SYSTEMIC STEWARDSHIP: THE FINANCIALLY MATERIAL IMPERATIVE

Embedding systems thinking and stewardship into practice

RAILPEN

TIIP THE INVESTMENT INTEGRATION PROJECT

SINCLAIR CAPITAL L.L.C
INNOVATION. HONED BY EXPERIENCE.

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RAILPEN FOREWORD

Railpen's purpose is to secure our members' future. We operate on behalf of the Trustee of the railways pension schemes whose mission is to pay pensions securely, affordably and sustainably. We recognise that members and employers trust us with a significant responsibility, and that the decisions and actions we take affect members' lives and wellbeing. We are proud of this responsibility and are committed to improving the lives of members.

We need to use all the levers available to us – including stewardship – to drive long-term value creation at both the portfolio company and market level. At Railpen, in addition to a traditional focus on idiosyncratic risk management, we have long recognised our role as a universal owner, and **our stewardship work has been increasingly shaped by the understanding that our holdings span the breadth of the global economy, exposing us to system-wide sustainability and governance risks and opportunities.** This recognition means we look beyond individual companies and sectors, and acknowledge that we have a responsibility to members of the railways pension schemes to consider the health of the financial system in our stewardship work. We carefully prioritise our resources in terms of which stewardship tools are most likely to be impactful, and by choosing to focus on priority stewardship themes: those system-wide issues that evidence shows have the greatest potential to affect our ability to protect and enhance the value of members' savings.

Markets, industries and political economies evolve, and therefore so must our approach to systemic stewardship. This is why in 2025 Railpen reconsidered and refined our work in this space. This saw us reassess the evidence base for financial materiality and impact in relation to the priority issues we agreed five years ago, upskilling and training individuals across Railpen on systems change approaches[1], and creating more structured stewardship strategies for each theme to help us better influence for real-world outcomes[2].

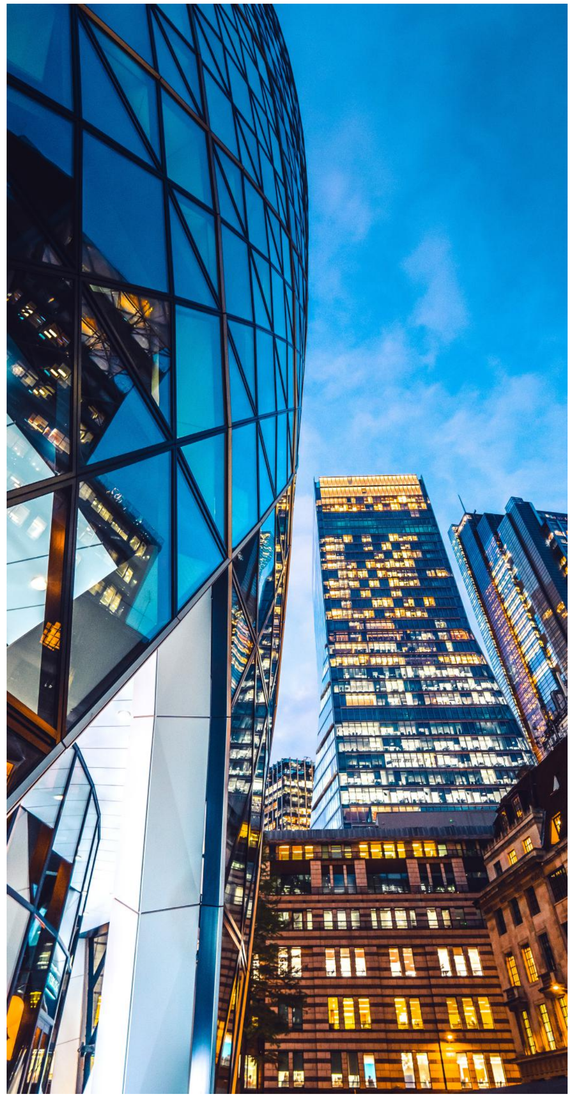
In launching this programme of work, we also recognised that in the last five years since we first set out our priority stewardship themes, the academic and industry evidence base on universal ownership, system-level investing and the effectiveness of systemic stewardship tools has expanded and developed. This is why we were delighted to commission and collaborate with The Investment Integration Project (TIIP) and Sinclair Capital. It's helped us understand:

- The latest evidence on the financial materiality of system-level stewardship approaches and systemic issues to portfolios.
- How Railpen can best build on our existing work to strengthen our approach and ensure efficient use of resources.

As a large UK asset owner, we recognise that we are privileged to have the scale and resources to be able to undertake this work. **However, we also acknowledge that we cannot achieve real-world change alone.** This is why we are sharing this paper – a summary of the latest evidence alongside practical recommendations for investors (both UK and global asset owners and managers) who are looking to adopt and embed a systemic stewardship or system-level investing approach. We hope that this report will be a useful contribution to the now rapidly evolving industry debate on systemic stewardship, and we are grateful to TIIP and Sinclair Capital for their work.

1 As defined by the UK government in 2023: "Systems thinking is a framework for seeing the interconnections in a system and a discipline for seeing and understanding the relevant aspects of the whole system - the 'structures' that underlie complex situations." An introductory systems thinking toolkit for civil servants - GOV.UK

2 Published early 2026.



EXECUTIVE SUMMARY

The purpose of this report

Our report explores the evolution and practical implementation of systemic stewardship, focusing on the financial materiality of systemic risks for institutional investors – particularly universal owners such as pension funds and large, highly-diversified asset managers.

We provide a literature review and regulatory analysis, and build upon these to provide a strategic roadmap for embedding systemic stewardship in investment practice, with a focus on the UK, EU, and US regulatory environments as these are major markets for many investors (though we also bring in examples from other jurisdictions where relevant).

Setting the scene: Key concepts in systemic stewardship

Institutional investors increasingly recognise that their long-term financial returns depend on the health and stability of the broader systems in which they operate. Each of the following concepts describes evolving practice for investing that goes beyond modern portfolio theory to consider systemic risks, helping investors rethink investing as interacting with both the real world, where risks and opportunities (both idiosyncratic and systemic) are created, and the capital markets, where they are priced.

Universal owner theory:

Universal owners are exposed to systemic risks that affect the entire market, in addition to idiosyncratic risks that affect individual investments (which can be mitigated through diversification). This describes highly diversified investors (e.g. pension funds, sovereign wealth funds) whose portfolios effectively represent a cross-section of the economy. As such, they have a financial imperative and, arguably a fiduciary one, to safeguard the viability of the global financial, environmental, and societal systems that underpin their investments.
Over the past three decades, this theory has moved into mainstream investment strategy, reflected in the rise of stewardship models that prioritise real-economy outcomes in addition to, and sometimes more than, company-level returns so as to improve total-portfolio returns.

Systemic risk management:

The concept of financial materiality has also evolved to incorporate systemic risks that transcend sectors and jurisdictions such as climate change, inequality, and governance failures – risks that cannot be diversified away and require collective action. This progression of financial materiality to include systemic risks in addition to company-level factors has spurred new frameworks (e.g. double materiality, scenario analysis, systems mapping) and driven regulatory developments in the EU and UK that embed various environmental, social and financial risk considerations into fiduciary obligations. Leading funds are beginning to integrate these insights into capital allocation, stewardship, research, and regulatory engagement.

System-level investing and systemic stewardship:

System-level investing puts into practice universal owner theory and systemic risk management, applying them to a broad range of investment activities. While system-level investing is broader than just stewardship, it often uses systemic stewardship as a tool to mitigate systemic risks. Whereas traditional stewardship typically focuses on company-level enterprise value (alpha), systemic stewardship uses proxy voting, engagement, and policy advocacy to shape the structures and systems that shape market-wide pricing (beta). Traditional stewardship and systemic stewardship coexist comfortably; many investors run hybrid programmes, and systemic stewardship practice is advancing – particularly in Europe and the UK.

Regulatory divergence and systemic stewardship

Regulatory divergence across the UK, EU, and US is reshaping systemic stewardship in practice. This requires careful calibration of goals, tactics, and characterisation, with consistent objectives pursued through jurisdiction-specific tactics. This variability spans company engagement, market-wide policy influence, and collaborative initiatives – the three pillars of systemic stewardship. While divergent regimes bring compliance complexity, reputational risk, and tactical constraints, we believe they also create an opportunity to lead globally – particularly, though not exclusively, for UK asset owners.

Strategic recommendations for investors

Aside from divergent regulatory frameworks, investors continue to face implementation challenges in systemic stewardship. These include the following:

- **Divergent interpretations of fiduciary duty**, which create uncertainty about the extent to which investors can pursue systemic outcomes
- **Measurement difficulties**, as quantifying the impact of systemic stewardship is complex, with benefits accruing across markets rather than individual assets
- **A lack of internal alignment**, since systemic stewardship requires breaking down organisational silos and integrating stewardship insights across all asset classes and functions

As such, we provide the following recommendations for investors to ensure they embed system-wide thinking and stewardship in a way that improves long-term financial outcomes for clients and beneficiaries:

Implementation change	Recommended approach
Navigating regulatory divergence	**Justify by economic rationale:** Anchor all systemic stewardship in the evidence on financial materiality and beneficiary outcomes to help withstand political and legal challenges. **Exploit UK leadership (UK-domiciled investors):** Use the UK's enabling regulatory framework to shape global norms and collaborative frameworks. **Differentiate by jurisdiction:** Tailor stewardship strategies to local legal and political realities rather than applying a uniform approach.
Building organisational capability	**Legal framework:** Document the materiality of systemic risks and integrate long-term risk scenarios into investment decisions. **Coalition resilience:** Establish protocols for collaborative engagement, ensuring legal compliance and outcome-focused charters. **Technology integration:** Deploy AI and digital tools to enhance stewardship capacity, monitor risks and support decision-making. **Internal integration:** Formalise business partnering between stewardship and investment teams, provide systems thinking training, embed stewardship in investment processes and create cross-functional groups for systemic risk oversight.
Risk management and compliance	**Political & legal risk mitigation:** Frame engagement in financial terms, use pre-vetted communication templates, and maintain legal documentation for high-risk activities. Seek legal advice where possible. **Regulatory monitoring:** Launch dashboards to track regulatory changes, assign responsibility for monitoring key jurisdictions, and engage early in consultations. **Performance measurement:** Focus on outcome metrics (e.g. changes in corporate behaviour, market standards) and publish annual dashboards linking stewardship to member value.

Next steps for investors

Systemic stewardship is now considered a crucial part of a universal owners' work to improve financial outcomes for their beneficiaries. The UK's regulatory environment offers a unique opportunity for leadership. However, success depends on integrating systemic risk management across investment functions, tailoring strategies by jurisdiction, and demonstrating clear links between stewardship activities and long-term value creation.

Our recommendations provide practical guidance for investors in the UK and elsewhere seeking to embed systems thinking and systemic stewardship into their investment approach.

A thoughtful approach takes time, and we outline later in this report (with a summary also presented in the figure to the right) a strategic roadmap to achieve genuine impact. This sets out key considerations and proposed actions within a 12 month, 3 year and 5 year period.

Despite ongoing challenges within this space, we believe there are also significant opportunities for investors. Those who proactively adapt their strategies to local contexts and focus on long-term value can not only safeguard outcomes for their beneficiaries but also influence the evolution of global stewardship standards. In a world defined by systemic risks, leadership and decisive action are essential – and waiting for certainty may pose the greatest threat of all.

Strategic implementation roadmap

0-12 months

- Prepare narratives for 2026 Stewardship Code (where relevant)
- Audit coalition strategies
- Develop AI governance frameworks
- Launch regulatory intelligence dashboards
- Take steps to mitigate political risk

1-3 years

- Embed systemic risk priorities in investment decisions
- Formalise innovation partnerships
- Expand stewardship across asset classes
- Undertake regulatory scenario planning
- Implement rapid response protocols

3-5 years

- Lead relevant advocacy and stewardship alliances
- Develop frameworks for emerging risks
- Advance real-world impact metrics
- Position organisation as a reference point in global stewardship forums

SECTION 1: LITERATURE REVIEW AND CURRENT BEST PRACTICE

In this section, we consider how the widespread adoption of modern portfolio theory and the resultant diversification of portfolios across asset classes, styles, and securities have led institutional investors to increasingly recognise that their long-term financial returns depend on the health and stability of the broader systems in which they operate. This idea crystallises across the three interrelated concepts explored in this section:

- **universal owner theory**, and its implications for asset owners and other diversified investors
- **systemic risk analysis**, also known as environmental, social, and financial system (including corporate governance) risk analysis
- system-level investing including **systemic stewardship**

We also examine how investors and academics are rethinking fiduciary duty, investment practice, and the types of risks they face as they attempt to optimise returns.

Given that these three areas are relatively young and remain dynamic, our literature review is necessarily a snapshot of a particular moment and suggests what is current best practice. We also note that best practice is rapidly evolving, as academics and practitioners react not just to each other, but also to the external environment.

I. The evolution of universal ownership

Universal owner theory or universal ownership has become a foundational concept in sustainable investment (also known as responsible investment). Its central tenet is that diversified investors – and particularly large, institutional investors such as pension funds, sovereign wealth funds, and insurance companies – effectively own a representative slice of the investible economy. Because these investors are exposed to market-wide risks and opportunities, they have a direct economic interest in the health and sustainability of the global environmental, social, and financial systems on which their portfolios depend. Such investors may therefore want to go beyond traditional metrics and approaches to intentionally and actively address systemic issues like climate change, the value of work and inequality, and biodiversity loss.

Theoretical foundations

Universal owner theory originated in the 1990s, when governance experts like Robert Monks and Nell Minow observed that some institutional investors were so broadly diversified that their interests began to align more closely with the overall economy than with any particular firm or sector[3]. Monks used the term universal owner to describe investors whose holdings were sufficiently representative of the market that negative externalities from one company could negatively impact others in their portfolio. As such, these investors have a structural incentive to promote public goods – such as environmental protection or social stability.

Academics James Hawley and Andrew Williams expanded on this idea in their seminal book, The Rise of Fiduciary Capitalism (2000), where they introduced a formal definition of universal owners[4]. They argued that as fiduciary institutions came to dominate equity markets, their financial performance became increasingly dependent on macroeconomic stability and the mitigation of systemic risks. Their work reframed fiduciary duty to encompass not only overseeing the performance of individual assets and portfolios, but also the stewardship of the systems that underlie those assets. **The implications were profound: Universal owners had a rational, financial interest in addressing large-scale societal challenges not for ethical reasons, but as part of prudent risk management and total return maximisation.**

3 Robert A. G. Monks and Nell Minow, Watching the Watchers: Corporate Governance for the 21st Century (Wiley, 1996).

4 James P. Hawley and Andrew T. Williams, The Rise of Fiduciary Capitalism (University of Pennsylvania Press, 2000).

From theory to practice

Universal owner theory has since evolved from an academic proposition into an influential principle guiding responsible investment. As investors increasingly recognised their exposure to system-wide risks such as climate change, income inequality, and biodiversity loss, the need to translate theory into action became urgent.

Sustainability and governance factors are material financial risks

The launch of the UN-backed Principles for Responsible Investment (PRI) in 2006 marked a turning point. PRI urged asset owners to consider environmental, social, and governance (ESG) factors as material financial risks that affect long-term portfolio value. This shift, and the growing evidence base on the financial materiality of certain sustainability and governance factors, helped provide the rationale for universal owners to proactively address systemic issues. It also laid the groundwork for mainstream adoption of ESG integration and active stewardship as tools to safeguard the overall economy – an economy that universal owners, by virtue of their diversification, effectively own.

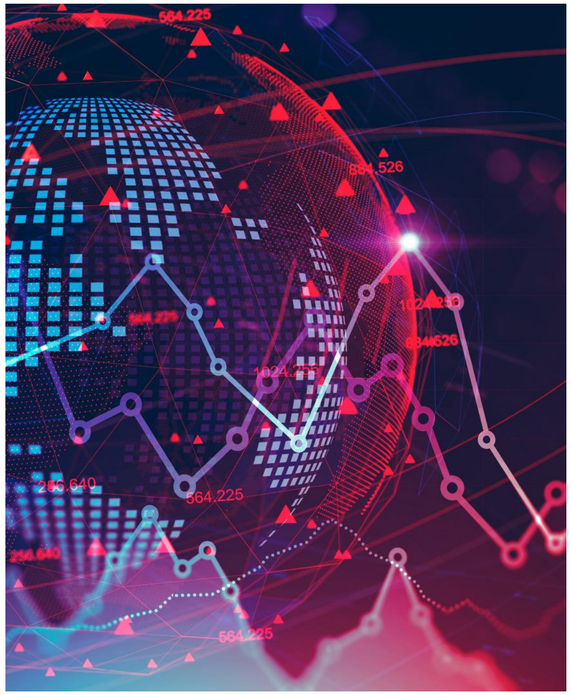
A 2011 report published by the PRI and United Nations Environmental Programme (UNEP) Finance Initiative – Universal Ownership: Why Environmental Externalities Matter to Institutional Investors – provided further practical justification for the theory[5]. It emphasised that diversified investors are inherently vulnerable to externalities and that they should therefore proactively mitigate externalities. This report provided institutional investors with a framework for interpreting systemic risk through the lens of their portfolios and suggested that collective investor action could be a powerful force in internalising the costs of environmental degradation. By framing issues like climate change, pollution, and resource scarcity as portfolio-level financial risks rather than moral concerns, the report generated interest in system-level stewardship and helped shift the discourse from firm-level ESG screening and ESG integration to market-wide risk management.

Major asset owners soon began publicly identifying themselves as universal owners. CalPERS described its multi-billion-dollar portfolio as being so diversified that it held "a little of everything," necessitating stewardship over the entire market's performance[6]. Similarly, Norway's Government Pension Fund Global and the UK's Universities Superannuation Scheme (USS) highlighted their universal owner status in public disclosures[7]. To quote Martin Skancke, the Norwegian official in charge of the fund in 2010: "When most economic activity impacts your portfolio (negatively or positively) on the margins, there is no rationale to support exploitative behaviour in any one portfolio company." [8]

The theory soon spread globally. In 2014, Japan's Government Pension Investment Fund (GPIF) – the largest pension fund in the world at the time – wrote:

"The GPIF is a universal owner, an investor with a very large fund size, a widely diversified portfolio across the overall capital market, and a super long-term investor designed as a part of a 100-year sustainable pension scheme. Given such features, the sustainable and stable growth of the overall capital market is essential for the GPIF to secure its long-term investment returns." [9]

These institutions began adjusting their investment practices and engagement strategies to reflect their exposure to systemic risk – prioritising long-term value creation across entire sectors and advocating for reforms that could strengthen the economic and environmental foundations of their portfolios. Their actions illustrated how universal ownership was no longer just a conceptual framework, but a basis for reshaping the role of institutional investors in promoting sustainable market systems. Their statements and reports proved influential.



5 PRI and UNEP Finance Initiative, Universal Ownership: Why Environmental Externalities Matter to Institutional Investors, 2011.

6 CalPERS, Financial Markets, July 6, 2023: calpers.ca.gov/investments/sustainable-investments-program/financial-markets.

7 Universities Superannuation Scheme (USS). "USS is a Universal Owner – But What Does That Mean?" USS Investment Insights. May 28, 2024. Explains how a major UK pension scheme applies the universal owner framework in practice.

8 Martin Skancke, The Government Pension Fund Global and the management of petroleum wealth, Norwegian Ministry of Finance, June 2010.

9 Akio Otsuka, Can the world's largest pension fund, Japan's GPIF, be a responsible steward. Stewardship responsibility as asset owner, Journal of Governance and Regulation 9, no. 1 (April 2020): doi.org/10.22495/jgrv9i1art4.

Regional leadership and evolving practices

Europe and the UK, as well as some asset owners in Canada, have emerged as global leaders in implementing universal owner strategies. Pension funds in the Netherlands, Nordic countries, the UK and Canada have integrated systemic risk management into their investment policies and stewardship practices. The Dutch pension funds ABP and PGGM, for instance, have adopted low-carbon indices and pushed for climate policy reforms at national and EU levels. Their collaborative initiatives with policymakers demonstrate an awareness that mitigating systemic risks requires coordinated, cross-sector solutions beyond individual company engagement. By investing in green infrastructure, advocating for sustainable finance regulations, and setting science-based targets for their portfolios, these funds work to align the financial system with broader environmental and societal goals – embodying the principles of universal ownership in both strategy and execution[10].

In the UK, Railpen and USS (among others) have embraced the universal owner model. **Our approach at Railpen includes engaging in regulatory advocacy, systemic stewardship, and long-term capital allocation strategies that favour sustainable economic outcomes and are aimed at improving outcomes for members**[11]. Phoenix Group – one of the largest long-term savings and retirement businesses in the UK with some 12 million customers – also aligns its stewardship practices with universal ownership, emphasising climate risk and systemic stability rather than reactive divestment.

A recent UK Sustainable Investment and Finance Association's (UKSIF) report highlights that UK pension schemes are especially well-positioned to lead in this space. It recommends that schemes revise their Statements of Investment Principles (SIPs) to include systemic risk language, build trustee fluency in macro-financial sustainability and governance risks, and structure engagements to reflect systemic rather than company-specific impact[12]. This framing aligns with actions already taken by Railpen, USS and similar institutions, positioning UK pension funds as models for globally responsive systemic stewardship. UK investment consultants also have added to the literature, calling for increased efforts to mitigate systemic risk by asset owners, asset managers, regulators and governments, as noted in an October 2024 report from LCP: "Systemic stewardship is important to address systemic risks – these are risks that could cause the collapse of an entire financial system or entire market, as opposed to the risk associated with any one individual asset."[13]

Universal ownership is also taking hold in Asia. In Japan, the GPIF has explicitly acknowledged its responsibility to improve market-wide sustainability. GPIF's stewardship guidelines emphasise corporate ESG performance and public policy alignment, illustrating the cross-sector influence that a universal owner can have. The fund's policies go beyond financial returns to include the long-term stability of the markets in which it operates. This includes participating in collaborative initiatives, promoting disclosure standards, and engaging in dialogue with regulators to help shape a resilient financial ecosystem[14].

What is stewardship?

"The use of investor rights and influence to protect and enhance overall long-term value for clients and beneficiaries, including the common economic, social, and environmental assets on which their interests depend."[15]

These reports, analyses and actions exemplify how systems thinking is being embedded into mainstream financial management across global regions. While local regulatory environments and cultural norms vary, the overarching logic of universal ownership – that diversified long-term investors have a stake in the health of the whole economy – is driving a convergence in stewardship philosophy and practice. As more institutional investors adopt this mindset, regional innovations are increasingly informing international standards, signalling a broader shift in how capital markets understand responsibility, risk, and long-term value creation[16].

10 ABP Climate Policy 2022-2030: Accelerating investment that makes a difference. PGGM, Climate change: abp.nl/content/dam/abp/documenten/beleggen/abp-climate-policy-2022-2030.

11 Railpen, Stewardship Report 2024, June 2025.

12 UK Sustainable Investment and Finance Association (UKSIF), Systemic Risks: A Framework for Portfolio Resilience, 2025.

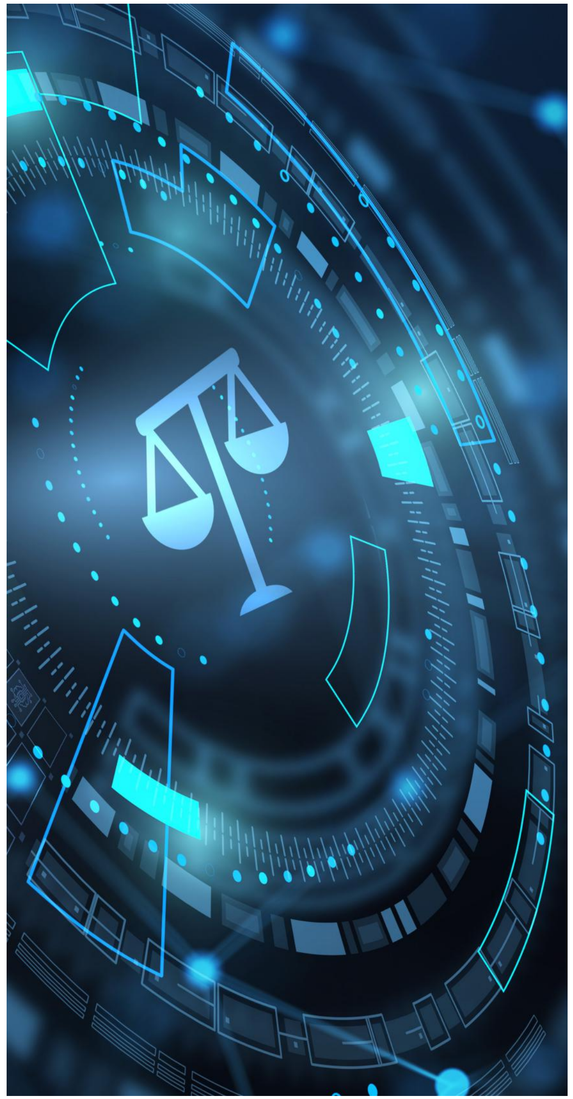
13 LCP, Systemic Stewardship, October 2024.

14 Government Pension Investment Fund (GPIF), Stewardship Principles, Established June 1, 2017, Revised February 6, 2020 and March 31, 2025.

15 Globally, systemic stewardship was boosted by a 2023 redefinition of stewardship by the CFA Institute (representing more than 200,000 investment professionals in more than 160 countries), the PRI, and the Global Sustainable Investment Association. They jointly defined stewardship in terms that fully endorsed universal ownership theory,

CFA Institute, PRI and GSIA: "Definitions for Responsible Investment Approaches", November 2023.

16 Alice Klettner, Stewardship Codes and the Role of Institutional Investors in Corporate Governance: An International Comparison and Typology, British Journal of Management (2021): doi.org/10.1111/1467-8551.12466.



Legal, political, and practical challenges

Despite growing acceptance, universal ownership faces some legal and political challenges. Previous interpretations of fiduciary duty, for example, emphasised maximising risk-adjusted returns of individual investments, while universal ownership introduces a broader responsibility: Managing risks that affect the economy and the capital markets as a whole so as to improve the overall capital markets' risk/return profile. The win/win cases where the two goals align are easy, but there is sometimes a level of misalignment between the two, which has resulted in a continuing debate in certain jurisdictions. Legal scholars such as Daniel Irvin argue that fiduciary law can and should evolve to reflect this wider mandate, enabling shareholders to act not only in the best interests of specific holdings, but also in pursuit of market stability and sustainable economic growth[17]. However, others caution that rethinking fiduciary duty in this way could blur the boundaries of investor responsibility and expose asset owners to legal risks if their systemic actions are perceived as sacrificing returns at the company level[18].

While the Legal Framework for Impact report[19] by UK law firm Freshfields was welcomed by many and some consider the issue resolved (particularly for those domiciled in the UK and EU), the tension remains unresolved in some jurisdictions, leaving many institutional investors uncertain about how far they can go in implementing universal ownership, particularly in jurisdictions where the movement against ESG has sometimes also challenged the implementation of universal owner principles, and where some politicians have conflated non-economic motivations for seeking to influence systemic risks with the economic motivations of universal owners. As a result, asset managers and asset owners have been accused of overstepping their fiduciary duty by incorporating climate considerations or social concerns into investment decision-making. Critics argue that such practices mask political or ideological objectives under the guise of fiduciary prudence. These tensions have led to legal reviews, legislative proposals, and a fragmented regulatory landscape, where asset managers face conflicting expectations from different stakeholders. In some cases, US states have even sought to penalise, or blacklist, asset managers perceived to be prioritising ESG or climate-aligned strategies. This politicisation of sustainable investing complicates the operationalisation of universal ownership, particularly in markets where regulatory guidance is inconsistent or where systemic risk considerations are framed as political rather than pragmatic tools for long-term risk management[20].

A different objection to universal ownership – often coming from those who are advocates for mitigating systemic risks – is that investors cannot achieve adequate social or environmental impact. They state that stewardship tools like proxy voting and corporate engagement, while influential in some contexts, are ineffectual at driving systemic change. For example, Tom Gosling at the London Business School has argued that universal owners may be expecting too much from voluntary investor action[21]. Without stronger government intervention – such as mandatory regulation, robust carbon pricing, or global ESG reporting standards – the influence of universal owners may fall short of what is needed to address climate change, social inequality, or other complex systemic challenges. Moreover, stewardship efforts can be diluted by free rider problems: If only a few universal owners bear the cost of engagement while others benefit passively, the collective impact may be diminished. As a result, while universal ownership provides a powerful rationale for investor involvement in systemic issues, it cannot fully substitute coordinated policy action or broader market reform in solving governance and sustainability issues. In effect, this school of criticism judges efficacy against environmental or social goals, rather than against incremental improvement in the environmental, social and financial systems and the resulting incremental improvement in the price level of the overall capital markets.

Ultimately, universal owners must ground their approach to systemic risks in economic analysis to navigate legal and political challenges, while tailoring to the specific legal and political context of each jurisdiction.

17 Daniel Irvin, Universal Owners, Shareholder Primacy, and Stakeholderism, Emory Corporate Governance & Accountability Review 10, no. 1 (2022): 104–146: scholarlycommons.law.emory.edu/ecgar/vol10/iss1/4.

18 See, for example, Financial Markets Law Committee, Pension Fund Trustees and Fiduciary Duties: Decision-making in the context of Sustainability and the subject of Climate Change, February 6, 2024.

19 Freshfields Bruckhaus Deringer, A Legal Framework for Impact, PRI, UNEP FI and Generation Foundation, 2021.

20 See, for example, Crowell & Moring LLP, Texas v. BlackRock: Statement of Interest of the Federal Trade Commission and the U.S. Department of Justice, 2025, and Karin Rives, Dozens of New State Anti-ESG Bills Introduced; Federal Legislation Expected, S&P Global Market Intelligence, January 30, 2025.

21 Tom Gosling, Universal Owners and Climate Change, Journal of Financial Regulation 11, no. 1 (2025): 1–40, December 9, 2024.

II. Systemic risk integration

Systemic risks differ from conventional risks that are idiosyncratic to a company or asset, but they are no less material. These risks include large-scale disruptions that influence entire economies, sectors, and geographies – such as climate-related costs, decreased economic activity and societal instability driven by inequality, and an underdeveloped consensus around the governance of technology (particularly information technology, social media and artificial intelligence)[22].

Evolution of sustainability and governance materiality

Environmental, social, and financial system (or governance) risks have always been regarded as financially material after the fact. The Deepwater Horizon oil spill, for example, affected housing prices along the Gulf coast[23] as well as costing oil company BP some $65 billion in clean-up costs and legal claims[24]. Over the last quarter of a century, the trajectory of the materiality of some sustainability and governance issues also reveals a shift from values-based investing to economic valuation-based investing when thinking about such risks in advance. This is a major change from when "socially responsible" investors in the 1960s-1980s focused on avoiding investments in controversial sectors such as tobacco, certain types of weapons, or apartheid-era South Africa for values-based reasons.

By the early 2000s, a more pragmatic approach emerged as investors began examining whether sustainability and governance factors could offer financial insight. Work by academics like Eccles, Ioannou, and Serafeim found that firms with high sustainability ratings outperformed[25]. Simultaneously, meta-studies such as Clark, Feiner, and Viehs synthesised evidence linking ESG performance to reduced risk and improved returns[26]. While there is some controversy around the quality of sustainability and ESG ratings, and the methodologies of the firms which issue them, these studies and others gave rise to ESG integration as a mainstream financial strategy.

Legal scholarship evolved in parallel. As noted previously, Hawley and Williams introduced the theory of fiduciary capitalism, contending that universal owners – large, diversified institutional investors – are functionally exposed to the entire economy and thus must manage systemic risks[27]. Their subsequent work framed universal ownership as both a constraint and an opportunity: Such investors are uniquely positioned to influence corporate behaviour at scale but also face some challenges. The UK Law Commission, Organisation for Economic Co-operation and Development (OECD), and the UN-backed Principles for Responsible Investment (PRI) further advanced the view that fiduciary duty includes ESG considerations where financially material[28].

22 Wildfires across Australia and California, for example, have caused not only direct losses to infrastructure portfolios but also reinsurance price spikes and broader disruptions to housing markets and credit instruments. Similarly, rising inequality has been linked to slower economic growth and political volatility that affects macroeconomic stability. The global financial crisis and the COVID pandemic created systematic, non-diversifiable, financially material risks for the capital markets.

23 Javier Cano-Urbina, Christopher M. Clapp, and Kevin Willardsen, The effects of the BP Deepwater Horizon oil spill on housing markets, Journal of Housing Economics (2019).

24 Ron Busso, BP Deepwater Horizon costs balloon to $65 billion, Reuters, January 16, 2018.

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

26 Gordon L. Clark, Andreas Feiner, and Michael Viehs, From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance, University of Oxford and Arabesque Partners (March 2015).

27 James P. Hawley and Andrew T. Williams, The Rise of Fiduciary Capitalism, (University of Pennsylvania Press, 2000).

28 Organisation for Economic Co-operation and Development (OECD), Responsible business conduct for institutional investors: Key considerations for due diligence under the OECD Guidelines for Multinational Enterprises, January 1, 2017.

Principles for Responsible Investment (PRI), Fiduciary Duty in the 21st Century, 2015.

UK Law Commission, The Fiduciary Duties of Investment Intermediaries, 2014.

Financial materiality of sustainability and governance risks

Materiality in sustainable investment has matured, encompassing not only the direct effects of sustainability and governance issues on specific companies or sectors (outside in materiality, or ESG integration), but also the broader economic and financial system consequences (inside out materiality, or systemic risk)[29]. Financial materiality, in this context, refers to the extent to which sustainability and governance factors can affect the economic value of an investment or a portfolio of investments – through impacting revenue, expenses, asset valuation, capital structure, regulatory costs, changes in demand, etc.

Frameworks such as the Sustainability Accounting Standards Board (SASB) and the International Financial Reporting Standards (IFRS) Foundation's new International Sustainability Standards Board (ISSB) have created sector-specific mappings of financially material ESG issues. These tools help investors identify what matters most for specific industries.

However, while these mappings identify idiosyncratic or sectoral risks, they often fall short in capturing risks that are intersectoral, dynamic, and emergent – hallmarks of systemic risks. Systemic environmental, social, and financial risks are characterised by feedback loops, cross-market contagion, and persistence over time. For instance, the transition to a low-carbon economy can create regulatory and market shocks that ripple through energy, transportation, finance, and real estate[30]. Similarly, the erosion of labour rights in global supply chains may destabilise social cohesion, depress aggregate demand, and contribute to political instability[31]. These system-wide effects challenge the boundaries of traditional materiality and call for broader analytical frameworks, such as the growing field of systems change thinking.

The evolution of capital markets and the rise of universal ownership theory also contribute to a change around what is considered to be financially material, as what is considered financially material to an investors' entire portfolio becomes as important as that which is material to single assets within that portfolio[32].

Recent guidance from UKSIF reinforces this shift by providing a practical framework for how investors can operationalise resilience in the face of systemic governance and sustainability risks[33]. Their 2025 model introduces a three-part investor strategy – anticipation, adaptation, and alignment – to manage systemic exposures:

1. **Anticipation** – involves early-warning analysis, horizon scanning, and identifying compounding risk drivers
2. **Adaptation** – refers to restructuring investment governance, mandates, and decision-making processes to absorb shocks
3. **Alignment** – entails connecting investment practices to real-economy resilience outcomes through stewardship and policy advocacy

This framework builds on existing systems-thinking approaches by explicitly linking macro-level disruptions (e.g. climate instability, or AI-driven economic shifts) to portfolio design, governance expectations, and investor influencing strategies. It adds depth to the evolving understanding of the materiality of sustainability and governance and strengthens the argument for integrated, systems-aware investment practice.

Industry groups such as the Principles for Responsible Investment (PRI), the Net-Zero Asset Owner Alliance (NZAOA), and the Network for Greening the Financial System (NGFS) have called for climate and sustainability risks to be integrated into prudential regulation, asset valuation, and fiduciary decision-making. Reports like TIIP's (Re)Calibrating Feedback Loops (2023) argue that investors should view governance and sustainability risks not only through their effect on enterprise value, but also in terms of how their investment behaviours influence systemic environmental, social, and financial outcomes[34].

Influential asset owners are beginning to adopt tools such as systems mapping, policy engagement, and systemic stewardship as a means to manage these complex exposures. For example, Dutch pension fund PGGM and UK-based Brunel Pension Partnership have explored how their investment decisions intersect with social and environmental systems, adopting approaches that blend not just ESG integration but also system-level investing generally, including policy and societal engagement[35]. At Railpen, we have a well-established body of public policy work as part of our systemic stewardship approach, and we've worked to raise awareness amongst other investors of the potential benefits of public policy engagement for achieving system-wide change[36].

29 European Commission, Corporate Sustainability Reporting Directive (CSRD), December 14, 2022.

International Financial Reporting Standards (IFRS) Foundation, International Sustainability Standards Board (ISSB), accessed July 11, 2025.

Sustainability Accounting Standards Board (SASB), Materiality Finder, accessed July 11, 2025.

30 Steve Lydenberg, Portfolios and Systemic Framework Integration: Towards a Theory and Practice, The Investment Integration Project (TIIP), 2015.

31 Principles for Responsible Investment (PRI) and The Investment Integration Project (TIIP), Why and How Investors Can Respond to Income Inequality, 2018.

32 Jon Lukomnik and James P. Hawley, Moving Beyond Modern Portfolio Theory: Investing That Matters (Routledge, 2021).

33 UKSIF (UK Sustainable Investment and Finance Association), Systemic Risks: A Framework for Portfolio Resilience, 2025.

34 William Burckart, Melissa Eng, Jessica Ziegler, and Monique Aiken, (Re)Calibrating Feedback Loops: Guidance for Asset Owners and Institutional Investors Assessing the Influence of System-level Investing, The Investment Integration Project (TIIP), 2023.

35 PGGM, ESG Integration: pggm.nl/en/integrated-report/esg-integration/.

Brunel Pension Partnership, 2024 Responsible Investment and Stewardship Outcomes Report, May 2024.

Brunel Pension Partnership, Climate Change Policy 2023–2030, June 2024.

36 See, for instance, Caroline Escott and International Corporate Governance Network's 2023 ICGN Systemic Stewardship & Public Policy Advocacy Toolkit | ICGN

Implications for pension funds and other diversified investors

Pension funds and other asset owners are exposed to systemic environmental, social, and governance risks due to their diversification, their long-term investment horizons, and the obligation to safeguard intergenerational wealth. As universal owners who manage portfolios so diversified that they effectively own a slice of the global economy, they cannot avoid the impacts of system-wide disruptions. **This unique position gives them the incentive and, arguably, the fiduciary obligation to address sustainability and governance issues at the system level so as to mitigate the drivers of non-diversifiable risk.**

Regulatory norms are shifting

Historically, many investors adopted a passive approach to systemic risks, either doing nothing or relying on exclusion screens or third-party ratings[37]. However, regulatory and societal expectations are a tailwind pushing toward deeper integration. International bodies such as the International Corporate Governance Network (ICGN) and the PRI continue to refine guidance for universal owners.

Stewardship codes in multiple jurisdictions now emphasise systemic engagement, not just company level oversight. In the UK, pension schemes are required to disclose climate-related risks under TCFD-aligned frameworks. The EU's SFDR and taxonomy regulations impose similar obligations across member states[38]. Updated pension directives in Europe explicitly call for trustees to consider long-term environmental and social risks to portfolios[39].

As regulations evolve, particularly in the EU, UK, and Canada, fiduciary standards are increasingly being interpreted to encompass sustainability and system-level risk management[40]. This shift reflects a growing recognition that most of the risk-and-return of large, diversified asset owners – particularly pension funds and sovereign wealth funds – is determined not by single asset selection or portfolio construction, but by the general price level of the markets which, over time, is linked to the health of the broader economy. As Lukomnik and Hawley wrote: "systemic risk, not alpha, drives returns."[41]

Some funds are leading the way. The Brunel Pension Partnership in the UK has developed a climate stock-take to assess alignment between managers and net-zero goals. The Swedish buffer funds (AP1–AP4) have embedded sustainability across asset classes and collaborated on system-level engagement. Australia's Aware Super and Denmark's ATP have likewise prioritised ESG integration, scenario analysis, and stewardship escalation[42]. **Railpen has brought UK and international investors together on policy and company engagement coalitions and campaigns** such as the Investor Coalition for Equal Votes (ICEV) – co-founded with the Council of Institutional Investors (CII) – which focuses on the issue of dual-class share structures and unequal voting rights; the Governance for Growth Investor Campaign (GGIC), which addresses UK governance and shareholder rights policy; and the Workforce Directors Coalition (WDC), which champions worker voice and inclusion in the US and UK markets.

37 See, for example, UN Principles for Responsible Investment (PRI), An introduction to responsible investment: screening and exclusions, October 21, 2024.

World Bank, Incorporating Environmental, Social, and Governance Factors into Fixed Income Investment, April 19, 2018.

Organisation for Economic Co-operation and Development (OECD), ESG Investing: Practices, Progress and Challenges, September 2020.

Alice Ross, Active managers' attacks on sustainable passives miss their mark, Financial Times, February 16, 2024.

38 European Parliament and Council, Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector, Official Journal of the European Union L 317/1, December 9, 2019. data: europa.eu/eli/reg/2019/2088/oj.

European Parliament and Council, Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment, Official Journal of the European Union L 198/13, June 22, 2020: data.europa.eu/eli/reg/2020/852/oj.

39 European Parliament and Council, Directive (EU) 2016/2341 on the activities and supervision of institutions for occupational retirement provision (IORPs), Official Journal of the European Union L 354/37, December 23, 2016: data.europa.eu/eli/dir/2016/2341/oj.

40 Sophie Smith, Groundbreaking' legal opinion provides further clarity on fiduciary duty rules, Pensions Age, June 3, 2025.

41 Jon Lukomnik and James P. Hawley, Moving Beyond Modern Portfolio Theory: Investing That Matters, (Routledge, 2021): 32.

42 ATP, Stewardship 2024: Part of ATP's Responsibility, 2024.

Aware Super, Responsible Ownership, aware.com.au/member/about-us/responsible-ownership.

Brunel Pension Partnership, Climate Change Policy 2023–2030 Summary: A five-point plan to build a financial system which is fit for a low carbon future, 2024.

Sarah Rundell, Sweden's AP Funds Model Sustainable Ownership, Top1000Funds, May 9, 2024.

Lukomnik and Burckart (2025) identified several commonalities among investors with robust climate change programmes, which serves as an example of effective systemic risk management and provides learnings for progress on other issues. They found that these investors adopted several system-level investing practices, including the following:

- Identifying climate risk as having direct financial consequences and opportunities
- Citing a fiduciary duty to respond to the systematic risk of climate change
- Adapting traditional investment tools to be used in responding to climate risk
- Using thought leadership and field building in their climate efforts
- Assigning a senior officer responsible for coordinating and overseeing those efforts
- Acknowledging that precise measurement of the impact of their efforts is difficult, but not allowing that to deter them[43]

Yet challenges persist. Many trustees and asset owners still lack the capacity, tools, or mandates to assess systemic risk. Typical ESG assessments are often focused only on enterprise-level risks rather than both on enterprise-level and portfolio or system-level exposures. Engagement strategies can be fragmented, with limited escalation or accountability for outcomes, or siloed, rather than integrated in a full investment programme.

Fortunately, innovations are emerging. TIIP provides diagnostic tools to help asset owners map their investments to system-level outcomes, from climate stability to inclusive economies[44]. Frameworks like the Impact Management Platform, Future-Fit Business Benchmark, and the UK Stewardship Code (2020 and 2026) support clearer expectations for impact, influence, and governance. And the creation and growth of initiatives like Climate Action 100+, the Investor Alliance for Human Rights, the UK Asset Owner Council[45] and ShareAction's asset owner roundtables signal investor interest in collaboration.

43 Jon Lukomnik and William Burckart, Tools Used by System-level Investors in Their Net-Zero Initiatives, in Investment Innovations Toward Achieving Net Zero: Voices of Influence, ed. Brian Bruce (CFA Institute Research & Policy Center, 2025).

44 The Investment Integration Project (TIIP). Systems Aware Investing Launchpad (SAIL): tiiproject.com/sail/

45 About The Asset Owner Council (AOC) | PRI

III. Universal ownership theory in practice: System-level investing and systemic stewardship

Some 20 years after Hawley and Williams wrote The Rise of Fiduciary Capitalism and defined universal ownership, Hawley and Jon Lukomnik (2021) married universal owner theory with finance theory to argue that traditional investing, based on Modern Portfolio Theory (MPT) alone, is sub-optimal for long-term, diversified investors. At the same time, Burckart and Lydenberg (2021) brought together investing with a systems view of the world. Together, the two books, Lukomnik and Hawley's Moving Beyond Modern Portfolio Theory and Burckart and Lydenberg's 21st Century Investing: Redirecting Financial Strategies to Drive Systems Change built on universal ownership theory and the increased acknowledgement of the materiality of systemic risks to suggest that mitigating those risks is a core part of investing[46].

Lukomnik and Hawley based their systemic focus on what they called the third stage of modern corporate governance. This third phase, roughly coinciding with the rise of universal ownership theory, incorporates sustainability and macroeconomic feedback loops directly into investment practice. They underscored the need to shift from optimising relative returns at the asset level to emphasising total portfolio return by safeguarding the structural integrity of entire markets and improving the overall price level of the capital markets[47].

Burckart and Lydenberg emphasised that universal owners must move beyond conventional ESG screens, responsible investment or impact investment and adopt system-level investment strategies that explicitly aim to influence market dynamics and societal outcomes[48]. They called on investors to recognise that, while important, there are limitations to asset-level performance optimisation and to instead develop strategies that address root causes of systemic risk – such as shifting capital flows, redefining performance metrics, and collaborating to improve the knowledge base and data necessary for more effective systemic stewardship.

What is system-level investing?

System-level investing moves beyond traditional portfolio theory by explicitly considering how environmental, social, and financial systems affect returns.

It operationalises the theory of universal ownership, applying it to a broad range of investment activities, such as integrating into capital allocation, stewardship, research, and regulatory engagement, with the aim of improving the risk/return profile of markets as a whole by positively influencing the systems on which those markets depend.

Systemic issues require systemic solutions. New approaches to stewardship have arisen, from coordinated engagement campaigns and ESG-aligned voting strategies, to active participation in regulatory and policy reform[49]. While system-level investing encompasses all those aspects of modern investing, among the most frequently used strategies has been the expansion of stewardship and engagement from a focus on a single company or single asset to also include a focus on systemic risks across multiple companies, assets or asset classes. However, implementation challenges persist, including inconsistent alignment across investment chains and the difficulty of measuring systemic influence. In regions like the UK and parts of Europe, stewardship practices have become more structured and ambitious, offering valuable contrasts to approaches elsewhere.

46 See, for example, William Burckart and Steve Lydenberg, 21st Century Investing: Redirecting Financial Strategies to Drive Systems Change (Berrett-Koehler Publishers, 2021) and Jon Lukomnik and James P. Hawley, Moving Beyond Modern Portfolio Theory: Investing That Matters, (Routledge, 2021).

47 Jon Lukomnik and James P. Hawley, Moving Beyond Modern Portfolio Theory: Investing That Matters, (Routledge, 2021).

48 William Burckart and Steve Lydenberg, 21st Century Investing: Redirecting Financial Strategies to Drive Systems Change (Berrett-Koehler Publishers, 2021).

49 Jon Lukomnik and William Burckart, Tools Used by System-level Investors in Their Net-Zero Initiatives, in Investment Innovations Toward Achieving Net Zero: Voices of Influence, ed. Brian Bruce (CFA Institute Research & Policy Center, 2025).

Asset owners have been leading the way

Asset owners – including pension funds, sovereign wealth funds, and endowments – have been among the earliest and most influential proponents of this evolving approach. Their leadership is often reflected in their Statements of Investment Beliefs (SIBs), which is optional (unlike a Statement of Investment Principles (SIP) which is mandatory for UK pension schemes of a certain scale) which articulate both the institution's investment philosophy and its understanding of the role markets and systems play in value creation. For system-level investors, SIBs increasingly highlight the importance of healthy environmental, social, and financial systems, the reciprocal influence between investors and those systems, and the need to actively contribute to their long-term resilience.

Railpen and the Trustee of the railways pension schemes have shared Investment Beliefs that exemplify this thinking. The beliefs cite the role of systemic risks, such as climate change, as inherent threats that long-term investors like pension schemes are exposed to. In response, we support active management through capital allocation decisions that dually build portfolio resilience and contribute to positive systemic outcomes. This approach is seen as integral to delivering on our fiduciary duties to beneficiaries[50].

The California State Teachers Retirement System (CalSTRS) has stated its intention to "...be a catalyst in transforming the financial markets to focus on long-term value creation that fully integrates sustainability considerations and uses CalSTRS' influence as a significant global investor to promote sustainable business practices and public policies."[51]

The University Pension Plan (UPP) of Ontario affirms in its investment beliefs: "As a long-term investor, UPP has a responsibility to promote the health of the capital markets and the financial, social, and environmental systems on which capital markets rely."[52]

These institutions, by virtue of their diversified holdings across the global economy, are inherently exposed to the externalities that companies may produce, even while having a vested interest in ensuring the health of the systems in which their assets operate. As a result, these asset owners try to influence systemic outcomes, including company behaviours that externalise costs onto those systems.

Systemic stewardship

Traditionally, stewardship activities – such as corporate engagement and proxy voting – were employed by investors to influence company-level practices and governance structures to enhance shareholder value at a single enterprise. This approach was largely rooted in modern portfolio theory (MPT), which focuses on an individual asset's risk, return and correlation. In other words, the idiosyncratic profile of the asset being considered. However, as markets increasingly moved towards diversified and universal owners, and as scholars and practitioners increasingly recognised the limitations of MPT in addressing systemic risks that affect the risk/return profile of the overall capital markets, the concept of systemic stewardship began to take shape[53].

Universal owner theory provides a compelling rationale for investors to address systemic risks through stewardship (and other system-level investing tools beyond the scope of this literature review, such as adapting manager selection and monitoring to align with system-level investing goals). Ellen Quigley's work on universal ownership has been influential in articulating this theory[54]. In her 2019 (revised 2022) paper, Quigley argues that universal owners cannot afford to ignore systemic risks such as climate change and social instability because these risks affect all sectors of the economy. Rather than merely divesting from risky firms, she suggests universal owners must engage in systemic stewardship – working to reform the rules, norms, and institutions that govern markets. This may include efforts to standardise ESG metrics, promote responsible corporate lobbying, or align fiduciary duty with sustainability goals[55].

50 Railpen, "Our Investment Beliefs." 2025

51 CalSTRS, Sustainable Investment & Stewardship Strategies Program and Portfolio Policy, July 2021.

52 University Pension Plan (UPP), "Leading with sustainability," myupp.ca/investments/responsible-investing/.

53 The UK Sustainable Investment and Finance Association's (UKSIF) three-part framework for portfolio resilience (detailed on page 12 of this report) echoes this emphasis on stewardship as a systemic risk management tool. Rather than focusing solely on corporate behaviour, the framework encourages investors to use stewardship to shape market norms, regulatory environments, and financial system infrastructure. It calls for investor engagement with pre-competitive issues such as ESG data standardisation, fiduciary interpretation, and macro-prudential disclosure rules. This mirrors the practical shift toward stewardship that targets system-wide change rather than firm-level adjustments alone.

54 Ellen Quigley, Universal Ownership in the Anthropocene, SSRN, May 13, 2019: ssrn.com/abstract=3457205.

55 Ellen Quigley and Raj Thamotheram, Universal Ownership in Practice, University of Cambridge Working Paper, 2020.

Unlike traditional stewardship, which targets improvements at the individual company level, systemic stewardship leverages activities such as proxy voting, engagement, and policy advocacy to influence market-wide standards and systemic outcomes. This could include targeting individual companies for their contributions to systemic risks. These tools, when deployed strategically and in coordination, can help investors mitigate systemic risks while enhancing long-term portfolio resilience:

- **Active ownership** involves engagement (including collaborative engagement) with companies, commonly through dialogue, proxy voting, and/or shareholder resolutions. For instance, universal owners frequently push for stronger climate risk disclosures or more inclusive labour practices. Through these engagements, they aim to reduce systemic threats like climate change, and governance failures. Organisations such as Climate Action 100+ exemplify this approach by mobilising investors to collectively press companies to align with climate targets. An important element of many of these active ownership activities is self-organisation; that is, creating improvements in things like disclosure or information sharing which enable stewardship efforts (and broader investing) to be more effective[56]. **Railpen also explicitly includes engagement with "systemically important" companies in its systemic stewardship efforts:** recognising that positive improvements at 'market-making' or high-profile companies can have a disproportionately beneficial impact in encouraging others in the sector to do likewise.
- **Policy advocacy** represents another one of the most direct avenues for shaping systemic outcomes. While historically perceived as outside the remit of institutional investors, advocacy efforts have expanded significantly. Asset owners now routinely engage with regulators and policymakers to push for reforms such as corporate ESG disclosure requirements, appropriate audit regulation, and sustainable taxonomies – tools that help shift market incentives in a direction aligned with long-term stability and mitigate the tragedy of the commons, whereby an individual firm may win by externalising economic costs[57]. The costs imposed on a universal owner's overall portfolio through such externalisation of costs are generally hard to quantify and allocate specifically to that firm, but there is broad consensus that they far outweigh the economic benefit the universal owner will get from the increased enterprise value of that single firm[58]. Moreover, regulators now routinely seek investor input, both through asking for comments on specific issues or regulatory proposals, and through ongoing relationships such as advisory committees[59]. By participating in consultations, serving on regulatory advisory groups, issuing policy statements, and joining coalitions, universal owners seek to influence the rules of the game so that the market rewards sustainable practices rather than externalising costs[60]. Reports from the UN-backed Principles for Responsible Investment (PRI) have documented these activities, underscoring the growing legitimacy of investor voices in public policy debates[61].

Systemic stewardship in action for climate change

These strategies converged in initiatives like Climate Action 100+ and the Net Zero Asset Owner Alliance (NZAOA). Climate Action 100+, launched in 2017, brought together hundreds of investors representing trillions in assets to collectively engage the world's largest greenhouse gas emitters. It has become a flagship example of investor collaboration focused on systemic decarbonisation, asking for not only corporate emissions reductions but also board-level oversight and alignment with the goals of the Paris Agreement.

Similarly, the NZAOA members commit to aligning their portfolios with net-zero emissions targets by 2050. Beyond setting decarbonisation goals, the alliance emphasises real-economy outcomes, such as reductions in financed real-world emissions and engagement with policymakers to facilitate a just transition.

Both illustrate how investors, including universal owners, leverage collaboration to achieve influence at scale.

Climate Action 100+ and the NZAOA persist despite growing resistance to ESG-driven strategies in certain jurisdictions, where some critics argue that ESG focuses too heavily on non-financial goals, potentially at the expense of shareholder value. Such policy moves have led some institutional investors and policymakers to reassess or even retreat from certain governance and sustainability commitments, calling for a more focused approach on traditional concepts of financial returns and fiduciary duty. Climate Action 100+ and the NZAOA reflect an enduring realisation among many investors, not least universal owners, that collaboration and engagement with companies and policymakers remain key tools in addressing challenges that go beyond individual investment portfolios or sectors.

56 William Burckart, Melissa Eng, Jessica Ziegler and Monique Aiken, (Re) Calibrating Feedback Loops, The Investment Integration Project (TIIP), June 2023.

57 European Corporate Governance Institute, Climate Risk Disclosure and Institutional Investors, Finance Working Paper 661/2020, November 2022.

58 See, for example, Fair Progress? Economic Mobility across Generations around the World (World Bank, 2018); Era Dabla-Norris, Kalpana Kochhar, Nujin Suphaphiphat, Franto Ricka, Evridiki Tsounta. Causes and Consequences of Income Inequality: A Global Perspective, International Monetary Fund, 2015; Jonathan D. Ostry, Prakash Loungani, and Andrew Berg, Confronting Inequality: How Societies Can Choose Inclusive Growth. Yale University Press, published in collaboration with the International Monetary Fund. (2019)

59 The FCA periodically appoints advisory groups with investor members. In the US, both the SEC and the PCAOB have standing investor advisory groups.

60 See, for example, Principles for Responsible Investment (2022), A Sustainable Finance Policy Engagement Handbook, November 2022.

61 PRI, Making Voting Count, 2022.

The economics of the returns for systemic stewardship

All this activity begs a question: What is the evidence for the economic return to systemic stewardship? Many have studied the excess returns to stewardship designed to improve the performance of individual companies:

- Becht, Franks, Mayer, and Rossi (2009) found that corporate engagements by pension funds and other institutional investors generated significant improvements in operating performance[62].
- Cuñat, Gine, and Guadalupe (2012) showed that firms engaged by pension funds improved both governance and performance[63].
- A landmark study by Dimson, Karakaş, and Li (2015) documented that successful engagements correlated with positive abnormal returns, suggesting that influencing corporate behaviour can enhance shareholder value[64]. Their follow-up research on coordinated engagements (2021) emphasised the greater success of campaigns that involve multiple institutional investors, pointing to the power of collective action[65].

Universal ownership theory holds that the returns from systemic stewardship should far exceed those from stewardship aimed at a single company, since the benefits of risk mitigation extend across the entire capital market. Yet this breadth also makes quantification more challenging, as there is no 'control' universe left untouched. A rare exception emerged in the US public equity market, where a stop-and-start regulatory effort to grant shareholders proxy access (the ability to nominate directors) created the conditions for a natural experiment. Bhandari, Iliev and Kalodimos (2019) found that the New York City Comptroller's proxy access campaign created, on average, 53 basis points of excess return across 75 targeted companies[66].

Railpen's perspective on company-level stewardship and system-wide issues

Railpen has a well-established programme of engagement with priority companies in our portfolio, based on our heritage as an active, bottom-up investor (and given the majority of its listed equity assets are internally managed). This continues to be an important aspect of our stewardship work.

Railpen has also been developing our theory of systemically-important companies. That is, those companies that are leaders or well-regarded in their field, or jurisdiction. They are the music makers and, where such companies go, others follow. Significant aspects of Railpen's system-wide work therefore focuses on encouraging such companies to, for instance, consider the perspective of investors on unequal voting rights, or develop a more sophisticated approach to workforce relations: The theory of change driving this work is that positive developments at one company can have both disproportionate and beneficial ripple effects at other companies in the same market.

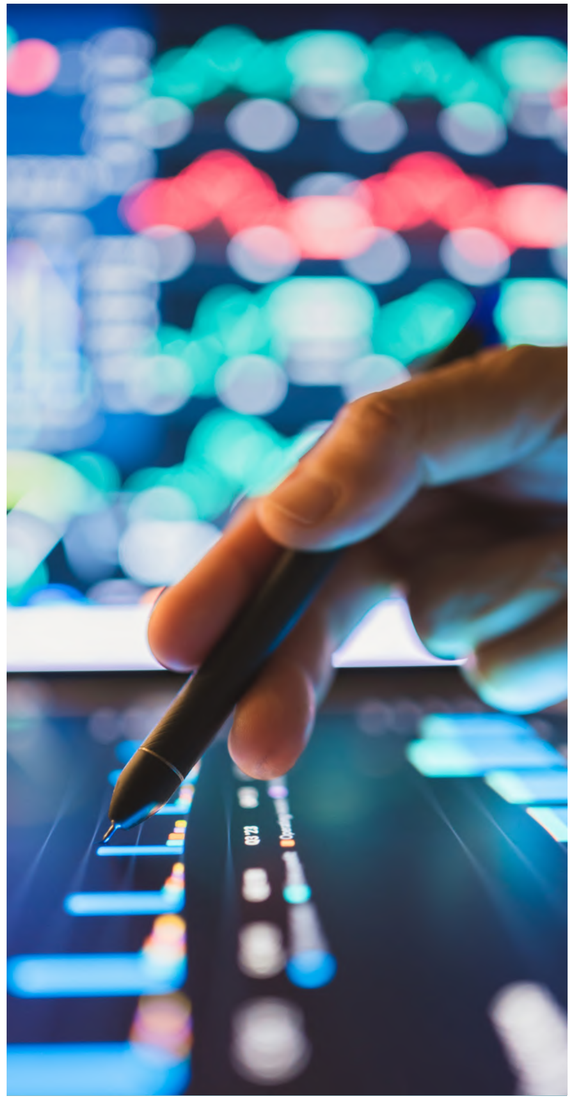
62 Marco Becht, Julian Franks, Colin Mayer, Stefano Rossi, Returns to Shareholder Activism: Evidence from a Clinical Study of the Hermes UK Focus Fund, The Review of Financial Studies, Volume 22, Issue 8. (August 2009)

63 Cuñat, V., Gine, M., & Guadalupe, M. (2012). The vote is cast: The effect of corporate governance on shareholder value. The Journal of Finance, 67(5), 1943-1977.

64 Elroy Dimson, Oguzhan Karakaş, and Xi Li, Active Ownership, Review of Financial Studies 28, no. 12 (2015): 3225–3268.

65 Elroy Dimson, Oguzhan Karakaş, and Xi Li, Coordinated Engagements, European Corporate Governance Institute – Finance Working Paper 721/2021, March 16, 2025: dx.doi.org/10.2139/ssrn.3209072.

66 Bhandari, Tara and Iliev, Peter and Kalodimos, Jonathan, Governance Changes through Shareholder Initiatives: The Case of Proxy Access (February 18, 2019). Fourth Annual Conference on Financial Market Regulation, Available at SSRN: ssrn.com/abstract=2635695 or dx.doi.org/10.2139/ssrn.2635695.



Implementation challenges and innovations

Despite growing consensus on the importance of systemic risk to an investor's returns, system-level investing implementation, including systemic stewardship, remains challenging. While conventional metrics focus on changes in company behaviour or valuation, they do not capture broader systemic outcomes. One obstacle is the difficulty of measuring the effectiveness of systemic stewardship activities, since they affect entire markets or market segments, leaving no control universe for comparison[67]. For institutional investors keen to track such things, it can also be hard to isolate the impact of an individual organisation's efforts as opposed to what has been achieved in combination with others. Efforts are underway to develop new tools and indicators that assess the impact of investor action on climate stability, social equity, and market integrity[68]. Progress is also being made towards integrating these metrics into reporting standards, such as those advanced by the Task Force on Climate-related Financial Disclosures (TCFD) and the EU Sustainable Finance Disclosure Regulation (SFDR).

Innovations are also emerging in engagement techniques and stewardship platforms. The use of AI tools to map corporate lobbying, assess ESG controversies, and simulate policy scenarios is enhancing investor capacity to act on systemic issues. Additionally, new collaborative models – such as engagement alliances and cross-border policy coalitions – are expanding the scope and scale of investor influence[69].

Emerging models for pricing externalities

A recent development in system-level investing is systemically adjusted investment models, which explicitly price the impact of externalities into portfolio decisions. For example, a series of 2024 reports by Ortec Finance calculated the performance drag created by climate change across various institutional investors. They found that for large UK pension funds, climate change, if unaddressed, could decrease financial returns by 30% by 2050[70]. This moves investors toward capital allocation strategies that favour sustainable outcomes at the system level. For example, a systemically-adjusted model might reduce exposure to high-carbon assets not only because of regulatory or reputational risks to individual securities or to the asset manager or asset owner, but because their broader economic impact threatens the health of the investor's entire portfolio.

By embedding system-wide consequences into valuation models and risk analysis, system-level investors can align financial decision-making with their view of systemic risks. Another very new effort (begun April 2025) around quantifying the externalities which may impact portfolio performance is the Externality Investment Research Network (EIRN), a joint academic-practitioner NGO seeking new ways to quantify the impact of corporate externalities on investors' portfolios[71].

67 The Bhandari et al. study is an exception because of the unique circumstances around a legal challenge to a proposed SEC rule followed by a muscular private ordering campaign

68 See, for example, Organisation for Economic Co-operation and Development (OECD), Finance and Investment for Climate Goals, oecd.org/en/topics/finance-and-investment-for-climate-goals.html.

United Nations Environment Programme Finance Initiative (UNEP FI), Adaptation & Resilience Impact: A Measurement Framework for Investors, April 2024.

Sustainable Finance Observatory (formerly 2° Investing Initiative), The Impact Potential Assessment Framework (IPAF) for financial products, March 2023.

Sustainable Finance Observatory (formerly 2° Investing Initiative), Sustainable finance & market integrity: Sustainable Finance Observatory paper identifies critical regulatory gaps, June 7, 2021.

Xiaoxuan Hou, Jiayi Yuan, Joel Z. Leibo, and Natasha Jaques, InvestESG: A multi-agent reinforcement learning benchmark for studying climate investment as a social dilemma, February 10, 2025, doi.org/10.48550/arXiv.2411.09856.

69 See, for example, GaiaLens, "GaiaLens Unleashes AI to Combat Corporate Greenwashing," The Australian, 2024.

Investor Climate Alliances, "Investor Climate Alliances: A Mechanism for Transnational Climate Risk Mitigation," Washington University Law Review, February 25, 2025.

Railpen, 2024 Stewardship Report.

DiligenceVault, "Railpen Selects DiligenceVault to Streamline Their Due Diligence and ESG Data Collection Processes," May 31, 2022.

Caroline Escott and Michael Marshall, "Railpen Builds on 2021 Momentum with Stewardship Report," Railpen, May 3, 2022.

Louis D. Coppola, "Cross-Border ESG Regulations: Navigating the New Age of Disclosure," G&A Institute, October 27, 2023.

70 Ortec Finance, Climate risk assessment – Top 30 UK pension funds, November 2024.

71 Externality Investment Research Network, About us, eirnetwork.org/.

Regional applications and global contrasts

Europe, and the UK in particular, has led the way in embedding systemic stewardship into institutional investment practices. Regulatory frameworks such as the EU Sustainable Finance Disclosure Regulation (SFDR) and the UK Stewardship Code have set clear expectations for investors to consider system-wide risks. Pension funds in the Netherlands (e.g. ABP, PGGM), the UK (e.g. Railpen, Church of England Pension Board, People's Partnership) and Canada (e.g. UPP) have adopted system-wide engagement strategies, advocated for policy reforms, and supported collaborative ESG initiatives[72]. The FRC's 2020 revision of the UK Stewardship Code explicitly called on asset owners and managers to report on how their stewardship contributes to the systemic health of the capital markets. This has encouraged greater transparency and alignment with systemic goals.

In contrast, adoption of systemic stewardship practices has been uneven in some other regions. For example, in North America (and particularly in the United States), fiduciary interpretations generally remain more conservative[73], although large institutions continue their systemic stewardship activities[74].

Legal and fiduciary implications of systemic stewardship

One of the ongoing debates for systemic stewardship relates to whether fiduciary duty permits, or perhaps requires, institutional investors to address systemic risks. This has been the subject of intense scholarly discussion. Some scholars argue in favour of systematic stewardship, suggesting that the duty of prudence and loyalty obligates trustees to take steps to mitigate systemic threats that could undermine portfolio returns[75]. Doing so, they argue, is not only consistent with fiduciary duty but essential to its fulfilment. Others, however, warn that systemic stewardship may conflict with the traditional interpretation of fiduciary obligations[76]. They argue that trustees should focus narrowly on risk-adjusted relative returns and avoid using beneficiary assets to pursue what can be seen as public policy goals.

Critics of this notion contend that it underestimates the extent to which systemic risks are financially material and thus legitimately within the scope of fiduciary oversight.

This legal tension has been partly addressed through evolving regulatory guidance, particularly in the UK and EU. For example, the Financial Reporting Council's (FRC) Stewardship Code 2020 (and 2026) explicitly recognise the role of stewardship in promoting sustainable value[77]. Similarly, the PRI's report, A Legal Framework for Impact (2021), argues that fiduciary duty can and should be interpreted in ways that support ESG integration and long-term systemic risk mitigation[78]. More recently, NatWest Cushon and Eversheds Sutherland have affirmed that a pension trustees' fiduciary duty is "broader than previously understood" as they carefully balance financial and traditionally non-financial factors to meet long-term financial obligations[79].

Globally, although systemic stewardship is more associated with asset owners, a few asset managers have adopted systemic stewardship, including such large global managers as Legal and General Investment Management (LGIM) and BNP Paribas Asset Management (BNPPAM). Their systemic stewardship investment philosophies could easily have been written by an asset owner. As LGIM wrote in 2024: "As a universal owner on behalf of our clients, we take responsibility to seek to address key macro and systemic risks, with the aim of tackling market issues and accelerating progress against complex, global sustainability challenges."[80] BNPPAM notes: "We have seen an increasing demand for meaningful stewardship programmes from both clients and policymakers, with the financial crisis and climate crisis driving the need for effective responses to increasingly complex sets of systemic risks."[81]

72 ABP, ABP Climate Policy 2022-2030: Accelerating investment that makes a difference.

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75 Jeffrey N. Gordon, "Systematic Stewardship," Journal of Corporation Law, European Corporate Governance Institute Law Working Paper No. 566/2021, Columbia Law and Economics Working Paper No. 640 (2022): ssrn.com/abstract=3782814.

76 Edward Rock and Marcel Kahan, "Systematic Stewardship as Fiduciary Duty?" NYU Law and Economics Research Paper No. 22-01 (November 2021, rev. March 2022). ssrn.com/abstract=3974697.

77 Financial Reporting Council, UK Stewardship Code 2020.

78 PRI, UNEP Finance Initiative, Generation Foundation, and Freshfields Bruckhaus Deringer, A Legal Framework for Impact, 2021.

79 Mona Dohle, "UK master trust seeks pension minister's backing to review fiduciary duty," Net Zero Investor, June 3, 2025, netzeroinvestor.net/news-and-views/uk-master-trust-seeks-pension-ministers-backing-to-review-fiduciary-duty.

80 Legal and General Investment Management, Active Ownership 2024, 2025.

81 BNP Paribas Asset Management, Stewardship Policy, July 2019.

Summary

Investment theory has evolved from traditional modern portfolio theory to system-level investing, driven by the concept of universal ownership. Building on foundational work by Hawley and Williams, recent scholars like Lukomnik, Hawley, Burckart, Lydenberg, and Quigley have argued that large, diversified investors, particularly pension funds and sovereign wealth funds, must move beyond optimising individual asset returns to addressing systemic risks that threaten entire markets if they are to maximise returns. This shift recognises that for universal owners, systemic risk, not alpha, drives the majority of returns, since their portfolio performance is fundamentally tied to the health of the broader economy and financial system.

The practical application of this theory has transformed stewardship from a reactive governance function focused on individual companies into a proactive tool for system-wide resilience. **Modern stewardship now encompasses collaborative engagement campaigns, policy advocacy with regulators, and efforts to influence market-wide standards around disclosure and sustainability practices.** Universal owners use these tools not just to improve firm-level performance, but to mitigate systemic threats like climate change, and governance failures that could undermine long-term portfolio stability across all their holdings.

Implementation of systemic stewardship faces ongoing challenges, including difficulties in measuring system-level influence, aligning practices across investment chains, and navigating evolving legal interpretations of fiduciary duty. While Europe and the UK have led the way in embedding these practices, aided by regulatory frameworks like the SFDR and updated Stewardship Codes, adoption remains uneven globally. Nevertheless, innovations continue to emerge, including AI-enhanced engagement tools, systemically adjusted investment models that price externalities into portfolio decisions, and new metrics for assessing both portfolio-level exposure and broader system-level risks such as climate change, biodiversity loss, and social equity.

SECTION 2: NAVIGATING REGULATORY DIVERGENCE TO ACHIEVE SYSTEM-WIDE CHANGE

In this section, we explore the extent to which the regulatory context is supportive for systemic stewardship, and how today the global regulatory environment is fragmenting[82]. In this environment, **we believe the following are imperatives:**

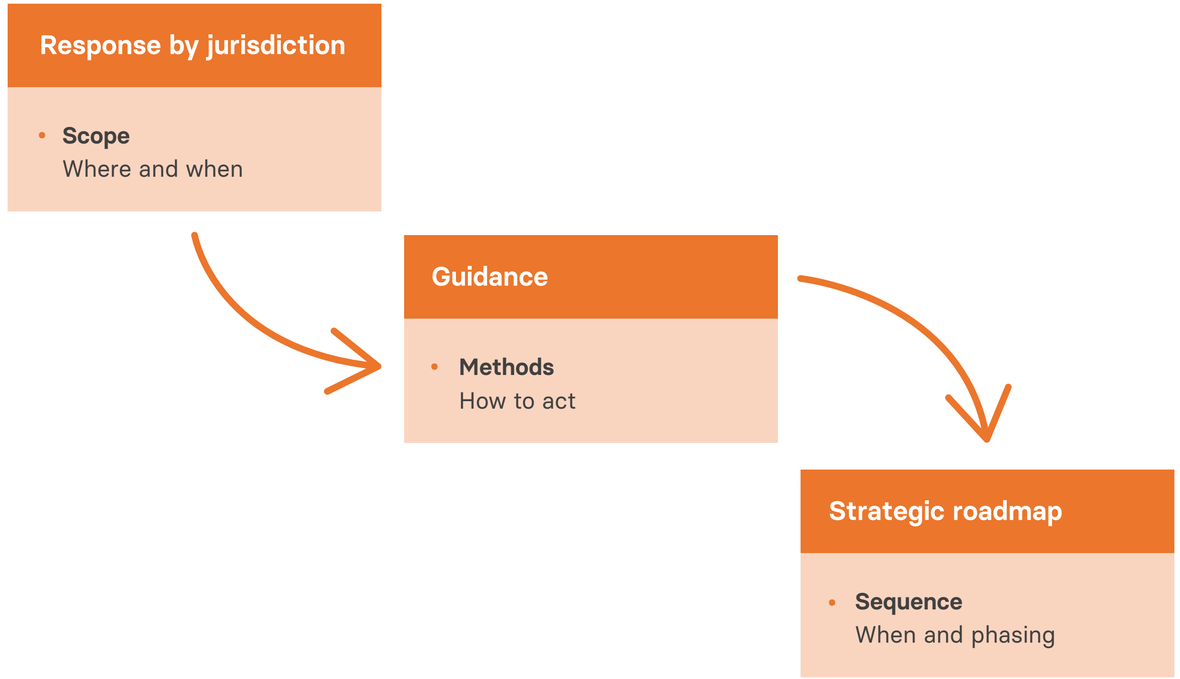
- **Justify by economic rationale and analysis** – investors should anchor all systemic risk engagement in financial materiality and beneficiary outcomes to withstand political challenge.
- **Differentiate by jurisdiction** – apply tailored stewardship strategies that reflect legal realities and political climates, rather than one-size-fits-all approaches.

The divergence in regulatory regimes creates compliance complexity, reputational risk, and tactical constraints, but also an opening for UK-based asset owners in particular to lead globally. The UK's flexible, narrative-driven approach provides an opportunity to build upon previous reporting in a way that helps shape global norms and collaborative frameworks. Although we think that UK asset owners are particularly well-placed to influence given the regulatory background, there are learnings for other asset owners and globally diversified asset managers.

Building on this analysis, we:

- **Provide a 'response by jurisdiction',** defining the scope of where investors can influence
- **Set out 'guidance'** for acting across these different jurisdictions:
  - **Setting up the operating system**
  - **Safeguarding the licence to operate**
  - **Strengthening internal alignment**
  - **Expanding external influence and leadership**
- **Outline a 'strategic roadmap',** which suggests implementation sequences and timing

Together, we think this provides a coherent framework for universal owners to embed and undertake systemic stewardship – linking analysis to strategy, and then execution.



82 Methods & Sources. Section 2 synthesises interview insights (FCA, FRC, PRI, ICGN, SEC, CII, various institutional investors and academics) anchored to primary references in Section 1 (e.g., UK Stewardship Code 2020; UKSIF's 2025 systemic risk framework). Throughout, we prioritise decision-useful guidance; citations are included where specific claims depend on external rules or studies. See Bibliography for full references.

I. Navigating divergent stewardship regimes

Regulatory divergence in the UK, EU, and US is reshaping what systemic stewardship looks like in practice. The same engagement tactic can be encouraged in one jurisdiction, tolerated in another, and problematic in a third, forcing careful consideration of how goals are expressed, tactics selected, and activities characterised. This variability affects company engagement, market-wide policy influence, and collaborative initiatives – the three pillars of systemic stewardship.

We note that the UK, EU, and US are taking divergent paths, but amid the crosscurrents, one theme does emerge: across all three jurisdictions, political actors across the spectrum are tending to become more prescriptive about what pension funds and other investors should or should not do, eroding the historical deference to investor judgment and to fiduciary obligation as determined by a robust process.

Response by jurisdiction

Key developments

UK

- The 2026 revision of the UK Stewardship Code explicitly embeds systemic risk within fiduciary duty, reinforcing that asset owners must evidence how stewardship advances long-term member outcomes.
- The Competition and Markets Authority (CMA)'s guidance on green claims (2021) also raises the bar for credible, substantiated sustainability communications – stating that coordinated activity around environmental goals is unlikely to be a violation of competition law.
- Meanwhile, the UK's Transition Plan Taskforce (TPT) framework (2023) demonstrates the country's capacity for investor–regulator collaborations, creating precedents that can be drawn upon and expanded.
- The Financial Conduct Authority (FCA) remains supportive of investor stewardship. However, recent changes to the UK listings rules (2024) have diluted some important longstanding shareholder rights, making it harder for investors to influence companies (including systemically-important ones) on material issues.

EU

- The Corporate Sustainability Due Diligence Directive (CSDDD, 2024) sets an extended runway for compliance, but its ultimate force will reshape how investors influence supply chains on climate, human rights, and inequality.
- The Commission's Omnibus proposal (2025) reflects political pushback, seeking to limit corporate burdens in the name of competitiveness, which may dilute ambition but still provide levers for targeted stewardship.
- Together, these developments provide opportunities to align systemic risk priorities to binding EU-level frameworks, particularly in workforce and supply-chain contexts.

US

- Overall, the US landscape is becoming increasingly more challenging for systemic stewardship, with the SEC's broadening of group definitions raising the risk of inadvertent regulatory breaches in collaborative engagements.
- At the same time, companies' reliance on exclusion rules for shareholder proposals, coupled with state-level divest/anti-divest mandates, narrows the space for shareholder advocacy on material issues.
- Anti-trust rhetoric further chills coalition-building, while new laws in some states diminish shareholder rights and may limit access to proxy advice[83].
- Some state-level developments, such as California's new laws requiring more climate disclosure (2023), may provide consistent data that informs systemic stewardship activities not just in California or the US, but globally[84].
- This environment requires investors to frame US engagements more purely around financial materiality, document independence in collaborative work, and remain alert to reputational and legal risks.

Why this matters

Jurisdictions are diverging sharply in their regulatory posture toward systemic stewardship and shareowner rights generally. A uniform approach won't work – rather, consistent goals should be pursued and tactics calibrated by jurisdiction.

Table A (next page) distils those differences to help investors tailor strategies by jurisdiction rather than risk a one-size-fits-all approach. Colour-coded circles signal relative opportunity and risk. The suggested response column summarises potentially effective tactics in each jurisdiction. In practice, this serves as the foundation of our guidance – a set of jurisdiction-specific points that link regulatory realities to actionable tactics. This enables trustees and executives to interpret regulatory signals, weigh risks and opportunities, and adapt engagement strategies accordingly.

83 For a summary of developments, see: Jack Grogan-Fenn, "SB 2337 Stunted: Texas Scraps Short-term Efforts to Revive Proxy Advisor Bill" Minerva Analytics, November 26 2025: manifest.co.uk/sb-2337-stunted-texas-scraps-short-term-efforts-to-revive-proxy-advisor-bill/.

Minerva Analytics, "Texas introduces restrictions on small shareholder proposals", May 9, 2025: manifest.co.uk/texas-introduces-restrictions-on-small-shareholder-proposals/.

84 California's SB 261 requires companies with over $500 million in annual revenue doing business in the state to provide biennial disclosures on climate-related financial risks and mitigation strategies beginning this year. In addition, SB 253 mandates that large companies doing business in California report Scope 1, 2, and 3 greenhouse gas emissions starting in 2029. Together, these measures will significantly expand the data available to investors concerned about climate risks in their portfolios.

Table A: Response by jurisdiction

Jurisdiction	Company engagement	Policy engagement	Collaborative engagement	Suggested response
UK	Stewardship Code 2026 recognises systemic risk as fiduciary duty; narrative flexibility for bespoke stories. Some decrease in voting rights at UK-listed companies. 🟢🟠	Regulators open to investor input; legal clarity on financial materiality. 🟢	Collaboration encouraged with transparent roles/objectives; low politicisation risk if framed in financial terms. 🟢🟠	• Leverage UK leadership space • Shape Stewardship Code implementation and model best practice • Regularly respond to exposure drafts; establish and continue ongoing relationships with key regulators and departments, volunteer and serve on regulatory advisory boards • Form and lead collaborative efforts; use collaborative organisations to issue thought leadership reports that resonate within and beyond the UK • Continue to advocate for robust shareholder rights mechanisms and sensible corporate governance standards
EU	CSDDD/Taxonomy create disclosure, but likely for fewer companies due to reduced scope. 🟢🟠	Strong frameworks; competitiveness politics may slow roll-out. 🟢	Collaborations impactful but risk overreach tied to prescriptive mandates. 🟠	• Use CSDDD leverage for supply-chain and inequality engagement • Manage compliance load. Leverage work of ICGN, EU asset owners and others to monitor developments at systemic risk, policy and individual company levels
US	SEC 13D/13G interpretations raise cost/complexity; political pressure narrows flexibility. New laws in some states create barriers to shareholder proposals and to receiving proxy advice. 🟠🔴	Federal gridlock; reputational targeting risk; state mandates influence agendas. 🟠	High legal/political risk; SEC interpretation of group status chills coalition work. 🔴	• Maintain targeted, financially anchored engagements • Document autonomy where collaborations occur • Proactively engage with companies and with private equity sponsors with regard to listing jurisdiction preferences • Consider shifting to policymaker engagement to help raise standards at all companies, though recognising the prevailing political environment

II. Setting up the 'operating system' for systemic stewardship

Systemic stewardship is only as effective as the organisational and operational infrastructure behind it. We consider there to be **four cross-cutting capabilities that form this "operating system"**, enabling investors to deliver high-impact, jurisdiction-sensitive stewardship, and we recommend that investors work carefully to strengthen these factors to embed a truly long-term approach:

1. **Legal framework**
2. **Coalition communication**
3. **Technology integration**
4. **Internal integration**

1. Legal framework – embedding fiduciary clarity

Anchor systemic stewardship in fiduciary duty to protect member outcomes, even under shifting political and regulatory pressures.

Initial efforts (0-12 months)	Leading practice (1-3 years)
• Document the materiality of climate, inequality, technology, demographic risks and corporate governance in relation to long-term returns[85]. • Align with Financial Markets Law Committee guidance affirming that sustainability risks can be treated as financially material[86].	• Integrate long-term risk scenarios into all investment decision processes.

2. Coalition communication – safeguarding existing collaborations

Preserve the ability to engage in joint action while avoiding political or legal vulnerabilities, particularly in US and EU contexts.

Initial efforts (0-12 months)	Leading practice (1-3 years)
• Establish clear protocols documenting individual decision-making autonomy in collaborative engagements. • Rotate/share coalition leadership and spokesperson roles to enable other investors to be visible as part of coalition leadership. Ensure legal files (see 1. Legal framework, above) include the various legal opinions supporting collaborative engagement. • Seek external legal advice from jurisdictional experts, where necessary.	• Develop outcome-focused coalition charters that align with financial materiality, not on policy or political goals in and of themselves. • Create pre-approved communication rules that balance transparency with legal risk management.

85 Railpen has a well-established approach whereby research on the materiality of issues under consideration is undertaken before further resource is dedicated to influencing. See, for instance, its 2024 Acting on Audit report with Governance Perspectives Limited, or the 2023 Investor Coalition for Equal Votes report with Chronos Sustainability: Undermining the Shareholder Voice: The Rise and Risks of Unequal Voting Rights.

86 Financial Markets Law Committee, Pension Fund Trustees and Fiduciary Duties: Decision-making in the context of Sustainability and the subject of Climate Change, February 6, 2024.

3. Technology integration – scaling stewardship capacity

Use technology to ensure stewardship experts' resource is set aside for the high-value, high-complexity stewardship work.

Initial efforts (0-12 months)	Leading practice (1-3 years)
• Deploy AI-assisted tools for governance and sustainability data analysis. • Automate monitoring of portfolio company commitments and reporting deadlines.	• Apply predictive analytics to flag emerging systemic risks earlier than traditional reporting cycles. • Build a digital platform for real-time collaboration between stewardship and investment teams.

4. Internal integration – breaking silos

Ensure stewardship insights inform all asset classes and investment decisions.

Initial efforts (0-12 months)	Leading practice (1-3 years)
• Formalise business partnering models between stewardship and portfolio management teams. • Provide systems thinking training to staff in investment, risk, and stewardship functions. • Create opportunities for cross-functional information sharing about what different areas are seeing/doing vis-à-vis systemic risks.	• Embed stewardship criteria in all investment approvals and monitoring processes across all asset classes. • Create cross-functional groups for systemic risk oversight with authority to flag issues and suggest adjustments to investment strategy.

III. Safeguarding the licence to operate: Risk management & compliance considerations

Navigating systemic stewardship across multiple jurisdictions requires more than technical compliance – it demands a proactive, integrated strategy to manage legal, political, and reputational risk. Investors' ability to act decisively on systemic risks depends on maintaining three interlocking capabilities:

1. Political & legal risk mitigation
2. Regulatory monitoring & adaptation
3. Performance measurement & accountability

These capabilities form the guardrails for all stewardship activities, ensuring that decisions are financially grounded, compliant across jurisdictions, and demonstrably adding value. They also reduce the risk of distraction or retreat in the face of political challenge, regulatory change, or media scrutiny.

1. Political & legal risk mitigation

Anticipate and defuse challenges to stewardship activities before they escalate into compliance or reputational issues.

Initial efforts (0-12 months)	Leading practice (1-3 years)
• Frame all engagement on systemic risks in financial terms tied to relevant outcomes (value, not values). • Use pre-vetted communication templates for high-risk jurisdictions (notably US amber/red areas in table A). • Keep contemporaneous legal documentation for coalition work and company engagements with heightened risk.	• Develop an internal rapid response protocol for political or legal challenges. • Create a cross-functional risk review group to vet emerging stewardship opportunities against jurisdictional constraints.

2. Regulatory monitoring & adaptation

Detect and respond to regulatory changes before they materially constrain stewardship strategy.

Initial efforts (0-12 months)	Leading practice (1-3 years)
• Establish a regulatory intelligence dashboard or other system tracking shareowner rights, stewardship, and systemic risk regulation across key jurisdictions. • Assign named owners to monitor each jurisdiction (UK, US, EU). • Maintain and strengthen relationships with corporate governance membership organisations like the ICGN and CII. Seek early intelligence on any proposed regulatory or legislative changes to thematic priorities. • Use proxy advisor(s) and legal monitoring capacities. • Engage early in regulator consultations – building credibility and influence, particularly in the UK where regulators have expressed openness to asset owner input.	• Conduct annual scenario planning on potential regulatory shifts (e.g., US tightening of proxy advisor rules; EU CSDDD scope changes). • Create research, events and other advocacy to remind regulators and policymakers why UK governance is a touchstone worldwide and why the current emphasis on competitiveness cannot be allowed to create a race to the bottom. • Create an AI tool to automatically scrape news feeds for regulatory threats/opportunities on a weekly basis.

3. Performance measurement & accountability

Demonstrate the real-world impact of stewardship to members, regulators, and coalition partners.

Initial efforts (0-12 months)	Leading practice (1-3 years)
• Focus on outcomes (changes in corporate behaviour, market standards) rather than inputs or activity counts. • Set up KPIs for priority workstreams and projects.	• Publish an annual impact dashboard or other reporting linking stewardship activities to member value creation and systemic risk mitigation. • Incorporate impact findings into beneficiary communications and regulatory reporting to reinforce fiduciary alignment.

IV. Strengthening internal alignment

Over time, addressing systemic risks and pursuing system-level investing requires moving beyond the remit of just stewardship teams to aligning across the whole organisation, including investment beliefs, capital allocation, day-to-day practice and public positioning. Once the operating system has been set up, and a proactive approach to compliance undertaken, we suggest here some further internal alignment actions to integrate the ideas from elsewhere in the report into a disciplined overall approach[87]. Done well, this will strengthen internal coherence, build stakeholder confidence, and both deepen and broaden influence.

Aligning internal operations

A. Refining investment beliefs to provide a strategic foundation

- UK pension funds, where required, should consider adding a statement to the Statement of Investment Principles or SIP (for other investors outside of the UK, the equivalent would be a Statement of Investment Belief) that makes explicit the economic trade-offs that arise when short-term performance (in effect an alpha consideration) conflicts with long-term system stability (a beta consideration). Clarify how fiduciary duty entails pursuing a financially grounded path to protect the total portfolio. Linking this directly to the 'legal framework' recommendations in this report (see page 25) would help internal and external stakeholders see the fiduciary spine underpinning any situational narrative.

The statement could:

- Update beliefs to name the investors' full set of relevant systemic exposures and priorities.
- Add a short decision rule preface: When systemic risk evidence is material and time-bound, escalate stewardship and adjust mandates to preserve portfolio-wide value – and explain this in Stewardship Code (or equivalent) reporting. In practice, this ensures that teams are aligned, across all asset classes, around systemic risk priorities.

B. Considering portfolio construction and asset allocation

- System-level intent should extend across all asset classes, although this need not happen all at once. Other investors have found that adopting a systemic risk lens also surfaces systemic opportunities – particularly in private equity, infrastructure, fixed income, and private debt.
- Multi-asset investors should embed escalation criteria and reporting for all asset classes. Use the Responsible/Accountable/Consulted/Informed (RACI) framework[88] so stewardship isn't siloed from capital allocation.
- They should also consider embracing stewardship across asset classes, for example (where relevant):
  - expanding fixed-income stewardship and covenant asks and describe those efforts in Stewardship Code reporting
  - using leverage with private equity sponsors to encourage good governance in pre-IPO decisions, including voting rights, executive compensation policies and listing jurisdiction

87 Note: This section draws on the literature reviewed in Sections 1 and 2 so far, and interviews conducted in July 2025 with representatives from the FCA, FRC, PRI, ICGN and CII.

88 The RACI framework defines the roles of all stakeholders, serving as the baseline of the communications plan by stipulating who receives information, how frequently, and at what level of detail. See: projectmanagement.com/wikis/234008/raci#_

C. Breaking down internal silos and formalising business partnering

- Investors could consider establishing a cross functional Systemic Risk Oversight Committee or other form of internal grouping (with subcommittees or working groups as needed). Its mandate could include: (1) approving annual systemic risk priorities; (2) setting specific policy asks; (3) reviewing KPI progress; and (4) initiating escalation when milestones slip. Membership might include representatives from Stewardship, Portfolio Management, Risk, Legal, and Communications teams.
- The committee should have authority to escalate issues to relevant departments, which would be required to respond promptly under a 'comply or explain' framework. This could be a sub-committee of a main investment committee.

V. Expanding external influence and leadership

Asset owners in the UK (and to a certain extent elsewhere) have an opportunity to lead on systemic stewardship, given the supportive regulatory framework and leadership already demonstrated by certain pension funds. As pension funds consolidate and scale, this will provide additional opportunities for resource to be dedicated in a thoughtful way to system-level investing and stewardship. Alongside greater internal alignment, universal owners should seek to undertake 'field building', with those organisations who have the most significant resources also committing to a leadership role in the industry, working with peers, companies and policymakers for greater system-wide impact. 'Field building' is a strategy whereby investors seek to influence the "fields" in which companies are embedded[89]. In this context, this could involve creating shared knowledge, standards, and collaborative practices to influence systemic outcomes.

A. Undertaking coalition leadership and field building

- Coalition work is both necessary and scrutinised. We recommend documenting autonomy and employing outcome-focused charters tied to financial materiality to help safeguard cross-border collaboration while signalling prudence to regulators and beneficiaries.
- Pension schemes and other investors should seek to build coalition capabilities beyond mature themes of climate and governance.

B. Policy advocacy and regulatory engagement

- We recommend calibrating tactics by market, keeping the focus on risk-and-return impact rather than impact for its own sake. Where opportunities exist – primarily in the UK and EU – engage early in legislative and policy consultations.
- When policy wins are achieved, investors should demonstrate the through line from coalition engagement to regulatory adoption, to the share of portfolio revenues affected, and ultimately to quantified financial relevance.

C. Peer influence and industry leadership

- Investors should help others become more effective allies, publicising system-level practices and thereby converting them into shared best practice.
- To maximise influence, investors should provide open guidance, consider secondments from and to other leading system-level investors, and consider speaking at system-level investing events.

A strategic implementation road map for investors

The roadmap translates the capabilities outlined on the previous pages into a sequenced, accountable plan. It connects what investors need to achieve with how and when to achieve it, tying each action back to the relevant section of our guidance.

Actions are grouped into three time horizons to ensure immediate priorities are addressed while building momentum for medium-term integration and long-term global leadership. This structure provides both a decision-making and scrutiny tool for trustees and a delivery framework for investors' internal teams. See tables B, C, and D.

89 Marti, E., Fuchs, M., DesJardine, M.R., Slager, R. and Gond, J.-P. (2024), The Impact of Sustainable Investing: A Multidisciplinary Review. Journal of Management Studies., 61: 2181-2211: doi.org/10.1111/joms.12957

Table B: 0-12 months - foundational building

Setting up the operating system

Action
2026 Stewardship Code preparation

Description
Draft 2026 narratives demonstrating systemic risk integration and value creation.

Action
Coalition strategy review

Description
Audit collaborations for US legal exposure; implement documentation protocols.

Action
AI governance framework

Description
Develop AI oversight policy for portfolio companies.

Action
Internal integration assessment

Description
Map current stewardship–investment coordination; identify quick wins.

Safeguarding the licence to operate

Action
Political & legal risk protocol

Description
Create pre-vetted messaging, document protocols for high-risk jurisdictions.

Action
Protecting core governance functionality

Description
Map threats to shareholder rights, audit integrity, and disclosure standards (UK, EU, US); join and strengthen governance networks (ICGN, CII); deploy AI-based monitoring for regulatory/legal developments; document economic rationale for governance protections.

Action
Regulatory intelligence dashboard

Description
Launch tracking system for UK/US/EU regulatory changes.

Action
Impact baseline development

Description
Identify current outcome-level metrics for stewardship themes.

Table C: 1-3 years - scaling & integration

Setting up the operating system

Action
Technology platform development

Description
Deploy AI-assisted tools for monitoring, analysis, predictive alerts.

Action
Annual impact dashboard

Description
Add stewardship outcomes linked to systemic risk mitigation to regulatory and voluntary existing reports.

Safeguarding the licence to operate

Action
End beneficiary engagement strategy

Description
Communications linking stewardship to long-term value.

Action
Annual scenario planning

Description
Model regulatory change pathways; prepare contingency strategies.

Action
Rapid response protocol

Description
Establish cross-functional team to handle political/legal challenges.

Strengthening internal alignment

Action
Systemic risk integration

Description
Embed systemic priorities e.g. climate and tech risk in all investment decisions.

Action
Engagement across other asset classes (if relevant)

Description
Expand stewardship into e.g. debt markets; influence bond covenants/use of proceeds.

Expanding external influence and leadership

Action
Innovation partnerships

Description
Formalise collaborations (e.g. climate models, AI risk labs).

Action
Core governance functionality

Description
Lead or co-lead coalitions on core governance issues; prepare shovel-ready legislative/regulatory proposals; embed governance KPIs into stewardship dashboards; launch cross-functional working group.

Table D: 3-5 years - thought leadership & global influence

Safeguarding the licence to operate

Action
Outcome measurement maturity

Description
Advance real-world impact metrics tied to long-term risk horizons.

Action
Continuous impact reporting

Description
Integrate stewardship outcomes into stakeholder reporting cycles.

Expanding external influence and leadership

Action
Protecting core governance functionality

Description
Publish thought leadership on economic costs of weakened governance; become more involved in global fora (ICGN, OECD, PRI); embed governance permanently as a systemic risk priority; demonstrate portfolio-level linkages to member outcomes.

Action
Coalition development for new risks

Description
Build frameworks to detect under-addressed or emerging risks, as well as risks at the intersection of existing priorities (e.g. migration, demographic shifts).

Action
Institutional innovation case study

Description
Publicise best-practice models for integrated systemic stewardship.

Action
Regulatory engagement influence

Description
Become trusted adviser to UK/EU regulators on systemic stewardship policy.

Action
Regulatory leadership & alliances

Description
Shape UK/global stewardship norms; partner with aligned organisations.

CONCLUSION

Systemic stewardship is increasingly moving from the periphery to the heart of investment practice, driven by the recognition that the long-term health of portfolios is inseparable from the health of the systems in which they are embedded. **As this paper has shown, universal owners – by virtue of their scale and diversification – are uniquely exposed to systemic risks and uniquely positioned to address them.** The evolution of regulatory frameworks, particularly in the UK and EU, has both clarified and expanded the fiduciary responsibilities of asset owners, while also highlighting the need for careful navigation of divergent global regimes.

Yet, the journey from theory to implementation is neither linear nor complete. Investors must continue to build internal capabilities, foster cross-functional collaboration, and develop robust mechanisms for measuring and reporting the impact of their stewardship activities. The operating system for systemic stewardship – anchored in legal clarity, coalition communication, technological integration, and organisational alignment – will be essential for translating ambition into action. By institutionalising this cadence, and anchoring it in fiduciary clarity, investors can extend their focus on mitigating systemic risks into portfolio construction, daily decision-making, and its external voice. There exists a clear opportunity to set a durable standard for universal ownership in practice.

The challenges are significant: political headwinds, measurement difficulties, and the ever-present risk of fragmentation. But so too are the opportunities. Asset owners who act decisively, tailoring their strategies to local realities while maintaining a clear focus on long-term value creation, will not only protect their beneficiaries but also help to shape the next generation of global stewardship standards.

Ultimately, the future of investment stewardship will be defined not by those who wait for certainty, but by those who lead with conviction – because in a world of systemic risks, the greatest risk is standing still.

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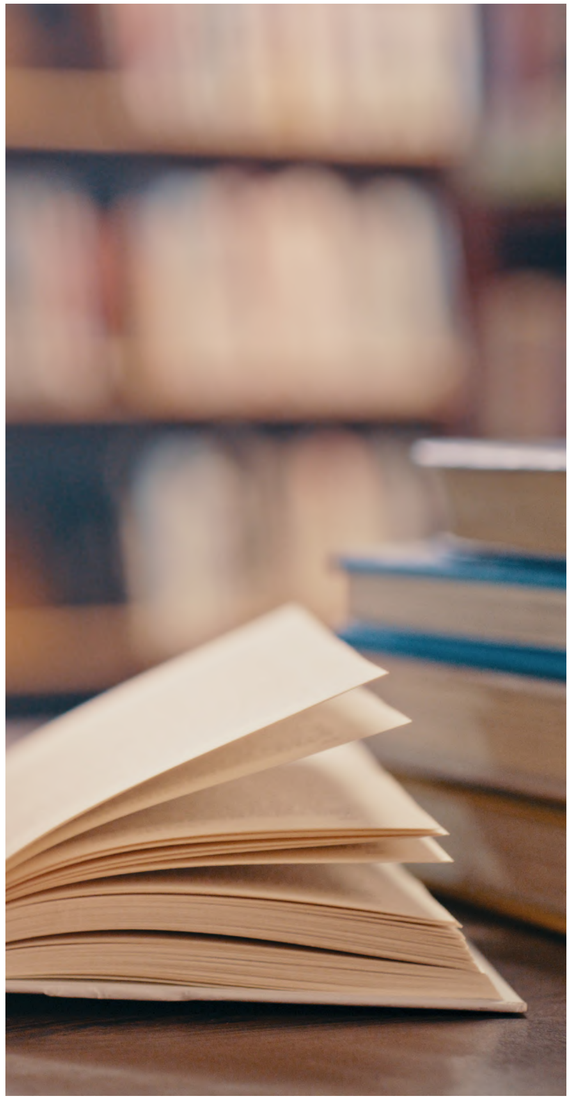

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AUTHORS AND ACKNOWLEDGMENTS

Authors:

This report has been prepared by **William Burckart** and **Monique Aiken** (of TIIP), **Jon Lukomnik** (of Sinclair Capital) and **Caroline Escott** and **Shane McCullagh** (of Railpen).

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7 Devonshire Square, London, EC2M 4YH
SO@railpen.com

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