

Pension Funds and Sustainable Investment

Challenges and Opportunities

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Chapter 1

C1 **Sustainable Investment in Retirement Funds**

Introduction

Olivia S. Mitchell, P. Brett Hammond, and Raimond Maurer

CIP1 Since its green shoots first emerged around 50 years ago, acceptance of environmental, social, and governance (ESG) considerations in institutional investing—especially in pension funds—has evolved with distinct shifts in investor preferences. This Pension Research Council volume traces these shifts and their implications, leading up to the present day. Our volume notes that investors have diverse reasons for devoting attention to ESG criteria when deciding where to invest their money. Some have had religious motives, such as Quakers who focus on values; this approach can offer some risk mitigation. Yet models that look at whether divestment actually changes behaviors of companies show that that rarely occurs. So, it is not always screening and divestment that bring about the changes that investors seek. Accordingly, this book offers a selection of distinct viewpoints from a variety of countries, on whether, how, and when ESG criteria should, and should not, drive pension fund investments.

CIS1 **The Long View**

CIP2 Economists tend to agree that ESG concerns may logically arise where there are market failures, often of the externalities type. Such externalities generally arise because a firm will impose costs or benefits on third parties on individuals or society, other than the consumer or producer, and these occur when the externalities are not properly priced. For instance, an oil refinery producing pollution that poisons the local population or the surrounding countryside creates a gap between the price that consumers pay for the refined oil, and the gain or loss to those injured by the pollution.

CIP3 Economics offers two general types of solutions for such problems: either the government can alter the costs and benefits of such production, or the government can change the fiduciary rules under which the producer operates. In the case of pension investments, while a pension fund might wish

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to invest in fossil fuel firms, it might not wish to impose the social losses on society. It is this tension that often drives debate over the pros and cons of ESG investment.

CIP4 In Chapter 2, P. Brett Hammond and Amy O'Brien (2023) point out that ESG principles have been shaped by numerous social movements, governments, and regulators, independent advocacy and service organizations, and asset owners and asset managers, notably pension funds. Their work outlines the origins of ESG to the pre-modern era, from the post-Industrial Revolution late nineteenth century to about 1970. That period was characterized by concentrated ownership of public companies in the US and elsewhere, the transformation of work and consumption, and little to no activism by small shareholders or pension funds on social or environmental issues.

CIP5 Governance concerns, however, were prominent in the pre-modern era. They included policies to limit monopolies and ownership of companies by banks and families, antitrust regulation, the emergence of uniform accounting, reporting, and disclosure rules, and the advent of a two-tiered board structure where supervisory boards retain control and management boards execute company strategies. Other features of the pre-modern era included regulation of working conditions and hours, food quality, and the beginnings of an environmental movement.

CIP6 The modern era for ESG began around 1970, yet governance policies and practices varied across countries, as did social and environmental concerns, note the authors. For instance, in the US, company management was dominant, whereas family and/or bank control persisted in some European countries, and cross-holdings and bank influence were common in Japan. On social issues, the US and the UK saw debates over employment practices and the declining influence of unions. The US was ahead of others in tackling environmental challenges, with the birth of the US Environmental Protection Agency coinciding with the dawn of ESG's modern era.

CIP7 Early on, the debate was over whether institutional investors should have separate portfolios for E, S, and G, versus a single common portfolio for all three; over time, there has been a growing recognition that true integration will likely work better. Hammond and O'Brien point to clear evidence of 'convergence,' which refers to a shift in thinking about environmental, social, and governance concerns such that they are now treated jointly. 'Integration' refers to the notion that investors need not consider E, S, and G factors separately from other decisions they make regarding their portfolios. For instance, some firms may currently underperform on ESG measures yet are likely to get better in the future. In addition, investors with well-integrated portfolios will need to balance and consider multiple dimensions of assets at once. Moreover, it is possible that higher ESG returns have arisen in certain sectors due to government support for ESG investments, as in the

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case of government subsidies for solar and wind power. Accordingly, the regulatory environment must be kept very much in mind when predicting the future of ESG performance.

C1S2 **Roles of the United Nations and Universal Owners**

CIP8 Notable among the substantial shifts in the ESG evolutionary process were the first wave of government mandates and governance attributes, bringing an early focus on environmental and social issues, and catalyzing actions by the United Nations. In 2006, the UN helped frame the Principles of Responsible Investing, integrating a global network of investors (UNPRI). In 2016, it articulated its Sustainable Development Goals, which continue to inform much of ESG investment approaches. These were in addition to the UN's climate change conferences, goading signatory countries to implement laws to combat greenhouse gas emissions. As Hammond and O'Brien note, the UN has been extremely influential in the development of ESG principles. For instance, UNPRI adopted the theme of building a bridge between financial risk and real-world outcomes for 2021–2024.

CIP9 These moves advanced awareness of ESG among corporations and regulators, but important shifts in ESG investing occurred only after institutions with substantial asset pools, such as pension funds, and other universal owners exerted their influence. A 'universal owner' is defined as a pension fund or a large institutional investor, such as BlackRock, which invests long-term in widely diversified holdings throughout the global economy. Universal owners must deal with, or are incentivized to deal with, externalities such as the environmental and social effects of the companies in which they invest. Moreover, governance systems can help those companies address their externalities. As of 2020, US pension funds managed US\$6.2 trillion of total assets incorporating ESG principles.

CIP10 In addition to the rise of the concept of universal ownership over the last few decades, drivers of ESG investing include economic transformation going back to the Industrial Revolution, the increased focus on stakeholder interests, and improved data and analytics that help capture the outcomes.

C1S3 **How ESG Developed Globally**

CIP11 ESG investing has developed differently across countries and much depends on national asset ownership patterns and legal frameworks. Pension funds' and other institutions' interests and approaches have evolved over time. A brief summary of developments is as follows:

1970s: The concept of 'ESG as a principle' took hold as investors aligned around key social concerns such as apartheid in South Africa and the Vietnam

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War. As well, pioneering institutions emerged in this decade, such as the Interfaith Center on Corporate Responsibility (ICCR), which broke new ground with shareholder advocacy among faith-based institutions to press companies on ESG issues.

1980s: This decade saw the articulation of ‘ESG as a product,’ with the formation of dedicated industry networks such as The Forum for Sustainable and Responsible Investment (US SIF) and increased emphasis on corporate governance and the environment.

1990s: The idea of ‘responsible investing as a product’ took shape in this decade, with the development of social indices to track ESG and Socially Responsible Investing (SRI) funds.

2000s: In this decade, ‘ESG as a process’ took hold, with investor convergence on climate issues and the formation of global investor networks such as the UNPRI and the Global Impact Investing Network (GIIN).

2010s: The concept of ‘ESG as an outcome’ gained ground as responsible investing approaches expanded across asset classes, and ESG data and reporting practices saw refinements. The adoption in 2016 of the UN’s 17 Sustainable Development Goals was another key catalyst. In December of 2019, the European Commission adopted a series of policy measures (called the ‘green deal’) in an effort to stipulate a green (climate neutral) transition of the European economy by 2050. These measures included various regulatory interventions imposed on the financial sector, aiming to reallocate capital from ‘dirty’ to ‘green’ activities. The core of the regulatory interventions is transparency, so investors can more readily identify green financial instruments. Following Steuer and Tröger (2021), they can be categorized into (1) *disclosure requirements* for raw data on climate impact (e.g. carbon emissions) by issuers of debt and equity instruments, and (2) unified *green quality labels* (taxonomies) of large-asset portfolios managed by institutional investors (such as mutual funds, insurance companies, pension funds) on behalf of third parties.

2020s: This decade saw the evolution of ‘ESG as a system,’ with many institutional investors going ‘all ESG.’ This grew out of an increased sense of urgency worldwide on climate issues. Companies that indulged in ‘greenwashing’ or faking environmental friendliness in their products also began receiving increased scrutiny.

CIP12 In the process, countries where institutional owners such as pensions have played a dominant role include the US, the UK, Canada, and the Netherlands. A close second in terms of influence on ESG investing are those with relatively less institutional ownership, such as France, Germany, Japan, and Sweden. That influence has been less in countries where the public sector is the dominant asset owner, such as China and Hong Kong. Institutional ownership is also relatively lighter in Malaysia, Russia, and Saudi Arabia. A combination of private corporations and strategic individuals dominates asset ownership in other nations including Argentina, Brazil, Chile, India, Indonesia, Pakistan, and Turkey. Private ownership is particularly strong in Mexico.

Sustainable Investment in Retirement Funds 5**CIS4 ESG to What End?**

- CIP13 Amidst the trend toward convergence and integration, a fundamental debate has centered on the question of ‘ESG to what end?’ Some argue that it enhances investment performance; others that it adds alpha potential; and still others argue that it can mitigate portfolio risk. In fact, this ongoing debate is helping to clarify who gets to decide about ESG investing, particularly when it comes to ESG performance and the role of the regulatory regimes. In the case of pension funds, ESG has been viewed through the business case lens, even when it is more difficult to make a business case for it. As a result, some institutional investors have struggled to find the proper balance between social responsibility and the fiduciary duty to act to maximize return on behalf of their participants (Tapiria 2021).
- CIP14 Moreover, institutional investors such as pension funds face the central question of ‘values versus value’ in virtually every investment decision they make. That is because they have a fiduciary responsibility to protect the financial interests of their members, who depend on them to secure their retirement nest eggs. Therefore, all investment decisions must clear the test of financial prudence, including environmental and social factors, in guiding those decisions.
- CIP15 Recent pivotal moves by some of the world’s largest pension funds to advance the case of ESG investing are discussed in Chapter 3 by Stéphanie Lachance and Judith Stroehle (2023). For instance, in March 2020, the California State Teachers’ Retirement System (CalSTRS), the Japanese Government Pension Investment Fund (GPIF), and the largest UK pension fund—the Universities Superannuation Scheme (USS)—publicly pledged that they would integrate ESG factors into their investment decisions. Six months later, a similar pledge was made by the CEOs of the eight largest Canadian pension funds—the so-called ‘Maple 8.’ A related move came in December of 2020 from the New York State Common Retirement Fund, when it set 2040 as its goal to transition its portfolio to net zero greenhouse gas emissions.
- CIP16 A related point regarding how to measure the inputs and impacts of ESG is taken up in Chapter 4 by Linda-Eling Lee’s (2023) research. Unfortunately, there remains a widespread lack of understanding about, and confidence in, how ESG concepts are measured, when such concepts are material, and how to work with ESG data in the investment process when the available data are very different from traditional financial data. In the pension context, Lee notes that data quality issues remain a challenge, along with problems that arise when comparing ratings and capturing different ESG objectives. Nevertheless, as more investors examine the track records and as the track records capture more funds, investors will become better able to analyze what is and is not performing well. Nevertheless, there remains concern

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about why the ESG data often disagree, and why ratings differ so much, one from the other. There has also been a sea-change in how the data are used, rotating away from a reliance on third-party ratings, toward firms reaching out for raw data and building their own models and assumptions. Moreover, Lee argues that ESG investments are likely to outperform in all sorts of market cycles and environments due to their long-term horizons. She also points out that, analytically, it is possible to conduct attribution analysis on ESG funds.

CIP17 Making this a more complex task is recent work by Berg et al. (2019), who caution that the average correlation of scores from different ESG raters varies from 40 percent to 70 percent; this can create complications in constructing a portfolio. This ongoing research seeks to quantify the noise and clean it up by underweighting the ‘noisier’ ratings agencies and overweighting the agencies with less noise.

C1S5 **Finding a Balance**

CIP18 Drawing on existing literature, several interviews, and an in-depth study of PSP Investment, Lachance and Stroehle demonstrate the role of historical, organizational, and contextual factors, and identify five pension fund characteristics that have an important impact on the funds’ ability to integrate ESG. These include the historical origins of funds and the extent of embedded regulatory authority; their mandate and legal structure; the importance of corporate governance and leadership at the funds; their investment strategies and asset mix; and the funds’ ability to engage in collaborative and advocacy activities.

CIP19 In addition, pension funds must follow national regulation guiding the mandates and legal structures covering retirement plans. In particular, these mandates and legal structures form the basis for the corporate governance standards advocated by pension funds, as well as the freedom to decide whether and how to implement environmental, social, and governance considerations. Pension funds therefore determine their investment strategies and asset mixes that can include ESG principles through engagement and stewardship. Collaboration and advocacy are the tools they use, by taking public stands around environmental and social issues, and by working with other funds, as in collaborative engagements such as the Climate Action 100+. Launched in 2017, Climate Action 100+ is now backed by more than 545 investors with over US\$52 trillion in assets under management, including 145 North American investors.

CIP20 There are also factors enabling and inhibiting ESG investments in pensions, reflecting the practical and real-life challenges that pension funds face. For instance, the ESG climate in the UK and Canada has been judged

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as more favorable than in the US, particularly because the Employee Retirement Income Security Act (ERISA) requires pension fiduciaries to act in the participants' best interests. Nevertheless, and particularly in Europe, 'success' in the ESG arena has recently expanded to engaging with companies, rather than simply buying and selling companies with good ESG track records. As a result, there is currently far more ongoing activism in the EU, where investors are focused on changing outcomes beyond the financial ones.

C1P21 Additional challenges to ESG investments include differences of opinion and lack of information in processes and methods not traditionally reported under Generally Accepted Accounting Principles (GAAP). Under traditional moral, ethical, or other screening bases, investors searching for utility would tend to sell investments that do not meet their criteria. But once they eliminate an asset, they must replace it with another. In Chapter 5, Chris Geczy and John Guerard (2023) note that this is complicated in the US by the need to satisfy fiduciary responsibilities despite a lack of clear and consistent guidance from the US Department of Labor and other regulatory authorities.

C1P22 The authors examine various methodologies, attitudes, and understandings about what ESG is and when it could enhance pension investment performance. Their empirical analysis shows that firms with high environmental scores do provide excess returns over those with low scores unconditionally, but also conditional on expected return from additional models including a variety of factor controls. Accordingly, they conclude that pension trustees, consultants, and money managers should combine information from both expected return models and ESG criteria as these could enhance their equity portfolio construction efforts. Alternatively, if fiduciaries focus on risk and return considerations alone when selecting investments, the authors suggest that incorporating non-GAAP information via earnings, price momentum, and ESG characteristics, along with a collection of weighted value measures, may collectively and individually add value rather than impose a constraint on the investment universe. Nevertheless, they have no firm conclusions, as yet, regarding whether portfolios formed from only high scoring ESG firms maximize Sharpe ratios.

C1P23 Further analysis of the impact of ESG for pension investments in Chapter 6 by Zacharias Sautner and Laura Starks (2023) notes that pension plans' long horizons render them particularly vulnerable to many long-lived ESG risks. The authors warn that the potential consequences of being underfunded, especially in the case of defined-benefit pensions, leave the funds particularly vulnerable to ESG-related downside risks. ESG-induced risks include reputational risk, when a firm has poor environmental practices; human capital-related risks, such as how firms treat their workers;

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litigation risk, such as due to pollution or wildfires; regulatory risk, including government-required disclosures; corruption risk; and climate risk, including physical risk, technological risk, and the risk of stranded assets, among others. Their chapter underscores the need to develop processes to identify, measure, and manage those risks more carefully, if pension funds are to remain sustainable. Their analysis demonstrates that, in many cases, investors prefer to deploy risk management and engagement strategies, rather than divestment, to address the climate risk in their portfolios. A recent quantitative analysis of ESG divestitures by Berg and van Binsbergen (2022: 1) similarly concludes that ‘socially conscious investors should invest and exercise their rights of control to change corporate policy.’

CIP24 The need to engage with multiple stakeholders, along with the growing need to examine investment impacts and systems-level engagement, are altering how global pension funds behave, according to Luba Nikulina (2023) in Chapter 7. She proposes that the key is culture, looking beyond immediate returns and focusing on long-term impact universal ownership: by this, she means that when pension participants own a slice of the system, they must be responsible to the system. Of course, this will require a transformation in the way pension funds are managed, with strengthened governance and system-wide collaboration. Moreover, Nikulina noted that individual pension funds, particularly of the defined-benefit variety, face different opportunities and constraints, yet as institutional investors, they tend to have very long time horizons. They are expected to deliver returns over many decades, and perhaps over an infinite horizon. Accordingly, their required returns need to encourage engagement with systemic risks and challenges beyond specific considerations of their own current portfolios.

CIP25 At the same time, Nikulina cautions that science still needs to determine the cost of not investing over a longer horizon, and how dynamics—including a changing legal framework—may be factored in. Ultimately, she concludes that pension funds will become more engaged in the ESG arena, but investment organizations will first need to strengthen their governance structures, do a better job measuring inputs and outputs, and institute system-wide collaboration and innovation.

C1S6 **How ESG Is Changing Pension Governance, Engagement, and Reporting**

CIP26 In Chapter 8, a topic of keen interest to Rob Bauer and Paul M.A. Smeets (2023) is what drives the sustainable investment agenda and whether beneficiaries of pension plans should have a voice in their pension plan’s investment choices. Noting the difference between the US

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approach to this—leaning toward hard law and sometimes-conflicting DOL regulations—and the European approach—more driven by social norms, they suggest that the answer depends on a fund’s legal and societal contexts, benchmarking pressure, and fund-specific factors such as the fund’s size and the board’s composition. While beneficiaries generally are not part of the debate over sustainable investments, the chapter reviews the experiences of a large Dutch pension plan that did so, and summarizes the lessons learned.

C1P27 In particular, the authors discuss how this occurred at Pensioenfonds Detailhandel (PD), the Dutch defined-benefit pension fund for retail sector employees. A majority of participants voted in favor of extending and intensifying the voting and engagement program and approved the sustainable development goals proposed by the board. Importantly, the majority support for sustainable investments was not undermined by the 2019 COVID-19 pandemic. Additionally, Bauer and Smeets argue that a better understanding of the beliefs and preferences of the clients of financial services can help bring back confidence in the financial sector and enhance customer loyalty.

C1P28 While many agree that participants deserve a voice in their pension fund investments, no one yet knows whether a simple majority rule is the right approach. Moreover, given financial illiteracy, many participants may not understand the tradeoffs, and individual investor goals may be mutually exclusive. Of course, when two investments have the same financial return, but one has positive ESG externalities, the evaluation process can be easier; even so, however, people may disagree on how to compare nonfinancial attributes. A related point is that one might think of investing in two different types of technologies, each of which would improve environmental outcomes. For instance, one might wish to hold fossil fuels in her portfolio while the other would not, in the hopes of engaging the potentially polluting firms. Ultimately it might be unclear whether and when to walk away from the first technology.

C1P29 A comparative study in Chapter 9 by Nathan Fabian, Mikael Homanen, Nikolaj Pedersen, and Morgan Slebos (2023) focuses on policy frameworks and important structural variables relative to private retirement systems in Australia, the UK, and the US. The authors believe that investment organizations, as either corporations or custodians of long-term value, do have international and national social obligations and commitments to social outcomes, under both human rights laws and employment regulations. For organizations within these systems, enumerated by OECD guidelines for multinational enterprises, the view is that there is a clear regime or framework indicating financial institutions’ responsibilities.

C1P30 By analyzing reports, interviewing experts, and using data from the Principles of Responsible Investment, as well as national pension and retirement authorities, the research identifies three key structural challenges to national retirement systems. These include market fragmentation, which

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tends to undermine the responsible investment support and activities among retirement plans; the increasing importance of fund managers and investment consultants, along with their limited sustainable investment incentives; and the growth and lack of a sustainability emphasis in personal pension systems. At present, they argue that retirement plans are less likely to consider responsible investment practices, while commercial service providers lack incentives to deviate from the ‘norm.’

CIP31 The authors also suggest that policymakers should consider fund consolidation in private sector retirement systems, along with whether service-provider incentives could be better aligned with sustainability incentives. For instance, policymakers could boost transparency in these markets, helping generate better-informed policies, while providing beneficiaries with information relevant to their savings choices. It remains an open question as to whether beneficiary sustainability interests are truly being met and serviced. For instance, regarding the lack of ESG investment options in defined-contribution (DC) personal pension plans, consideration of climate change could be made mandatory in view of evidence that investments may be affected by changes in market pricing, regulations, technology, and customer preferences over the medium term and over the life of most DC funds. Yet it is more difficult to do so if no agent in the financial value chain is ultimately responsible for the long-term interests of the beneficiary or client.

CIP32 In Chapter 10, Anita Margrethe Halvorssen (2023) addresses the issue of ESG and alternative asset investing in the context of Norway’s Sovereign Wealth Fund, giving as an example the Fund’s 50 percent stake recently taken in Danish energy firm Ørsted’s offshore windfarm in the Netherlands. Although the Fund is not involved in managing the real estate, she suggests that ESG integration is a necessity, considering the frequency of global extreme weather events. She believes that ESG disclosure will eventually be required in financial statements and, as that occurs, investors will become increasingly active rather than reactive. As a result, selecting the right investments will probably be somewhat easier than altering non-ESG firms’ behavior in the future.

C1S7 **Looking Ahead**

CIP33 While some people may still believe that the ESG concept remains limited to the old concept of ‘socially responsible investing,’ this volume clearly shows that ESG-related thinking and investment have evolved to focus on several new components. Included among these are multiple risks, including transition risk, or the degree to which a company is prepared for regulatory and market changes; physical risk, or the exposure of factories and other assets

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to floods and other climate change effects; disclosure risk, or how companies disclose risks to water and other resources that are necessary to their function but are not reflected on their balance sheet; liability risks due to potential lawsuits; and how they disclose the risks of labor strife and customer or supply chain disruption. Some investment managers, consultants, and pension fund trustees may be wary of ESG investing due to a lack of consistent guidance from regulatory agencies, but in many nations, institutional investors are increasingly moving ahead in a very thoughtful way.

CIP34 This volume also discusses a range of challenges facing the ESG movement, particularly in the context of pension funds. Data with which investors can learn about such risks are not yet commonly available across firms, sectors, or nations. Perhaps eventually there may be a single global standard, though stakeholders could still differ in their views of its applicability and the weights placed on each key element. For instance, the Sustainability Accounting Standards Board (SASB) criteria focus on materiality, while the Global Reporting Initiative (GRI) takes a much broader purview. Further movement in the ESG direction is likely to wait until US pension fiduciaries receive more guidance from their investment advisers and investment managers; in turn, the latter will await clearer guidance from the US Department of Labor and settled case law. In the Australian and New Zealand DC pension systems, institutional investors have devoted increasing attention to, and active engagement in, pushing an energy transition from fossil fuels (Klijn 2020).

CIP35 Moreover, models of ESG performance differ from one consultant or provider to another and, sometimes, firms that advertise themselves as ESG-friendly or ‘carbon free’ are actually priced identically to those that do not (Larcker and Watts 2020). An additional challenge to pension funds contemplating ESG assets is that large institutional investors may have difficulty getting into new ESG products. This is because they tend not to be able to invest in allotments of under US\$100 million, while many ESG opportunities are small, early-stage opportunities. Relatedly, many institutional investors are often prohibited from owning over half of any given firm’s investment, nor can the allocation exceed 10 percent of the pension fund’s assets. Some hedge funds and private equity are working to make this more feasible, using fund-to-fund models dedicated to getting money to smaller managers and companies. Consultants are also finding ways for large institutions to allocate assets to smaller opportunities and smaller investors. Nevertheless, the ‘silver bullet’ has not yet been found.

CIP36 A final consideration is that there remains controversy about what to do about climate change, and who should pay to mitigate its worst effects. The Stern Report (2007: xii) on the economics of climate change argued that ‘the scientific evidence that climate change is a serious and urgent issue is now compelling,’ and that the study, along with many others, helped drive

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international efforts to pursue the goal of keeping global temperatures from rising. But while the 2021 UN Climate Change Conference brought together almost 200 nations, who negotiated the Glasgow Climate Pact, several important nations, including the US, India, and China, refused to sign the agreement. Moreover, the conflict in Eastern Europe has confirmed the challenge of reducing nations' reliance on fossil fuels, along with the controversy over whether nuclear and natural gas should be labeled as 'green' (Abnett 2022). Consequently, the debate remains far from settled.

CIP37 Further research on these and related matters is a top priority for institutional investors, money managers, governments, and international organizations to strive to clarify what can and should be done. In particular, little is known as yet about the ways in which pension funds develop and document their ESG policy and practice, how they determine their fiduciary responsibilities regarding ESG, how they comply with their reporting requirements, how they report their ESG practices and results to stakeholders, and when they can and should use divestment versus engagement, relative to investment opportunities. Much remains to be done.

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