, have a long-term stewardship interest in the effects of corporate actions on society. They also control a variety of tools such as legislation and regulation, to direct and affect corporate behavior. While governments and universal owners cannot afford to avoid sustainability issues, individual shareholders may also see an interest, although their influence will be less than that of governments and universal owners. Finally, corporations can assess their own stances and take actions to either embrace or avoid sustainability and responsibility (Urwin 2019).

Externalities and agency. To better understand the interests of these actors in ESG investing, it is helpful to turn to two well-known but fundamental economic concepts: externalities and agency theory. Simply put, an economic externality is a cost or benefit that accrues to third parties: society, organizations, or individuals that did not directly agree to incur it. The externality may also affect how firms (and their shareholders) produce it, but a significant portion of the cost or benefit still attends to third parties. For instance, a plant's stationary source air pollution could result in higher health insurance costs and reduced productivity among its workers, thus affecting profits; nevertheless, substantial impacts are likely to be felt by many others through air particulates or climate change. Conversely, a plant that scrubs its emissions will benefit many others who do not pay directly for the costs of doing so. More generally, an externality occurs when a product or service's market equilibrium price does not reflect the true costs or benefits of that product or service for society as a whole. From society's perspective, then, because resources are suboptimally allocated, the externality cannot pass the Pareto optimality test and results in a market failure.

While it may be in society's interest to reduce or eliminate externalities, the dilemma is that when the cost of doing so is borne by one or more firms, they are unlikely to be able to fully capture related positive benefits (e.g., cleaner air and climate stability). A firm might still spend the money, hoping that ESG-minded customers and investors will reward it by their willingness either to pay higher prices for the firm's goods and services or to purchase its securities. For example, customers of the US clothing manufacturer, Patagonia, are willing to pay more for its highly-publicized environmentally friendly cotton-based clothing. In other cases, however, a firm acting alone is unlikely to reap a return on its actions.

A different approach could be for a group of competitors to all agree on reducing specific negative externalities. Even if they cannot capture all of the positive effects, they may incur similar extra costs, so that their relative competitive positions can remain the same. In these cases, trade associations or standard-setting groups can play a central role.

Yet a different approach is for third parties to step in and pressure firms to act. These may include regulators charged with stewardship over public goods, consumers able to direct their purchasing dollars (e.g., boycotts), or pensions and other investors who can pressure company managements using a variety of tools—carrots and sticks—at shareholders' disposal. This is where agency theory comes into play. A conflict or moral hazard arises between a principal—the shareholder—and the agent—company management—when the two parties have different interests and asymmetric information; that is, management knows more about the business than do shareholders (Berle and Means 1967). In such an instance, shareholders cannot directly ensure that management is always acting in their best interest, particularly when activities that benefit the principal are costly to the agent, and/or where what the agent does is costly for the principal to observe. In these cases, there may be suboptimal outcomes—agency costs—that reduce societal welfare. The agency problem can get worse when company management acts on behalf of multiple principals or shareholders, some of whom may not want to share in the cost of monitoring and enforcing certain company policies and practices, or who may not agree on what those policies and practices should be.

Agency problems affect pensions and other institutional universal owners. Among other things, institutional shareholders may be reluctant to act because they receive a fraction of the benefits resulting from stewardship activities, while having to handle all the costs.

It might seem that the problems of externalities and agency theory are closely related, and that responsible investing efforts should easily recognize the connection. Those using the externality lens, as well as those using the agency lens, can both favor incentives such as shareholder and customer preferences, or regulation to internalize certain negative externalities. More likely, a narrower view of agency that focuses on shareholders interested primarily in short-term profits to the exclusion of externalities, will conflict with a broader conception that includes a wider set of stakeholders interested in addressing externalities. For example, efforts to align manager and shareholder interests to produce policies that ignore or amplify negative externalities (e.g., reducing costs by moving jobs to countries that allow sweatshop labor) can be aligned on the profit question, albeit not in ways that always produce sustainable, responsible outcomes.

Stakeholders versus shareholders. As a US example of this issue, the California Public Employee Pension System (CalPERS) defines corporate governance as ‘the relationship among various participants in determining the direction and performance of corporations. The Primary participants are: shareholders; company management…and the board of directors.’ (quoted in McRitchie 2020, p. 1). By contrast, Milton Friedman laid out the case for a definition of corporate governance confined almost entirely to a firm’s owners’ return on investment:

> In a free-enterprise, private-property system, a corporate executive is an employee of the owners of the business. He has direct responsibility to his employers. That responsibility is to conduct the business in accordance with their desires, which generally will be to make as much money as possible while conforming to their basic rules of the society, both those embodied in law and those embodied in ethical custom (Friedman 1970: Section SM p. 17).

To Friedman, corporate governance must be evaluated by how it transmits and enforces actions that maximize monetary returns to shareholders, tempered only by the need to conform to the basic rules of the society.

There is, however, an alternative and more expansive definition hinted at in the CalPERS formulation, one exemplified by the Johnson & Johnson Company's Credo, penned by Robert Wood Johnson in 1943, recognizing that the company's activities touch employees, customers, and communities, as well as shareholders (J&J Credo 1943). In other words, according to this definition, the J&J Credo makes clear that the company creates externalities which must be acknowledged and managed. Accordingly, governance should be evaluated by how it serves the needs of all of these entities, not merely by returns to stockholders. This position also allows for a consideration of externalities, that is, effects on stakeholders that do not accrue to exclusively to shareholders or management.

This tension between a shareholder vs. stakeholder conception of corporate governance is present wherever limited liability corporations exist, but it has had a different flavor across countries and regions in terms of the roles, responsibilities, and influence of company management, shareholders, stakeholders, and governments. The varying perspective continues to challenge pensions, other institutions, and other shareholders in efforts to improve corporate governance around the globe.

Recognizing that a focus on externalities and the narrower view of governance can conflict, it is also possible to separate externality and agency issues. For example, stakeholders primarily interested in improving societal and environmental outcomes might choose to focus on mechanisms such as regulation or proxy votes that work directly toward those ends without directly addressing agency issues. Alternatively, those interested in better aligning shareholder and management incentives—perhaps in search of higher profits—might focus on governance policies, such as board independence and firm takeover policies, to the exclusion of concerns about externalities.

In this vein, a comprehensive way to define the challenge for proponents of responsible investing requires an effort to gain agreement regarding a broader definition of principals in the agency problem. In the process, stakeholders affected by a company's externalities will be included and then their interests aligned with management, shareholders, and stakeholders, so they agree on policies to reduce negative externalities and capture positive externalities. This challenge is a formidable one, and even if the key players could agree on a broader definition of whose interests a company should serve, there is no universal agreement on how to weight those interests, that is, how to prioritize externalities and how to address them.

Such challenges have shaped the evolution of ESG investing, and they remain very much alive today. In the next section, we will see that the modern origins of responsible investing were grounded in this dilemma and essentially led to separate tracks for efforts to improve governance, environmental, and social outcomes. For pensions and some other institutional investors, improving governance, that is, programs and policies to better align management with shareholder interests, emerged early on in what might be called the modern era of sustainable investing. As it did so, better governance proponents did not at first recognize the relevance of environmental and social concerns to their project. What brought the three tracks closer together was the recognition of a broader, more encompassing longer-term focused definition of shareholder interests that includes negative and positive externalities.

Strands and Spheres: ‘Pre-Modern’ to ‘Modern’

Here we are primarily interested in understanding the place of pensions and other institutions in modern ESG investing, but this requires us to recognize the developments that brought both pensions and ESG to where they are today. We refer specifically to three observations about what we might call the ‘pre-modern’ era (roughly prior to the 1980s), as opposed to the ‘modern’ era of ESG policies. First was the absence of pensions in sustainable investing until the late 20th century, largely because funded pensions were small compared to other institutional and most individual investors. Thereafter, with rapid asset and participant growth, pensions began to recognize their emerging status as universal investors with an interest in long-term issues of sustainability. Second, due to government policies, sustainable investing evolved quite differently across countries and regions. As governments, pension plans, and others began to recognize that ESG raises issues are global in nature, policies and practices that varied between countries began to be reexamined. Third, there was initially very little attention devoted to the environment (E) strand of ESG, later followed by attempts to treat G separately from S and E. With a growing recognition that agency and externality issues are highly intertwined, policymakers, pensions, and other investors began to bring the E, S, and G strands together. In effect, the transition from the pre-modern to the modern ESG era is one of evolution and convergence.

The pre-modern era. Some observers group countries with respect to ESG investing exclusively by each nation's type of corporate legal system. Yet while legal systems differ, two simple but powerful drivers of the evolution of sustainability practices in the private sector have been patterns of stock market ownership, and government involvement in social reform and corporate regulation across countries and regions.

Prior to the turn of the 20th century, early social reforms benefiting employees and then consumers began to emerge in developed countries, but they were often the result of pressure from workers, voters, and advocacy groups with little investor involvement. (See Appendix A for details on premodern ESG developments in selected countries.)

What investor interest there was centered on what we now call corporate governance, as corporate control in industrial economies was concentrated in three ways: in monopolistic or oligopolistic industries; control by wealthy families; and financial institutions. For example, in some countries, families used pyramidal ownership structures[2] and/or banks used special share classes and proxy voting to give them effective control. This began to change, but not always in the direction of greater protections for other shareholders and with differences among countries, notably in the role of government control. The US, for example, used antitrust policy and regulation to virtually eliminate family and financial institution control of public companies by the 1940s, but policy still tended to favor the interests of company management over those of shareholders. By contrast, in most European countries, family and financial institution control was tolerated for far longer. In addition, in the name of worker and consumer protection, and to preserve declining industries after World War II, some European governments took direct ownership of companies in certain industries and/or exerted a stronger role in capital allocation.

We also note that environmental issues played a back seat to governance and social concerns, or were often nonexistent, until the 1960s and 70s.

At the dawn of the modern era of ESG investing, the landscape looked as depicted in Table 1. Here we see that several of the tools and approaches used to promote good corporate governance in the modern era were already in use but not widespread, including the 2-tier board structure, a degree of uniform accounting and disclosure, limits on institutional and family ownership, anti-monopoly enforcement, and formal recognition of stakeholders. Others approaches, such as shareholder initiatives, prohibition of interlocking directorates, independent board members, etc., were scarce or missing.

Table 1 here

There was a long history of employee and consumer protections regarding social and environmental issues in many countries, but the impetus rarely came from shareholders. Rather, most often it arose from union activism and other interest groups leading to government regulation and/or ownership of industry. For example, the US government created a wave of regulatory agencies at the start of the 20th century. Pensions were not in a position to exercise much influence in those days, since in many countries they were either unfunded public entities or, as in the UK and the US, they were funded but had not yet accumulated substantial financial clout.

The modern era. What we call the modern era of ESG investing began in the late 1970s and early 1980s, marked by the rise of pension ownership, the retreat of direct government ownership of companies, and separate movements to promote corporate governance and environmental reforms. For example, in 1969, the US Environmental Protection Agency was created, exemplifying a new era of government regulation in response to environmental activism; this was later followed by similar programs in other countries.

The establishment of funded pensions earlier in the 20^{th} century, particularly in the US, the UK, the Netherlands, and later in Australia, meant that by the 1980s these had become substantial asset owners, along with sovereign wealth funds. In addition, a small number of asset managers joined asset owners in controlling a growing percentage of public company shares. While these trends were far from identical across industrial countries, and the assets under management appear small from today's vantage point, the largest institutions could even then be considered universal owners who had no choice but to purchase shares in most public companies in search of capital appreciation and income for their beneficiaries.

The result of these shifts in stock ownership patterns can be observed in Figure 1. Institutional investors, which include pensions, other asset owners, and asset managers who work, in part, for asset owners, now own over 70 percent of outstanding shares in the US, with similar percentages in the Netherlands, the UK, and Canada. By contrast, institutional investors own less than 40 percent of public shares in other European countries, about one-third in Japan, and less than 10 percent in China. Corporate cross holdings, which are high in Asia, are quite low in Europe and the US. In addition, in countries such as Norway and Japan, government agencies directly invested pension savings in the stock market, while in others such as China, governments took direct ownership of companies. (The Figure does not reflect the legacy and continuation of pyramidal ownership and share class structures in Asia and Europe.)

Figure 1 here

Given these patterns, it is not surprising that interest in ESG investing issues emerged among pension plan managers. This occurred slowly, evolving with different patterns across institutions, countries, and the three strands of sustainability: environmental, social, and governance.

Governance

Pensions. Several leading US pensions, such as TIAA, CalPERS, and other institutional investors, were instrumental in the corporate government movement of the 1980s and 1990s. In addition to their growing asset bases, these institutions were operating with the legacy of pre-WWII reforms that favored company management over other stakeholders, a rising stock market, and an accompanying wave of mergers. For example, management-controlled boards, limited disclosure, opaque shareholder initiative processes, and other measures all enabled managers to operate with little scrutiny. Although there was a dearth of concrete evidence available, institutional investors began to respond to the view that it was in their interest to propose and/or support policies that would shift the balance of power toward shareholders and away from management.

No two pensions (or other institutional investors) pioneered identical approaches to corporate governance programs. For example, CalPERS tended to employ public statements aimed at changing corporate behavior, while TIAA more often used direct and relatively more private communications with company management. Nevertheless, these and other programs largely shared four elements: a legal orientation; similar, though not identical, reform proposals; cross-fertilization with investment managers; and separation from environmental and social concerns. Conceptually, corporate governance reform was, for the most part, viewed through a legal rather than a financial or economic lens, meaning that problems and solutions were more likely to be evaluated by whether they conformed to a set of preferred principles such as a definition of board independence, or a process such as a streamlined shareholder initiative process. Economic impacts, such as increased shareholder returns, were mostly ignored, or they were assumed to follow from the implementation of corporate governance initiatives. Organizationally, new corporate governance units were, for the most part, housed in the legal departments of institutional investors. For pensions as well as corporate governance service providers, these units were led by experts with a legal background.

In keeping with this focus on principles and process, many pension managers could agree on the need for assistance. TIAA, CalPERS, CalSTRS, and others were co-founders of the Institutional Investor Responsibility Center (IRRC) in 1972, which sought to aid investors in understanding corporate governance issues. as Along with international pensions, these entities were also among the founders of the Council of Institutional Investors (CII), which assisted with proxy voting, regulatory advocacy and other activities (see Table 2). These and other research, service, and advocacy programs helped pensions and other institutional investors further the following policies: greater independence of board members, separate audit and compensation committees, changes in executive compensation, removal of poison pill provisions, support for the shareholder initiative process, regular proxy voting, and various forms of engagement.

Table 2 here

In terms of cross-fertilization, although corporate governance programs were not generally housed in investment departments, organizations that directly managed corporate governance staff could learn from investment analysts and managers knowledgeable about the management, governance structure, and processes of the companies they covered. This, in turn, enabled them to recommend companies that might benefit from certain reforms. Likewise, investment analysts and managers could incorporate into their investment decisions information about initiatives being proposed by corporate governance staff (see Table 3).

Table 3 here

Moving ahead in time, but still prior to the 2010s, corporate governance programs rarely considered environmental or social issues to be part of their universe. Their legal orientation may have made it difficult to incorporate these relatively more outcome-oriented issues. Also, some activists considered corporate governance reform to be fundamental, while other issues were often seen as derivative. In other words, establishing good governance practices was intended to lead companies to evaluate and treat all externalities properly.

Corporate governance organizations. One cannot understand the emergence of activism among large institutional investors such as TIAA and CalPERS without noting the crucial role played by independent corporate governance service organizations. In the US, investors and companies for many years had been able to turn to business groups such as the Chamber of Commerce, the Business Roundtable, and, for fund companies, the Investment Company Institute, for informed views on corporate structure and process. In turn, these often supported company management over shareholders.

Beginning in the 1970s, several new service organizations were established that played various advisory and advocacy roles oriented to institutional investor interests. The IRRC sought to provide independent, impartial research on proxy voting, corporate governance, and corporate social responsibility issues (Weinberg Center 2021).[3] Another independent organization, the National Association of Corporate Directors (NACD), was established in 1977 to train and set standards for board directors (see Table 4).

Table 4 here

In 1985, during a period of heightened corporate mergers, the Council of Institutional Investors began an effort to pool resources in exercising shareholder oversight through proxy voting, shareowner resolutions, pressure on regulators, discussions with companies, and litigation.

Membership today includes 140 US public, union, and corporate employee benefit plans, endowments, and foundations, with combined assets under management of approximately $4 trillion. Associate members include non-US asset owners with more than $4 trillion, and US and non-US asset managers with over $35 trillion in AUM (CII 2021). Around the same time, the Institutional Shareholders Services (ISS) group began to advise institutional shareholders (including mutual and hedge funds) on proxy voting and, when requested, to vote their shares. The firm later acquired the IRRC and was in turn sold to MSCI. On the international front, the International Corporate Governance Network (ICGN), started in 1995, was created to promote dialogue and education regarding governance and stewardship practices. Its members, drawn from over 45 countries primarily in North America and Europe, include pensions, asset managers, public companies, and advisory firms (ICGN 2021).

Institutional investors differed in how they used these corporate governance resources. Some relied on organizations such as ISS to research and form positions, as well as to vote their shares. Many mutual fund companies, by contrast, refrained from active or intense participation in corporate governance issues and shareholder voting. Others relied on external research by the IRRC, CII, and other organizations, after which they developed their own corporate governance positions and programs.

While the world of corporate governance only gradually started to recognize its connections with environmental and social issues in the late 1980s, these two strands of sustainable investing also began to develop in the modern era.

Environmental and Social Issues

As with governance, investor concerns for social and environmental topics evolved over time into what is now often treated under the banner of socially responsible investing (or SRI). A stakeholder orientation provides the foundation for social and environmental investing, on the basis that companies' activities affect not only shareholder returns, but also communities, employees, customers, and the environment, implying that these latter interests should also have a voice in company activities. At first, environmental and social initiatives focused on three approaches: shareholder activism, community investing, and guideline investing. Of the three, social investing emphasized shareholder activism and community investing, while environmental investing emphasized both shareholder activism and guideline investing. Nevertheless, as time went on, all three strategies became important for both environmental and social concerns.

Shareholder activism. For pension plans required to act as fiduciaries, an initial avenue for shareholders to gain clout was to exert influence on companies identified as 'doing harm' with their products, or where they were doing business (e.g., South Africa). This took the form of informal and formal engagement with companies, including communications, and, in some cases, formal shareholder initiatives. In the US and in other countries, a recurring theme was the role of government vis-à-vis stakeholders and companies. Governments can spend to improve social and environmental conditions, and they can also direct companies to do so as well. Accordingly, stakeholders could pressure government, public, and private pensions and other asset owners to push companies to act, in turn. In that vein, SEC rules regarding shareholders' standing and shifting guidance on what constituted fiduciary duty, all helped to shape pension activism.[4]

Apartheid in South Africa was also an early defining social issue. In 1977, the Sullivan Principles became a voluntary code of conduct for companies operating in that country. In this spirit, in 1978, TIAA issued its own statement on companies doing business in South Africa, and in 1983 it fully divested from these assets. Other investors followed suit. Additional instances of global activism included, in the 1980s, actions against Procter & Gamble and Philip Morris for their involvement in El Salvador in the 1980s, and, beginning in the 1990s, wages, working conditions, and child labor in companies with factories operated outside the US.

These initiatives fueled a formal corporate social responsibility (CSR) movement that helped alter companies' expectations regarding their responsibility to internalize the effects (externalities) of their supply chains. The CSR movement resulted in greater demand by direct investors and other stakeholders for improved reporting, including both S and E. For example, CERES (the Coalition for Environmentally Responsible Economies), established as a response to the Exxon Valdez oil spill disaster of 1989, took a more comprehensive view of sustainability reporting. In turn, this led to the Global Reporting Initiative (GRI) program in 1997 (with Tellus Institute and the UN Environment Programme). The GRI would eventually become an independent organization in 2001, with headquarters in Amsterdam (GRI 2021). Beginning with the Valdez disaster, state pensions such as New York, CalPERS, and CalSTRS became increasingly active in designing and supporting these organizations.

During the 1990s, US pensions began to recognize the need to apply additional lenses to their portfolios, mainly through proxy voting and engaging with companies of concern. They also felt growing pressure from participants and other constituencies to use more E and S information to exclude portfolio holdings. To that end, pensions began to develop their ability to create and manage ESG portfolios.

Guideline investing. This approach began in the 1970s by fund managers Calvert, Dreyfus, and Pax World, and it was used by investors to exclude tobacco, alcohol, weapons, and other products or activities poorly aligned with ethical or faith values. Later, guideline investing expanded to impose systematic negative screening, positive screening, and best-within-a-sector (best-in-class) security selection. Pensions as well as asset managers were active in these developments, including TIAA, CalPERS, CalSTRS and others.

As the approach evolved, tension emerged between those using segregated funds versus applying ESG criteria to security selection and portfolio construction. For example, TIAA, which created the TIAA-CREF Social Choice Account as one among many investment options for participants in 1990, faced continuing participant pressure to eliminate tobacco and other products from all funds, not just the Social Choice Account. Moreover, among institutional investors, there was also no general agreement on how to select securities. The question that managers then faced was whether they should select companies in which to invest on an absolute basis, or instead to select the best companies within an industry or sector.

A related problem was that, while there might be agreement on certain issues such as tobacco, there was far less agreement on what exactly constituted ESG objectives. Part of this conundrum was due to the lack of data and analysis to provide a foundation for investment decisions. For example, in 1986 when the US Environmental Protection Agency required the first toxic release reports, that system focused on facilities rather than companies, making it difficult for investors to use the information for portfolio selection. In many cases, the early research providers serving institutional investors did not make raw data available, but rather they interpreted ratings and assessments. In retrospect, this may have harmed the cause more than it helped, because institutions first needed to unlock 'black box' methodologies, and later to determine how the information should inform investment decisions. In turn, this led to initiatives such as the GRI, to develop better reporting and measurement systems, along with efforts to define and reach agreement among investors and others on ESG objectives. While the establishment of the

Intergovernmental Panel on Climate Change (IPCC) in 1988 was not primarily investor-driven, its periodic assessment reports did help shape investor understanding of how company and industry actions affected climate degradation and the resulting investment risk.

Community investing or economically targeted investment (ETI) was the precursor to today's impact investing, developed to generate particular social outcomes alongside financial return. This strategy was based on the belief that 'the plight of the homelessness and joblessness cannot be "fixed" through conventional Wall Street investments,' but instead required involvement by credit unions, foundations, community-based revolving funds, worker cooperatives, and other entities (Domini et al. 1992, p. 3). Another impetus was provided by the federal Community Reinvestment Act of 1977, which required the Federal Reserve and other federal banking regulators to 'encourage' financial institutions to help meet the credit needs of the communities in which they did business, including with loans and direct investments. Organizations such as the Local Initiatives Support Corporation (LISC) were formed to work with financial institutions to channel funds into local projects; pensions and other institutional investors were also encouraged to participate.

Nevertheless, for pensions, challenges to community investing included the need to develop appropriate investment vehicles, gain scale, develop return expectations, and, for ERISA plans, shift DOL guidance on fiduciary duty regarding what constituted responsible lending practices. Alliances with Shorebank and other community banks, as well as the Local Initiatives Support Corporation, and the launch of Impact Community Capital (1998) founded by TIAA and seven other insurance companies, all provided solutions, particularly for low-income housing initiatives. In addition, activism played a role, as shareholders pressured banks on practices that harmed vulnerable customers via predatory lending and redlining practices.

Pension and other institutional involvement in community investing took a more global turn in the 1990s and 2000s, with attention to microfinance and the broader concept of financial inclusion. The term ‘impact investing’ was first coined in 2007, and it gained traction through the launch and fieldwork of the Global Impact Investing Network which included foundations and pensions in different countries. The initial focus was on private equity, with a concern for specific goals and outcomes that depended, for credibility, on advances in ESG-related measurement. Impact investing has more recently gained traction in other classes.

Bringing the Three Strands Together

The years around the turn of the 20th century also saw growing acceptance among pensions, other investors, and activists that environmental, social, and governance issues are intertwined and mutually reinforcing. On the one hand, investors, regulators, and independent organizations increasingly recognized that progress on corporate environmental and social concerns would only be successful if they were supported by governance reforms. On the other hand, they also saw that the next steps in corporate governance reform would likely lead to a discussion of environmental and social reforms. To illustrate these trends, several earlier events were arguably treated contemporaneously as primarily social (South Africa divestment) or environmental problems (the Union Carbide plant in Bhopal and the Exxon Valdez disasters) that did not involve the central concerns of corporate governance. Looking back on those events, we can now see that corporate decision making and governance were not only intertwined with these issues, but that changes in one were needed to produce improvements in the others.

Leading the way to integration of ESG was a movement to coordinate E&S activities across different countries and regions (see Table 5). Principal among these was the consortium of global pensions and other institutional investors that, in 2005, pressured the United Nations to sponsor a 20-person group from 12 countries to develop an ESG framework for the investment industry. The result, first issued in 2006, firmly linked E, S & G together as follows: 'As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and corporate governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognize that applying these principles may better align investors with broader objectives of society.' (UN PRI 2021b, p. 1) (see Table 6).

Tables 5 and 6 here

In addition, a UN-affiliated organization, Principles for Responsible Investment, was established to put the framework into practice, and it continues to lead integration efforts at a global level. Initially, PRI reporting requirements for its signatories were not seen as stringent. Nevertheless, backed by the principles and their own participants, global pensions and other institutional asset owners could and did increase pressure on investment managers to incorporate ESG considerations into portfolio decisions. In 2011, the UN PRI increased the specificity of reporting requirements, further encouraging ESG progress.

While visible and far-reaching, the UN PRI was far from the only group making initiatives in this period. The EU established a unit with the European Commission's Directorate-General for Economic and Financial Affairs to launch a series of studies, consultations, and directives moving in the direction of requiring institutional investors to consider ESG in the investment process. In the US, while integration of ESG was far from universal, two trends were evident. One was that CalPERS, CalSTRS, and TIAA-CREF began to connect their corporate governance units residing in legal departments more closely with their investment professionals. The second was to more closely connect staff tasked with environmental and social research, analysis, and investments, with the staff responsible for non-ESG oriented investment decisions. In other words, these organizations took the first steps to integrate ESG with 'regular' investing.[5]

The trend toward integration, which began in the late 1990s and 2000s, accelerated in the 2010s (see Table 7). Within pensions (again, particularly TIAA-CREF, CalPERS, CalSTRS and other independent pensions) and other institutional investors, the movement to fully integrate ESG analysis into investment decisions reached fruition. Near the end of the decade, for example, TIAA (as it was then called) announced that ESG factors would be considered in all funds and portfolios across all asset classes (TIAA 2021).

Table 7 here

At the international level, the Paris Agreement of 2015 was a watershed. One of a series of conventions and projects that originated with the *United Nations Framework Convention on Climate Change* (UN 1992), the Paris Agreement was signed by 195 countries and the EU (though not the US). It set out a definition of climate change and goals for limiting global warming and called for action to achieve goals by government and non-government actors (UN 2015). It has helped galvanize investors and companies to focus attention on sustainable investing and corporate challenges with respect to climate change, including but not limited to production processes, new products, and discussions of stranded assets.

At the regional level, in the EU the European Commission (EC) continued to stage a series of consensus-building consultations and to issue ESG-related rules. Following from reports issues by the Financial Stability Board and the Basel Committee on Banking Standards, the EC began to focus on 'prudential measures' that would integrate ESG risk factors into investments and financial firm solvency (Ingman 2020). It also developed corporate 'conduct' legislation, for example the

Non-Financial Reporting Directive which required larger EU corporations, starting in 2017, to disclose data on their firm's impact on ESG and vice versa (EC 2014). Other examples include EC's *Action Plan: Financing Sustainable Growth* (EC 2018), which clarified institutional investors' and asset managers' duties, incorporated sustainability into the suitability assessment of financial instruments, and increased transparency of sustainability benchmarks. Similarly, *The European Green Deal* (EC 2019b) and *The Proposal for a European Climate Law* (EC nd) were intended, among other objectives, to reorient capital flows towards sustainable investment in order to achieve sustainable and inclusive growth; limit global warming; manage financial risks stemming from climate change, environmental degradation, and social issues; and foster transparency and long-termism in financial and economic activity. The European Commission also examined and made recommendations for government investments, including pensions (EC 2018 a,b).

In addition to these initiatives, there was a near-explosion of similar developments by independent, industry and quasi-governmental organizations to construct ESG frameworks, guidelines and standards (see Figure 2). Of the twelve such initiatives in the figure, nine appeared between 2010 and 2020. It should be noted that while these initiatives reflected growing interest in ESG investing and integration of ESG, many of them were produced independently from the others and so contributed to confusion regarding just what investors should consider to be ESG and how to implement it. In that vein, in this period a number of private data and analytics providers began or continued major projects to identify, define and measure ESG factors pertinent to investment risk and return and sell the results to investors, with an increasing emphasis on integrating these factors into organized ratings systems (see also Lee forthcoming). In addition, a number of firms launched or added formal securities indexes that could be used by investors interested in forming integrated ESG portfolios.

Figure 2 here

Several other indicators give us a picture of ESG growth and integration in this period. In particular, the left panel of Figure 3 shows the change in US shareholder support for formal environmental and social proxy proposals, compared to governance and compensation proposals. In 2010, over 60 percent of governance and compensation proposals, but only 12 percent of environmental and social proposals, received more than 30 percent of the total votes cast. By 2018, environmental and social proposals received over 35 percent of the votes cast. The right panel of Figure 3 also shows the change in support for environmental and social proxy proposals. Median support rose from about 10 percent in 2010 to just under 25 twenty five percent in 2018. The right panel also documents the increase of UN PRI institutional signatories from about 60 in 2010 to over 400 in 2018.

Figure 3 here

The trend toward integration and systematizing ESG is continuing in the 2020s. ESG data and reporting continue to deepen, with a greater focus on intentional outcomes and impact measurement. For example, in 2021, the US DOL announced that it intended to return to an earlier view of the prudent investment rule followed by pensions and other fiduciaries. Specifically, fiduciaries are now asked to consider all factors that affect investors' portfolios and financial risks, including ESG factors (US DOL 2021) (see Table 8).

Table 8 here

In the European Union, the EC has launched a project substantiating 'green claims,' with the intention of reducing 'greenwashing' by companies trying to appear to be improving their ESG scores but avoiding substantive reforms (EC 2020b). Additional EC initiatives have showcased a willingness to allow ESG a central role within the legislative process, including a circular economy action plan (EC 2020a), the food system (EC 2020b), climate (EC 2020c) and additional disclosures (EC 2019b). Most recently, the EC presented its new Sustainable Finance Package, intended to help improve the flow of money towards sustainable activities across the European Union, including proposals for new corporate sustainability reporting and revisions to previous rules for sustainability reporting and assessments (EC 2021; EC 2020a). Finally, pensions and other institutional investors have continued to boost commitments to ESG investing. For instance, the Capital Group (Capital Group 2021), TIAA (2021), The Segal Group (2021), BlackRock (Williamson 2020), and other asset managers have announced plans to go 'all-ESG' and achieve future carbon neutrality in their investments

Looking Ahead: Challenges for Pensions

Four forces are leading to the convergence of E, S, and G for pension managers, along with the integration of sustainable considerations into asset owners' and asset managers' investment processes: economic transformation and accompanying social movements; the emergence of universal owners; stakeholders and small shareholders; and improved information and analysis. Despite these trends, convergence and integration will remain incomplete for several reasons that highlight challenges and directions for pensions and other institutions.

Goals and objectives. As we have seen, pension sponsors and their asset managers have increasingly recognized their roles as representing participants in universal ownership of public companies. There is less agreement on specific goals and objectives, often summarized as fiduciary responsibility. One remaining question regards the extent to which *sustainability conflicts with* *returns;* that is, how does sustainability conform to regulations requiring pensions to invest prudently on behalf of participants? Reflecting continuing confusion on this issue, the late 2020 US Department of Labor (DOL) requirement that pensions must focus on returns and, by implication, that ESG considerations reduced returns, was rescinded by a new Administration in early 2021. We believe that it is likely that the US will eventually follow the European view that sustainability can affect investment risk, and that proper fiduciary responsibility must balance sustainability risks with return.

Even with such a resolution, other questions remain, including for example the time dimension, or how much one should be willing to *sacrifice short-term return to achieve long-term benefits.* For example, an institutional investor may believe that a company with good short-term profit potential is undervalued, but that its long-term prospects are less attractive because of the nature of its business (e.g., tobacco or fossil fuels). Which is the better strategy: to avoid the company altogether, or own the company in the short run and determine when to sell it?

A third issue has to do with *participant heterogeneity*. Pensions and other financial institutions act for all participants and shareholders, but they need not all agree across all issues. One participant's negative, such as owning alcohol distributors or military suppliers, may be another's positive, and these differences may reflect both assessments of negative and positive externalities, as well as emotional positions. In either case, they pose challenges for investment institutions in setting responsive policies. One interim approach is to focus on ESG issues that gain wide approval among participants and shareholders, such as we saw in South Africa divestiture, and currently in long-term policies to reduce exposure to fossil fuels.

A fourth issue is other *organizational constraints*, including regulatory and other stakeholder concerns, affecting pension and institutional ownership. One such example is the series of EU regulations issued over the past decade under the sustainability banner. On the stakeholder side, unions, advocacy groups, and others using ownership stakes, shareholder meetings, and other mechanisms to pressure asset owners and managers are likely to continue encouraging investment institutions to focus on their preferred goals and objectives. Yet constraints can also work in the other direction. For instance, in Japan, while the Government Pension Investment Fund (GPIF) has established environment-oriented investment programs and criteria, it has not done the same with respect to governance and social issues to date. We speculate that this may be connected to the interests and views of some of the largest domestic public companies.

Analytical tools. There is far from universal agreement on how to evaluate environmental, social, and governance factors important to company disclosure practices, performance standards, and investment evaluation. For disclosure, governments such as the EU and independent organizations such as the Sustainability Accounting Standards Board (SASB) are calling for more and better standardized company disclosure. Others, such as the International Association of Securities Regulators (IOSCO), focus on performance standards to determine which activities can be considered more versus less sustainable (Eccles 2021a). In addition, we note that a wide variety of metrics have been developed over the past several decades, and these do not always agree on what factors to consider, how to define those factors precisely, and what weight should be given to each factor (e.g., Lee forthcoming). On the one hand, a lack of agreement provides opportunities for one investor with superior resources and skill to do a better job of securities analysis. On the other hand, analytical heterogeneity can limit or provide conflicting signals to companies as to what is expected of them regarding sustainable practices. Moreover, the design and choice of a measurement systems reflects the sponsor's sustainability goals and objectives, which, as we have seen, vary by institution. One can imagine that information users—institutional owners, government overseers, activists, and others—will eventually be able to agree on disclosure standards. Nevertheless, the largest universal owners will likely continue to refer to one or more widely-available ESG measurement approaches, as well as their own proprietary metrics, for identifying and incorporating ESG considerations in securities analysis and portfolio construction.

Institutional shareholder initiatives. There is also general agreement on the benefits of and necessity for universal owners to give voice to sustainability improvements in the companies they own. Nevertheless, there is less agreement on how to do so, and how interventionist to be, ranging from proxy voting, private communications, and initiating shareholder resolutions, to public campaigns, lobbying, and lawsuits. TIAA and other institutions have pioneered programs that operate on all these levels, and more universal owners may use these models as templates for their own engagement activities.

Global standards and practices. As we have seen, pensions and other financial institutions must operate within systems that include a variety of other powerful government and non-government actors. Regional and national regulators, both public (e.g., EU or US DOL) and private (e.g., SASB, FASB), are encouraging and/or requiring a consistent approach to accounting and disclosure, along with other practices that promise to affect sustainable behavior, both by companies and pensions. Other quasi-government (e.g., UN PRI) and non-governmental organizations will also, no doubt, continue to be active in promoting sustainability. And policies, practices, and levels of activism still vary across countries and regions. While international treaties and organizational initiatives such as the UN PRI have made substantial contributions to increased consistency, policies and practices are unlikely to completely converge without additional international-level enforcement, either through peer pressure or actual regulation. Also, an open question remains as to who will be the final arbiter of international standards, practices, and behavior. Some have argued that investors should not be the final arbiter of corporate behavior (Eccles 2021b).

Implications for Pensions

In sum, while we can see movement toward convergence and integration among pensions and other institutional investors, there are forces or reasons why these developments are not yet, nor may not soon, be complete. We close with an assessment of the outstanding questions.

Does further ESG progress require all investors to be on the same page? While pension investing is increasingly global, pension plans serve participants in specific countries, and in some cases, occupations or industrial sectors. This diversity of beneficiaries is likely to mean that specific ESG objectives and motivations will continue to vary. For example, while most appreciate the implications of global climate change, even there, impacts, concerns, and programs differ across regions and populations. Accordingly, complete convergence may be impossible or undesirable.

Similarly, integration of ESG considerations into all investments may be a goal for some investors, but not for others. The TIAA experience, for example, suggests that some participants would like 100 percent of their investments to be driven by ESG criteria, while others favor less weight on ESG criteria. Progress can be achieved in a world with many actors—governments, pensions, other institutional investors, advocacy groups, etc.—and many tools for advancing ESG. In fact, such a world can encourage innovation and adaptation, if not always complete coordination.

Who will make decisions? As noted above, full national and international convergence is unlikely regarding ESG disclosure, what data should be evaluated and how, and how to integrate this information into investment and engagement decisions. Pensions operate in a multilayered system where multiple public actors at the international, national, and local levels can claim authority over ESG policies affecting investments. Furthermore, pension participants, other shareholders, and other stakeholders in both the nonprofit and profit arenas can also claim an interest in investment decisions, as we saw in the latter half of the 20th century. For instance, one could imagine that as pension assets continue to grow, particularly in China, the rest of Asia, and Latin America, those players will increasingly express their views and take action.

Who 'owns' the big picture? There is no global ESG regulator, though many entities including governments and independent agencies all have a voice; they also cooperate as well as compete to set the ESG framework and guide action. This includes international pension consortia and even the very largest asset managers (e.g., BlackRock). To date it is unclear whether an effective global ESG ecosystem is necessary for continued evolution if the investment industry, and if so, who can direct such an ecosystem?

What is the next unifying issue after climate change? In the modern ESG era, climate change has been the topic that has generated the most interest and agreement among asset owners, managers, and other investors. Given that addressing climate change requires committing resources to analysis, as well as large and sustained public and private action, it will continue to be the most visible ESG issue for the foreseeable future.

Nevertheless, other ESG issues may also be candidates for unifying action, including what is now called economic equality (or inequality). Discussion of the equality issue goes back to the 19th century with concerns about workers, families, and consumers, along with regulation and social programs to address these problems. Interest in economic equality has waxed and waned over the decades, but it has now reemerged with proposals to improve working conditions, raise children out of poverty, and reduce the nearly unprecedented gap between the rich and the poor populations. Increasing economic equality is not exclusively a challenge for government and nonprofit organizations, since companies also play a role through wages and benefits, working conditions, supply chain design, environmental, and investment policies. For this reason, one can imagine that proposals and programs to address inequality engage companies in the future.

In any case, while these challenges remain, pensions and other asset owners can benefit from knowledge and experience gained from the evolution of ESG, deeper analytical and organizational resources, a more robust set of tools and initiatives, support (and constraints) from government and non-governmental organizations, and considerably more agreement among investors on goals and objectives. We anticipate that pensions will need to draw on these resources to address ESG concerns, both existing and emerging.

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Endnotes

[1] According to these estimates, ESG assets under management consist almost entirely of assets where managers incorporate ESG considerations into the ‘regular’ investment process. A few are in separate funds and accounts dedicated to ESG.

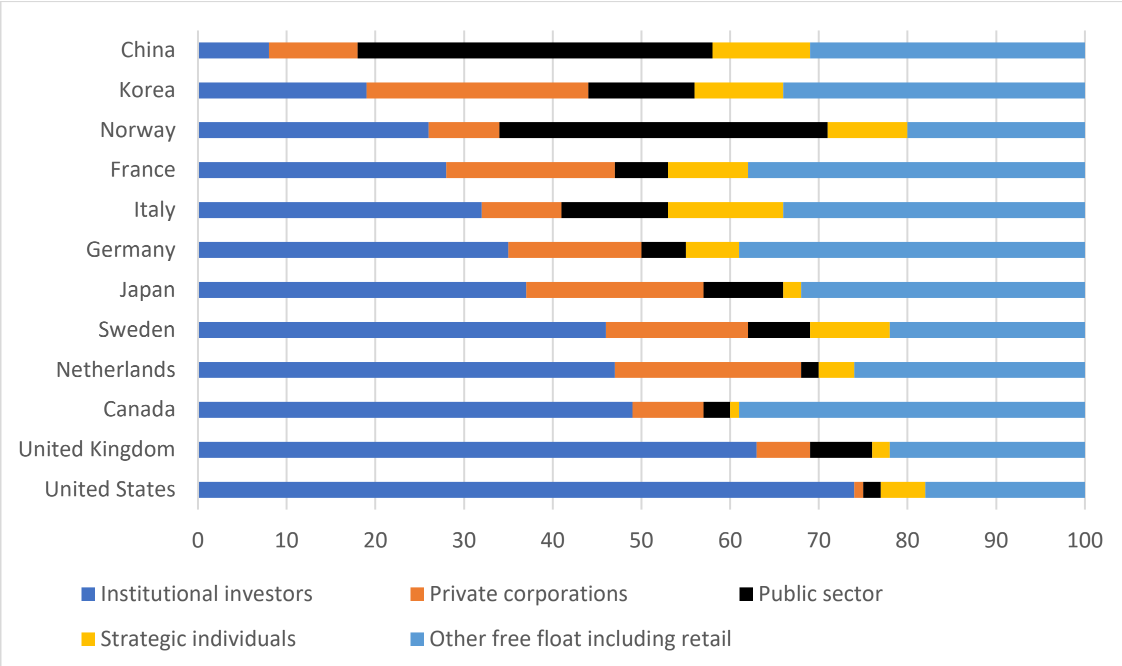
[2] A pyramid ownership structure separates rights to a firm’s cash flows from voting rights. In this case, a family uses a firm where it has controlling interest to set up one or more firms controlled by the first company, but with dispersed stock ownership as well. The first firm can capture a large percentage of the new firms’ revenues but leave any losses at the level of the new firms. In this way the family can access the entire amount of the retained earnings of the first company, which can include the captured firms’ revenues.

[3] In 2005 the IRRC was sold to Institutional Shareholder Services and the IRRC Institute, a research center now housed at the University of Delware, was created with the proceeds.

[4] In particular, see SEC 17 CFR 240.14a-8 rule governing shareholder proposals. An explanation can be found from the Legal Information Institute (2021).

[5] Based on authors’ interviews with current and former staff of CalPRS, CalSTRS and TIAA-CREF.

Figure 1. Total stock market holdings by investor categories across countries, 2017



Source: De La Cruz et al. (2019) based on OECD Capital Markets Data Set, Thompson Reuters and Bloomberg.

Notes:

1. Distribution of total holdings by investor category in each market for the universe of 10,000 largest listed companies. Both domestic and foreign holdings by category are aggregated in USD as a percentage of total market cap in each market.
2. Assignment of assets to categories follows each country's classifications. For example, Norway's public sector assets includes those held by the Government Pension Fund of Norway. Canada's public pension fund assets are classified as institutional holdings.

Figure 2. Evolution of international ESG frameworks, guidelines, and standards, 1997-2020

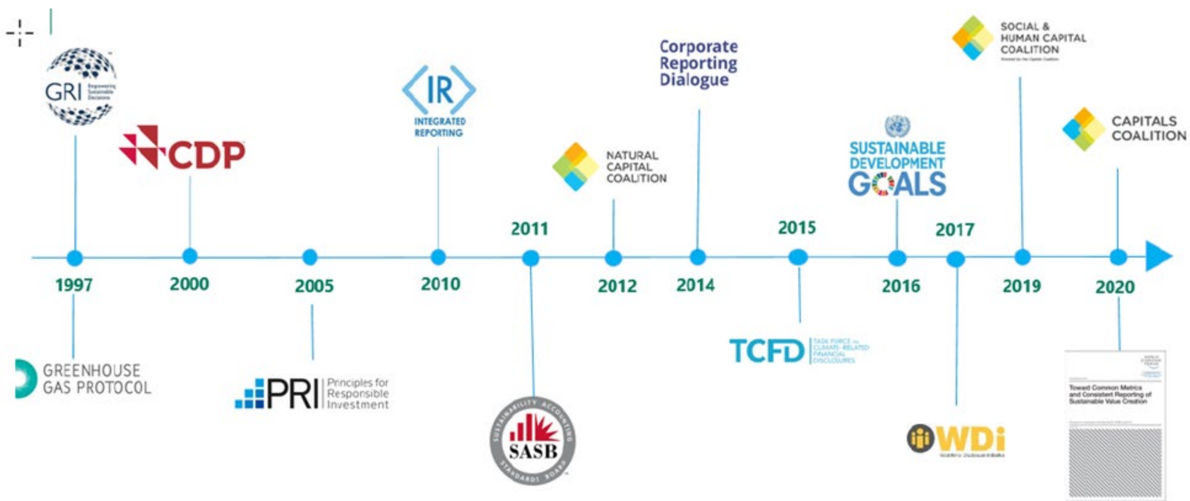
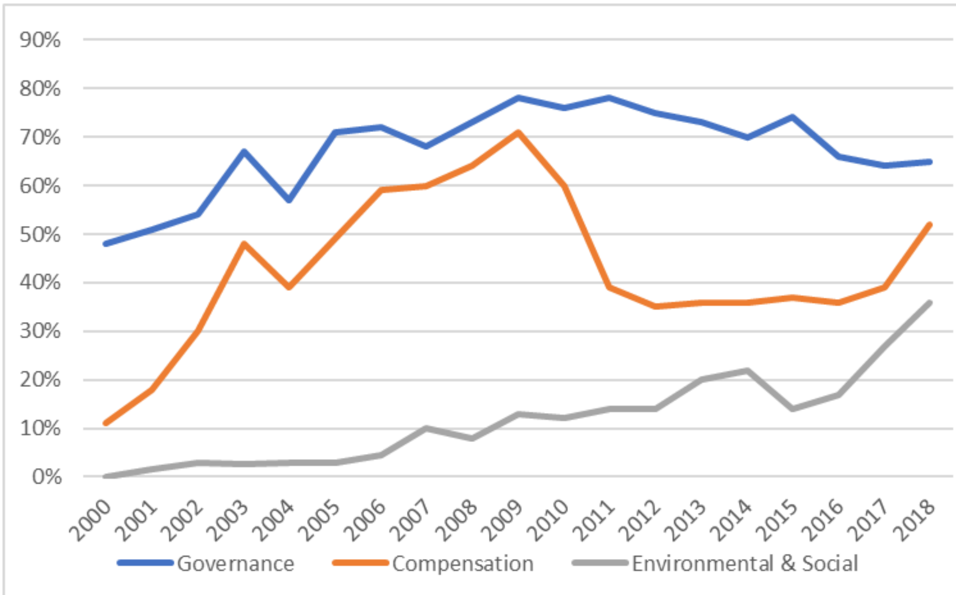
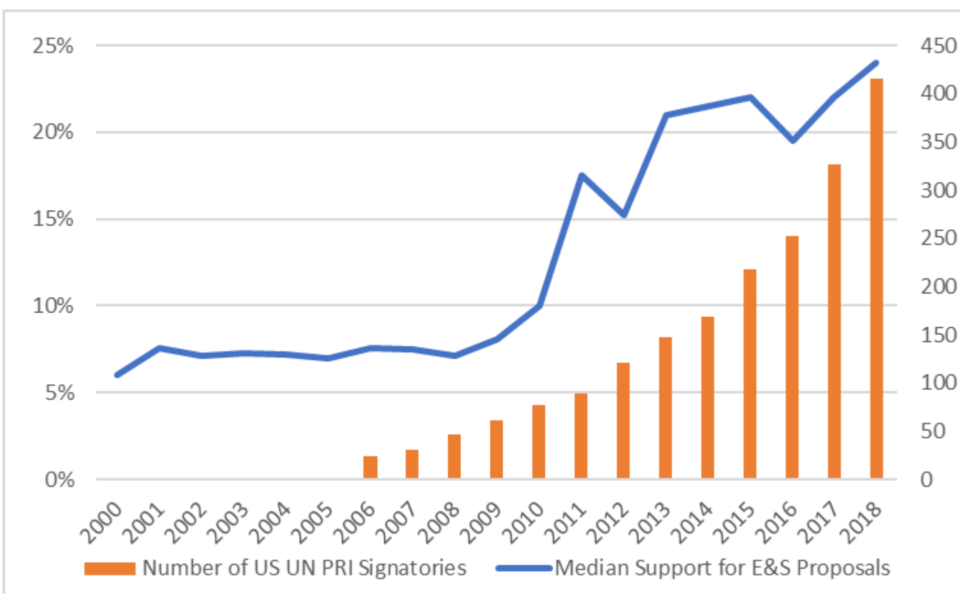


Figure 3. Environmental and social issues join the mainstream among shareholders

A. Percentage of US shareholder proposals receiving > 30% of votes cast



B. Median support for environmental and social shareholder proposals (left scale) and number of UN PRI signatories in the US (right scale)



Source: Papadopoulos (2019), p. 7 (Fig. 3A) and p. 3 (Fig. 3B).

Table 1. ESG investing landscape at the dawn of the 'modern' era

			U.S.	**U.K.**	**Netherlands**	**Germany**	**France**	**Italy**	**Sweden**	**Japan**
Corporate Governance	**Policies and Tools**	2-Tier Board Structure (+ worker participation)			X	X	X			
		Limit institutional ownership	X	X						
		Separate commercial & investment banking	X							
		Government ownership/direction of certain industries		X			X	X		
		Formal/legal recognition of stakeholders			X	X				
		Strong anti-monopoly enforcement	X	X						
		Higher degree of uniform accounting, reporting & disclosure rules	X	X		X				
		Small shareholder activism								
	Continuing Issues	High degree of manager control/low degree of shareholder control	X	X	X					X
		Relatively higher use of voting caps, multiple share classes, etc.			X				X	
		Interlocking directorates			X					X
		Family or bank control common*				X	X	X	X	
		Takeover defenses	X		X					
Social & Environmental		Environmental regulation and activism	H	L	L	L	L	L	L	L
		Consumer and worker protections	M	M	H	H	H	H	H	H
		Family and individual protections**	L	M	H	H	H	H	H	M
		Union activism: negotiation, lobbying	L	M	H	H	H	H	H	L

Pensions	Growth of funded pension assets (DB and DC)	H	H	H	L	L	L	L	H
	Social & environmental investments	L	L						

Source: Morck (2005); Authors' calculations
Notes: *Family control often exercised through pyramid ownership structures; bank control often exercised by proxy voting or direct ownership
**Health insurance, child support, other family support

Table 2. ESG in the 1970s

'ESG as a principle'	**Key Institutional developments**

• Investors align around key social concerns (e.g., South Africa, Vietnam War, poverty)
• Forerunning ESG research, and shareholder advocacy, and community development institutions are founded
	• Council on Economic Priorities / CEP (1969)
	• Pax World Fund (1971)
	• Dreyfus Third Century Fund (1972)
	• Interfaith Center for Corporate Responsibility / ICCR (1972)
	• Investor Responsibility Research Center / IRRC (1972) became IRRC Institute after 2005 sale of IRRC to ISS
	  • South Shore Bank / Shorebank (1973)
	  • National Federation of Community Development Credit Unions (1974)
	  • Calvert Social Investment (1976)

Source: Authors' calculations

Table 3. ESG in the 1980s and 1990s

'ESG as a product'	**Key institutional developments**

• Dedicated industry networks are formed in the USA (Ceres, USSIF)
• Triggered by corporate takeovers and environmental disasters—Exxon Valdez spill, Bhopal India (Union Carbide) chemical leak—investors increase their focus on corporate governance and the environment
• First social indices launched and universe of Socially Responsible Investing (SRI) funds expands
• Advanced business case for sustainability and reporting (Global Reporting Initiative—GRI)
• DOL issues guidance that plan fiduciaries are permitted to consider social benefits
	• CalPRS, CalSTRS
	• US Social Investment Forum / USSIF (1984)
	• Franklin Research & Development (1982) later renamed Trillium in 1999
	  • Grameen Bank (1983)
	  • Self-Help Credit Union (1984)
	  • Working Assets founded (1985)
	  • Social Venture Network (1987)
	  • CERES & the Valdez Principles (1989) initially a project of the USSIF
	• TIAA Social Choice Account (1990)

Source: Authors' calculations

Table 4. Major corporate governance research, service and advocacy organizations

Organization		Est.	Primary Focus	Non-Profit?	Membership/Support	Notes
Investor Responsibility Research Center	IRRC	1972	Research, Proxy Voting	Yes	Subscription	2005 sale to ISS funded the U Delaware Weinberg Center's IRRCi
National Assn of Corporate Directors	NACD	1977	Board member practices and education	Yes	Corporate directors	
Council of Institutional Investors	CII	1985	Proxy voting, shareholder resolutions, regulatory advocacy, engagement, litigation	Yes	U.S. and non-U.S. pensions, endowments /foundations, asset managers	
Institutional Shareholders Services	ISS	1985	Proxy voting	No	Fee for advisory service	Acquired by MSCI
International Corporate Governance Network	ICGN	1995	Governance and stewardship standards and practices	Yes	Pensions, asset managers, public companies, advisory services	Primarily North America and Europe
Weinberg Center for Corporate Governance		2000	Discussion forum, teaching, research	Yes	Law firms, asset managers, companies	
Harvard Law School Program on Corporate Governance		2003	Research, teaching	Yes	Law firms, companies	
Harvard Law School Forum on Corporate Governance		2006	Discussion forum	Yes	Law firms, companies	

Ira Millstein Center for Global Markets and Corporate Ownership	2012	Teaching, research, discussion forum	Yes	Law firms, companies	Columbia U. law school
Arthur and Toni Rembe Rock Center for Corporate Governance	2006	Teaching, research, discussion forum	Yes	Law firms, companies	Stanford U Law and Business Schools

Sources: Source: Authors' compilations from https://www.weinberg.udel.edu/; https://www.nacdonline.org/; https://www.cii.org/about; https://www.issgovernance.com/; https://www.icgn.org/; https://www.weinberg.udel.edu/; https://pcg.law.harvard.edu/; https://corpgov.law.harvard.edu/; https://millstein.law.columbia.edu/; https://law.stanford.edu/arthur-and-toni-rembe-rock-center-for-corporate-governance/.

Table 5. ESG in the 2000s

'ESG as a process'	**Key Institutional Developments**
• Investors coordinate on climate reporting issues • New global investor networks begin to unite investor approaches from different regions • In 2008, the US DOL narrows 1994 guidance: fiduciaries should only rarely consider non-economic factors when picking investment options for retirement plans.	• Carbon Disclosure Project / CDP (2000) • UN Global Compact (2000) • UN Principles for Responsible Investment (2006) • Global Impact Investing Network / GIIN (2009)

Source: Authors' calculations

Table 6. UN Principles of Responsible Investment

1. We will incorporate ESG issues into investment analysis and decision-making processes.
2. We will be active owners and incorporate ESG issues into our ownership policies and practices.
3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.
4. We will promote acceptance and implementation of the Principles within the investment industry.
5. We will work together to enhance our effectiveness in implementing the Principles.
6. We will each report on our activities and progress towards implementing the Principles.

Source: UN PRI (2021b)

Table 7. ESG in the 2010s

'ESG as an outcome'	**Key Institutional Developments**
• ESG investing expands across asset classes • Expansion of ESG data and reporting to better quantify ESG factors • Greater focus on 'intentional' outcomes and impact measurement • In 2015, DOL reversed its 2008 guidance, which 'unduly discouraged fiduciaries from considering [economically targeted investments] and ESG factors'. • Heightened investor urgency around climate change as COP 21 establishes the Paris Agreement, aiming to limit global warming • E.U. issues a series of sustainable investing guidelines and regulations	• UK Stewardship Code launched (2010) • Global Initiative for Sustainability Ratings / GISR (2011) • Sustainability Accounting Standards Board (2011) • Investment Leaders Group / ILG (2013) • Japan Stewardship Code launched (2014) • Taskforce on Climate Related Financial Disclosure / TCFD (2015) • UN Sustainable Development Goals / SDGs (2015/2016) • Investor Stewardship Group / ISG (2017) • Impact Management Project (2017) • International Finance Corporation (IFC) • Operating Principles for Impact Mgt (2019)

Source: Authors' calculations

Table 8. ESG in the 2020s

'ESG as a system'	**Key Institutional Developments**
• Expansion of ESG data and reporting to better quantify ESG factors • Greater focus on 'intentional' outcomes and impact measurement • COVID-19 and racial equity issues spur renewed emphasis on 'S' • Increased scrutiny and global regulation to combat 'greenwashing'	• Capital Group, TIAA, Blackrock and other asset managers go 'all ESG' (2020) • U.S. DOL rules that fiduciaries may only consider financial factors in investing (2020) • U.S. DOL announces it will not enforce the rule (2021) • EU announces its plan for company ESG reporting and investor compliance (2021)

Source: Authors' calculations

Appendix A: 'Pre-Modern' Era in Selected Countries

United States. The Progressive and Depression Eras' reaction to concentrated wealth and the negative externalities of industrialization not only resulted in new government social, economic, and health protections for consumers, small businesses, and employees, such as strong regulatory agencies and support for strong unions and emergence of pensions. Later, government acted to require companies to provide pensions and to pay for publicly-managed unemployment insurance. Notably, this period also produced protections for small shareholders, including major anti-monopoly policies, and court decisions that largely eliminated family pyramidal ownership structures, separated commercial from investment banking and limited the ability of banks, insurance companies, pensions, and mutual funds to take controlling interest in other companies (Becht and DeLong 2005). It did not, however, solve the agency problem, as hired managers directed company activities, with oversight by a board whose members were effectively chosen by management and approved through votes by dispersed shareholders. By the latter half of the 20th century, most public companies featured a relatively high degree of managerial control and a relatively low degree of shareholder influence.

Germany. Worker and shareholder protections as well as social programs began in the late 19th century in Germany, with Bismarckian legislation establishing the first health insurance, publicly-sponsored pensions and unemployment insurance, and union protections. These developments helped reduce negative externalities borne by workers and their families, and they enabled workers to band together to negotiate with corporate management. Nevertheless, as in the UK, France and other countries, these initiatives were not driven by investor actions, but rather by workers themselves pressuring government and, through unions, companies (Fohlin 2005).

In contrast, investors were more influential in German corporate governance, as Germany mandated a form of uniform accounting and reporting rules and a dual corporate board structure that prohibited overlapping members, features that exist today. However, German banks could still collect and vote proxies of shareholders of companies underwritten by those banks, and companies themselves issued additional share classes favoring family control. Consequently, the larger banks and prominent families controlled an increasing percentage of the German stock market. Notably and perhaps remarkably, in 1938 a Nazi law was the first in the world to explicitly assign corporate responsibility to all stakeholders, not just shareholders. However, family owners responded by shifting away from special share classes to a pyramidal ownership structure (Fohlin 2005). Today, while diminished, German corporate governance continues to reflect bank and family control of companies.

United Kingdom. In the UK, early social programs were also the result of worker pressure on government and, again through unions, on corporations, after the voting franchise was expanded several times in the 19th century. The original UK corporate structure was through grants of monopoly from the central government. In the late 19th century, not long after the first shareholder protections in Germany, UK legislation requiring greater company disclosure and making company directors liable for prospectus statements were both thought to have influenced a decline in family ownership of firms while supporting shareholder rights (Franks, Mayer, and Rossi 2005). Importantly, in the name of employee and consumer protection, government ownership of prominent industries advanced during WWII and then reversed in the 1980s, with the Thatcher government's emphasis on shareholder rather than governmental control. By the late 20th century, UK corporate governance came to resemble more closely the US version, with strong management, a somewhat weaker board, dispersed ownership, and regulatory oversight.

France. With a long history of financial market crises, France relied relatively little on banks and the stock market as it industrialized. Instead, both France and Italy followed the pattern in Germany and the UK, where investors were not instrumental in demanding social reforms. Firms tended to finance new investment largely out of earnings, thus favoring family control, which was further encouraged through inheritance laws as well as close government connections with family members. Like the UK, following WWII the French government took controlling interest of major industries, such as transport, energy, and others, in order to promote employee and consumer interests. It also established a dual board structure with worker representation on the supervisory board. As in the UK, the French government later divested some of its industrial holdings, but maintains some of the strongest worker protections of any industrial country (Murphy 2005).

Italy. Italy's major banks collapsed in the early 1930s, after which the central government assumed ownership and separated investment from commercial banking. Similar to the UK and France, after WWII the government owned and directed investment in capital intensive industries, propped up failing firms and used industrial policy to support development in southern Italy. It also supported the rise of family-controlled firms through provision of capital and lack of regulatory objections. Many family firms remained privately owned, while publicly-traded companies were family-owned pyramids. By the 1990s, rising debt loads and poor performance among government-owned firms forced a round of privatization and more dispersed shareholding, giving rise to demands for better shareholder protections (Aganin and Volpin 2005).

The Netherlands. The Netherlands has the oldest stock market in the world, but by the 19th century its development lagged due to hangover from a series of bubbles and crises and French-influenced aversion to bank financing. As in France, family-owned firms predominated, with financing from retained earnings. In the 20th century, the use of public shares and long-term bank loans grew as family dominance gave way to management control. Although Dutch firms are required to have a two-tier board structure, shareholders had little say in board membership. Moreover, interlocking directorates, super- and preference-voting shares, income trusts, and other measures reinforced management control. While workers were not as influential in the Netherlands as in in Germany, they did have a voice, both in corporate policies and through government worker protections. For example, industry-based funded pensions proliferated after WWII (CEPS 1995).

Japan. After emerging from self-imposed isolation from the international economic system in the late 19th century, Japan's government worked to catch up by funding development of major firms, which were then consolidated into large family-controlled conglomerates. In the 1930s, the military took effective control of these firms, but after WWII, the US wrested control away from government and families to create widespread ownership. However, in response to takeover fears, Japan's large public firms developed the system of persistent interlocking cross corporate holdings. Social benefit programs began for the military at the turn of century, and over the years expanded to other employment sectors, so that by the 1970s health insurance was universal and retirement was supported by a combination of public and private insurance. Unions were not a strong force in this period.