

Ensuring Fair Pay: The Role of Impact Investors in Living Wage Negotiations

Applying Game Theory to Wage Negotiations in the Private Sector

MSc Thesis
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Ensuring Fair Pay: The Role of Impact Investors in Living Wage Negotiations

Applying Game Theory to Wage Negotiations in the Private Sector

by

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Preface

With the completion of this thesis, I conclude the final chapter of my master's programme in Engineering and Policy Analysis at TU Delft. It has been a journey through a programme known for its broad, interdisciplinary approach – a quality that opens countless doors, but also makes it difficult to find a path that truly suits you. Choosing the right topic felt like both a challenge and an opportunity.

I first discovered the subject of this thesis via the university's graduation platform. It immediately caught my attention, especially in comparison to the more technical subjects I was used to seeing. The idea of a living wage really appealed to me. I believe that everyone who works should at least be able to meet their basic needs. I have never been able to accept the idea that some people are underpaid so that others can benefit from lower prices. That conviction gave this research a personal meaning that kept me motivated throughout the entire process.

My time as a student in Delft did not always go smoothly. Like many others, I experienced the consequences of COVID-19: isolation, uncertainty and changes in how we study and interact with others. In addition, I suffered a serious concussion in 2020, from which I am still recovering. These challenges made this process more difficult than I had ever imagined. That is why completing this thesis feels like more than just an academic milestone to me – it is also a personal milestone.

I owe a great deal of thanks to the people who supported me throughout this process.

To my first supervisor, Ellen Minkman — thank you for your steady support and encouragement. Even with your packed schedule, you always made time for this project, and your guidance helped shape it with clarity and purpose. I'm also very grateful to Cees van Beers, whose sharp feedback and professional perspective strengthened both the structure and the substance of this work.

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To my friends and family, thank you. Thank you for being there during the tough moments, for your patience when I wasn't always present, and for believing in me even when I doubted myself. A special thanks to my parents, who have always given me the freedom to find my own way, without pressure to follow anyone else's.

Finally, to anyone reading this thesis: I hope it draws attention to a subject that too often goes overlooked. If it encourages you to pause, to reflect, or to ask new questions, then it has done what I hoped it would do.

*Emiel Gemke
Delft, June 2025*

Executive Summary

Opening Problem Statement

In today's global economy, millions of full-time workers remain unable to afford basic necessities such as food, housing, or healthcare. The gap between actual earnings and a living wage—a wage sufficient to live with dignity—is not only a social challenge, but also an ethical imperative. This study examines how impact investors, who pursue positive social outcomes in addition to financial returns, can influence companies' wage policies. The study focuses specifically on their potential to promote the introduction of living wages within portfolio companies.

Context and Gap

Although the concept of a living wage has gained international support, including from the ILO and the UN Sustainable Development Goals, its practical implementation remains limited. Most companies continue to pay only statutory minimums, often falling short of subsistence levels. Meanwhile, impact investing has expanded as a form of capital mobilisation for sustainable goals, yet it remains unclear how investors can translate their social intentions into enforceable wage improvements. This study addresses that gap by examining the practical tools and strategies required to align financial mechanisms with living wage outcomes.

Objective and Research Question

The research investigates how and under what conditions impact investors can promote the adoption of living wages in investee firms. It addresses the following research question:

How can impact investors effectively negotiate and realise living wage commitments in private sector projects, based on insights from an ex-post case study?

To answer this, the study uses a mixed-methods design. Analysing a real-world case in the agri-food sector, the study combines empirical analysis with a formal game-theoretic model to examine the strategic dynamics between investor and investee. The aim is to clarify how engagement tactics and financial incentives can be structured to bridge the implementation gap.

Methodology Overview

The research draws on an ex-post case study of an agri-food investment led by a European impact investor. Semi-structured interviews were conducted with investor representatives, company managers, and subject-matter experts to map the negotiation process around wage commitments. These insights were then formalised into a principal-agent game-theoretic model, allowing for systematic testing of alternative incentive structures, such as contractual triggers or performance-linked loan conditions. This mixed-method approach ensures that abstract modelling remains grounded in a real-world context.

Key Insights

The investor combined relational engagement with enforceable contractual tools. Dialogue and trust-building opened space for negotiation, but binding clauses ensured follow-through. The study identifies three conditions for effective implementation.

First, the investor and company must agree on a clear living wage target from the outset. Second, wage increases should be phased, with defined milestones to help manage the financial impact. Third, engagement must follow a structured sequence: establishing legitimacy through evidence and stakeholder input, applying leverage via enforceable terms or financial incentives, and introducing deadlines to create urgency. When these elements aligned, the company had a strong incentive to comply.

Two financial tools played an especially effective role:

- **Impact-linked loans**, which reduced interest rates when companies met wage benchmarks.
- **Strict-adherence clauses**, which defined non-payment as a contractual breach.

Both mechanisms reshaped the company's payoff structure, making compliance the rational business choice. In short, while trust and transparency enable cooperation, they are not sufficient on their own. Only when paired with well-designed financial incentives can investor commitments to fair pay lead to measurable outcomes.

Conclusions

Impact investors can play a pivotal role in closing the gap between ethical intent and wage outcomes—but only when they actively integrate social objectives into the financial architecture of their deals. While they may use moral persuasion and relationship-building to lay the groundwork, these strategies alone do not suffice. Investors must operationalise impact through enforceable mechanisms such as contracts, pricing structures, and performance-based incentives. By coherently aligning these tools, they embed social goals within corporate strategy rather than treating them as external add-ons.

Actionable Recommendations

Impact investors should embed living wage targets directly into investment agreements to translate intent into enforceable outcomes. A clear benchmark, based on local living costs, must be agreed upon and supported by transparent monitoring clauses.

Investors should tie finance directly to performance. This includes:

- **Incentives:** such as interest-rate rebates when companies meet wage milestones.
- **Penalties:** such as applying funding holdbacks or enforcing breach clauses when companies miss targets.

Investors should phase in wage increases over time, using interim benchmarks to help companies adjust gradually. They must maintain consistent oversight and remain ready to enforce terms when companies fail to meet commitments. Collaboration enhances influence; investors can amplify leverage and reinforce expectations by acting through coalitions or working with other stakeholders. Policymakers also contribute by setting clear benchmarks and disclosure standards that support contract design and strengthen the enforceability of wage commitments. The goal is simple: make paying a living wage both a legal obligation and a strategic advantage.

List of Abbreviations

CSDDD	EU's Corporate Sustainability Due Diligence Directive.
CSR	Corporate Social Responsibility.
CSRD	Corporate Sustainability Reporting Directive.
EPA	Engineering and Policy Analysis.
ESAP	Environmental Social Action Plan.
ESG	Environmental, Social, and Governance.
GT	Game Theory.
ILL	Impact-Linked Loans.
ILO	International Labour Organisation.
LI	Living Income.
LW	Living Wage.
MW	Minimum Wage.
NGO	Non-Governmental Organizations.
OECD	Organisation for Economic Cooperation and Development.
P-A	Principal-Agent.
PLWF	Platform Living Wage Financials.
SDG	Sustainable Development Goals.
SPE	Subgame Perfect Equilibrium.
SPNE	Subgame-Perfect Nash Equilibrium.
SRI	Socially Responsible Investment.

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1

Introduction

“Everyone who works has the right to just and favourable remuneration, ensuring for himself and his family an existence worthy of human dignity.”

— Universal Declaration of Human Rights, 1948

Despite record levels of global wealth, more than 240 million people remain trapped in working poverty, unable to meet basic costs for food, housing, healthcare, or education [93]. This disconnection between economic growth and income security directly challenges the foundational principle of fair remuneration, as articulated in the Universal Declaration of Human Rights. The concept of a Living Wage (LW) gives this principle operational meaning: a wage that meets essential needs and provides a modest buffer for unforeseen costs, calculated from local cost-of-living data rather than political compromise or statutory minima [5].

Currently, wage-setting mechanisms fall significantly short of the LW benchmark. Minimum Wages (MWs) in many countries are influenced more by political considerations than by subsistence-level data, often remaining well below LW thresholds [14, 24]. The consequences are structural: low-paid workers remain trapped in poverty, with the burden falling disproportionately on women and youth. Young people are nearly twice as likely as adults to live below the poverty line despite working full time, driven by job insecurity and wage discrimination in entry-level roles [30]. Gender wage gaps are also widest in economies where statutory wages deviate most from the LW benchmark [30]. The risks extend beyond poverty. Empirical research consistently links sub-LW wages to heightened vulnerability to exploitation, including forced labour and abuse in global supply chains [61]. Ensuring LW payment is not only a social or economic goal but a prerequisite for safeguarding fundamental labour rights. These concerns are reflected in multiple Sustainable Development Goals (SDGs), notably SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reduced Inequality) [93].

While multinational corporations increasingly pledge support for LW principles, such commitments often remain unenforced. Voluntary codes of conduct rarely translate into substantive wage improvements, particularly in outsourced or informal employment segments [96]. Structural incentives discourage meaningful implementation: governments in export-oriented economies may suppress wage growth to attract investment [2, 89], while corporations use fragmented supply chains to minimise labour costs [29], where regulatory enforcement is frequently weak or absent [40].

Historically, trade unions and public institutions have driven wage reforms [31, 9]. However, shifts in global finance have introduced new actors to labour governance. One group—impact investors—explicitly seeks to generate measurable social benefits alongside financial returns. Unlike mainstream Environmental, Social, and Governance (ESG) investors, who often rely on exclusion criteria or portfolio tilts, impact investors deploy capital to influence corporate behaviour through active engagement, conditional financing, and performance-linked contracts [46]. This positions them, at least theoretically, as potential agents of change in wage-setting practices. By tying capital to social performance, they could help hard-wire LW principles into investment structures [92]. However, persistent gaps remain between stated intentions and outcomes. Many firms adopt the language of social responsibility without changing their labour practices—engaging instead in “purpose-washing” strategies that yield

reputational benefits while avoiding structural reform [60, 81, 75].

This study examines how impact investors can convert financial leverage into enforceable wage improvements. The focus lies on investment design: how firm-level financial conditions shape decisions, and which engagement strategies are most likely to close the implementation gap. To explore this, the research draws on an *ex-post* case study of an agri-food investment led by a European impact investor. Through semi-structured interviews with both investor and company representatives, the study maps key objectives, constraints, and bargaining strategies. These insights inform a game-theoretic model, grounded in P-A theory, which formalises how power asymmetries, incentive structures, and definitional ambiguities influence negotiation outcomes. Rather than assessing success or failure in absolute terms, the study focuses on the strategic mechanisms through which wage-setting is contested and enforced. The following central research question guides this research:

How can impact investors effectively negotiate and realise living wage commitments in private sector projects, based on insights from an ex-post case study?

This research centres on a private-sector investment in a lower-middle-income country facing significant socio-economic challenges. The country experiences persistently high unemployment, with youth joblessness nearing 40%, and a labour market predominantly composed of low-wage employment. Against this backdrop, the investment project aimed to support the development of low-carbon agricultural infrastructure. In doing so, it sought to encourage sustainable production practices and create meaningful employment opportunities for the local population. A distinctive feature of this project was the inclusion of a LW clause. This clause embedded fair wage thresholds directly into the capital agreements, linking financial investment to social outcomes. This design choice makes the case particularly valuable for analysis, as it provides an opportunity to examine whether LW commitments can be institutionalised and enforced within the structure of investment contracts.

Due to confidentiality arrangements with both the investor and the implementing company, identifying details cannot be disclosed. These agreements secured access to internal documents and stakeholder interviews, allowing the research to trace the LW commitment from negotiation to implementation and contestation. Rather than selecting a typical or average case, this study intentionally focuses on a critical example. The company involved is a large, hierarchical organisation employing hundreds of workers. Despite pressure, past efforts to implement a LW policy within this company have repeatedly failed. The internal dynamics are characterised by power asymmetries and institutional friction, further complicating reform attempts. This research offers valuable insight into the frictions between social impact objectives and commercial imperatives by examining a case marked by such structural and relational complexity. If strategies that overcome barriers in this context can be identified, they will likely prove effective in more straightforward or less politically fraught environments.

By adopting a multi-actor and systems perspective, the study situates investor–company dynamics within broader regulatory and economic contexts. It seeks to inform investors and policymakers on aligning social objectives with business realities through strategic design and implementation. It contributes to the global effort to reduce wage inequality through more accountable and outcome-oriented forms of private finance.

The remainder of the thesis proceeds as follows: Chapter 2 provides an overview of existing work on LW, MW policies, and the influence and challenges of impact investors. Building on that gap, Chapter 3 explains and justifies the mixed-method research: interviews, thematic coding and game-theoretic modelling, which will be used to answer the research questions. The following three chapters apply these methods: Chapter 4 identifies the levers investors can use to influence wage policy by interviewing several experts in the field, and Chapter 5 tests these insights in the case study, identifying where objectives match or clash. Chapter 3.1.3 then formalises the observed negotiation process into P-A extensive form game-theoretic models to derive clear, generalisable insights. Chapter 7 summarises the research’s theoretical contributions, limitations and advises on future research. Chapter 8 reflects on the process and how research choices impact the results. Finally, Chapter 9 concludes the empirical and model results into concrete recommendations for investors and policymakers, before the report concludes with references and appendices.

2

Literature Review

This chapter critically reviews the academic literature on LWs, MWs, impact investing, and adjacent fields. The review follows a structured, systematic approach to synthesise empirical and conceptual insights to ground the present study. A targeted search was conducted using the Scopus database, which was consistent with recommendations that Scopus provides a robust base for social science scholarship. Boolean operators combined key terms—such as *living wage*, *minimum wage*, *impact investing*, and *social investment*—with relevant synonyms and variant spellings to ensure broad coverage.

The literature search was divided into three thematic strands: (i) research on wages, with a specific focus on the LW; (ii) studies related to impact investing; and (iii) efforts to identify publications addressing both concepts jointly. The term “living wage” alone yielded over 950 results in Scopus, necessitating refinement. To filter the literature, only peer-reviewed English-language journal articles published after 2005 and cited at least ten times were retained. Connected Papers identified the most influential sources, enabling a final selection grounded in academic impact and thematic relevance. Combined search queries were constructed to capture the ongoing scholarly debate around LW versus minimum wage, producing high-quality results. Titles and abstracts were screened according to these inclusion criteria. This process produced 58 core sources for full-text review. To further enhance the robustness of the evaluation, backward and forward snowballing techniques were employed. Backward snowballing involved examining the reference lists of key studies to uncover additional relevant literature, while forward snowballing used citation indices to identify more recent papers that cited those studies. Interestingly, the combined search terms “living wage” and “impact invest*” yielded no relevant results, suggesting a notable gap in the literature. Consequently, the scope of the impact-investing query was broadened to include related terms such as “sustainable investing” and “responsible investment.” The final set of sources informed both the conceptual framework and the mixed-method research design, helping to refine the study’s direction and underscore the novelty of examining LW implementation within the context of impact investing.

2.1. Wages

Although wages give workers vital financial support, there is ongoing discussion about whether they are sufficient [93]. This debate is crucial because it highlights that even legal wage standards may fail to cover basic needs, thus motivating the search for a LW as a higher standard. Despite being set by law, MWs frequently don’t cover basic living costs [89]. This significant gap demonstrates that statutory wage floors often fall short of providing a decent living, giving rise to the need for a LW concept [24]. On the other hand, LWs are intended to guarantee a fair standard of living [6]. However, there are discrepancies in how they are estimated or calculated, and policies cannot be applied because there is no agreed-upon definition [6]. This lack of consensus is essential because, without a shared definition, LW initiatives cannot be consistently estimated or enforced, complicating research and policy efforts. Additionally, the concept of Living Income (LI) takes a broader approach, considering total household earnings, especially in cases where wages are not the primary source of income [20]. This distinction is included since wages alone do not capture livelihood in many informal or self-employed contexts, implying that broader interventions are needed beyond raising pay. This section explores these distinctions and their definitions.

2.1.1. The Living Wage

The concept of a LW lacks a universally accepted definition [5]. The literature generally defines a LW as a remuneration level sufficient to afford a decent standard of living, covering essential needs such as food, housing, healthcare, education, transportation, and discretionary income [5, 25, 85, 52, 53]. The lack of a universally accepted definition complicates policy implementation [6]. However, others argue that flexibility in the definition enables adaptability [25]. Various terms are used interchangeably to describe a LW, with the most common being "fair wage," "decent wage," and "sustainable wage" [18]. While Anker [5] highlights the absence of a universally standardised accepted methodology to estimate a LW, the Anker method has gained most traction in policy discussions [6]. Recently, the International Labour Organisation (ILO) has taken significant steps toward consolidating global understanding by proposing a tripartite-agreed definition of a LW, emphasising that it must be sufficient to afford a decent standard of living for workers and their families, including access to food, housing, healthcare, education, and other essential needs [55]. This effort marks a pivotal shift, as it positions the ILO to play a central coordinating role in harmonising diverse LW initiatives and enhancing policy coherence across countries and sectors. Global consensus-building is crucial because it gives governments and investors a clearer target, thus strengthening policy coherence. However, alternative methods to estimate a LW exist, such as those by the IDH and WageIndicator, which offer different estimations, leading to inconsistent wage calculations and implementation policies [27]. These differences in LW estimation methods highlight the need for a universally accepted calculation method. Differences in assumptions about a "decent living" standard contribute to significant variations in wage estimates [18]. These inconsistencies are essential to note because the calculated LW can differ widely depending on the methodology, complicating decisions about which benchmark to adopt. Challenges in estimation arise due to data limitations [6], regional cost disparities [6], cultural factors [48], gender-based wage differences [41], and issues related to standardisation [25]. Highlighting these varied factors underscores the empirical complexity of determining a LW, implying that any practical approach must account for local data, cultural norms, and standardisation issues.

2.1.2. The Minimum Wage

In contrast to the LW, a minimum wage is typically well-defined and legally established [54]. However, despite its legal clarity, societies often struggle to reach consensus on MW policies due to their varied distributive effects. This paradox underscores that wage-setting involves contentious trade-offs among stakeholders even with a clear legal baseline. Both in theory and in practice, wages are a hot topic. According to neoclassical models, the labour market sets the equilibrium wage by balancing supply and demand. Economic literature on MW policy [23, 16] and empirical research indicate that while an increase in the MW raises earnings for low-income workers, it can also lead to job losses and reduced economic output [1, 73]. Some studies, however, suggest that MW increases have negligible employment effects, particularly in low-wage service industries [101, 68, 88]. This discrepancy highlights the complexities of wage policy implementation. These effects are well-documented for MW, but their implications for LWs remain unclear due to the relatively small proportion of workers covered by such policies [1]. In other words, LW initiatives, often voluntary and less widespread, have not yet provided enough evidence to draw firm conclusions, marking a clear knowledge gap that motivates this study.

2.1.3. Living Wage vs. Minimum Wage

Although the LW and MW aim to provide income security, they differ significantly in origin, intention, and implementation. This distinction is crucial: the MW is a legally mandated baseline often born of political and economic compromise, whereas the LW is a voluntary standard grounded in social justice and human dignity, leading to different motivations and enforcement approaches. The MW is typically established by law and reflects a political compromise between worker protection and economic competitiveness [23, 54]. In contrast, the LW is conceptually rooted in social justice and human dignity, to reflect the actual cost of meeting basic needs [6, 25]. Yet, the practical boundary between these concepts is often blurred. In some cases, MW levels are raised towards LW benchmarks, leading to gradual convergence in both policy and discourse [24]. Others argue that equating both may dilute the normative power of the LW concept, transforming it from a rights-based principle into a technical adjustment [24, 27]. These contrasting views are included because they illustrate the tension between pragmatically aligning wage policies and preserving the LW ethical ideal. The empirical literature is inconclusive: while some studies suggest MW increases can reduce employment for vulnerable groups [73,

1], others find limited or no unemployment effects, especially in institutional contexts with strong social protections [88, 100]. These findings complicate the extrapolation of MW data to LWs, which are often introduced voluntarily and have no enforcement mechanisms. In other words, one cannot assume a LW will have the same effects as a mandated MW; its outcomes depend on voluntary corporate behaviour and stakeholder influence. In the context of investor-company relations, this distinction becomes particularly relevant. While MW compliance can be externally monitored and legally enforced, adopting a LW often depends on internal corporate preferences, investor pressure and shared beliefs about fairness and long-term value. This means that impact investors must rely on negotiation and incentives to achieve LW outcomes. As such, the dynamics around LWs can be better understood through strategic interaction and investor engagement frameworks. This study applies such a perspective, using a P-A lens to explore how an investor and a company strategise around a LW commitment.

2.1.4. Living Income

Although "living wage" and "living income" are often used interchangeably, they differ in scope, application, and measurement. Unlike a LW, which pertains to individual earnings, a LI considers total household earnings [5, 20]. LI is defined as the total net annual earnings required for a household to maintain a decent standard of living, incorporating income from diverse sources such as agriculture, small businesses and remittances [6]. This concept is introduced here to differentiate it from the individual wage level, whereas a LW pertains to earnings from employment, LI considers all sources of livelihood. The distinction is particularly relevant in contexts where individuals are self-employed, work in agriculture, or participate in informal economies where wages are not the primary source of income [52, 90]. This underscores that in such cases, improving living standards requires boosting overall household income, not just wages. This differentiation carries significant policy implications. While LW policies typically influence labour laws and corporate wage-setting, LI approaches require broader interventions [94]. Ensuring a LI might involve agricultural support, market reforms, or social welfare programs beyond workplace wage policies. By clarifying this difference, the review delineates the scope of the study: the analysis will focus on wages within formal employment, recognising that other contexts demand different solutions.

2.2. Impact Investors

Impact investing has recently become a significant aspect of Socially Responsible Investment (SRI), focusing on achieving measurable social or environmental results in combination with financial returns. This rise signals that pursuing positive social impact alongside profit is now a mainstream investment approach, underlining the relevance of examining how impact investors operate. The field continues to be conceptually fluid, influenced by changing terminology and evolving expectations. In other words, the boundaries and definitions of impact investing are still shifting, so careful clarification is needed in this analysis. Impact investing is fundamentally based on the principles of *intentionality* and *measurability*. These principles are emphasised because they require investors to deliberately target social benefits and track those outcomes quantitatively, distinguishing impact investing from traditional investing. Although aspirational, these objectives pose considerable challenges in implementation. This is crucial because turning ideals into practice and ensuring clear intent and credible measurement proves difficult, as later discussion will show. This section defines impact investing and examines the ongoing challenges investors encounter in measuring impact, ensuring intentionality, and navigating a developing but fragmented market. By outlining these concepts and difficulties, the review sets the stage for understanding why an impact investor might face obstacles when negotiating and realising a LW commitment in a private project.

2.2.1. Definition

Using financial capital to achieve social objectives is a growing area of research and investment [28, 95]. This trend underlines the increasing importance of aligning finance with social goals, warranting close examination of how such investments create impact. Impact investing is a subset of the broader category of SRI. Notably, the three most cited articles in the SRI field focus on impact investing, underscoring its significant influence within this domain [57]. The prominence of these works indicates that impact investing has become central to sustainable finance discourse. Researchers described similar concepts using different terminology before introducing the term 'impact investing'. Nwankwo, Phillips,

and Tracey [74] referred to it as 'social investing through community enterprises', while Bonini and Emerson [15] utilised the term 'blended value investing' [3]. This shift in terminology aligns with the broader evolution of sustainable finance concepts, as illustrated in Figure 2.1. The figure highlights how impact investing emerged as a distinct category alongside other financial concepts. As impact investing is still an emerging field, conceptual boundaries and terminology continue to be debated [3]. Acknowledging this ongoing debate is essential, as the study must clearly define its use of the term amid multiple interpretations. Most literature identifies impact investing as financial resources to generate economic, social, or environmental returns [95]. More specifically, most of its definitions focus on intentional social or environmental benefits that can be measured, along with financial returns [95]. Highlighting intentionality and measurability in definitions ensures that the social impact is deliberate and demonstrable rather than an accidental byproduct. Initial explanations of impact investing were wide-ranging but generic, but of late have evolved to be specific and quantifiable [3]. This progression toward more concrete definitions reflects a push for clarity and accountability in the field. The two fundamental characteristics of impact investing, intentionality and measurability, also present significant challenges for impact investors. Notably, the core requirements of intentional goals and measurable outcomes are precisely where practitioners encounter difficulties. These challenges are explored in more detail in the following sections.

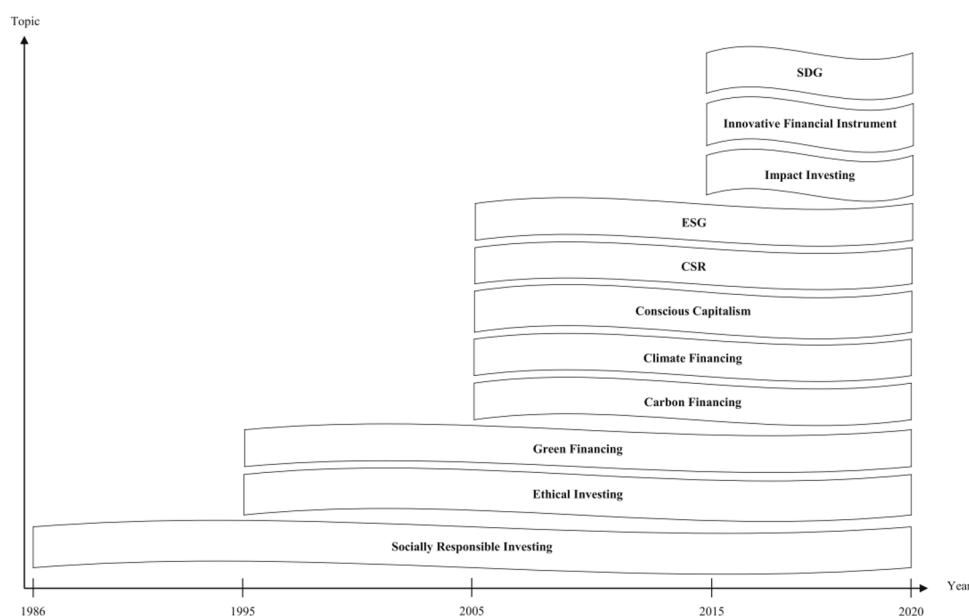


Figure 2.1: Evolution of sustainable finance research [57]

2.2.2. Challenges for Impact Investors

Impact investors balance financial returns with social goals, but face three core challenges: social outcomes are hard to measure, unclear objectives risk purpose-washing, and the sector lacks mature, investment-ready projects. These issues—measurability, intentionality, and market maturity—are explored below.

Measurability

A wicked problem is characterised by the absence of a consistent set of solutions and an unstructured nature [35]. Its complexity characterises impact investing, the subjectivity of social outcomes, and the participation of multiple stakeholders with differing priorities. In practice, this means that different actors may define and value impact differently, complicating the agreement on metrics. Impact investors struggle to quantify their social impact because standardised metrics and methodologies are often lacking [36, 80, 95, 98]. This difficulty is a significant hurdle: without reliable metrics, investors cannot easily demonstrate or manage the social outcomes of their investments. Unlike financial returns, which

are easily measurable, social impact is shaped by diverse societal values, influenced by multiple factors, and inherently more subjective than environmental or economic metrics [80, 98].

The complexity of impact measurement is further exacerbated by the diverse nature of impact investment portfolios, including loans, grants, feasibility funding, equity, export financing, government financing, and project financing [26]. This diversity implies that a one-size-fits-all measurement approach is infeasible, as each investment type yields different forms of impact. While they actively exclude investments with negative social and environmental consequences, such as child labour, unsustainable fishing practices, and animal testing, there is no standardised approach to balancing financial returns with positive social outcomes [78]. It is easier to agree on what to avoid than how much financial return to potentially forego for social good, highlighting a methodological gap in decision-making. The lack of universally accepted frameworks makes comparing investments, assessing long-term effects, and ensuring accountability difficult. As a result, impact measurement remains fragmented, relying on varied methodologies that may not be directly comparable or fully capture the broader systemic changes these investments aim to create [32]. This fragmentation is problematic because it hinders the ability to learn from different projects and to maintain transparency and accountability; each investor using a different yardstick makes industry-wide benchmarks and evaluations challenging.

Intentionality

The Social Impact Investment Taskforce defines intentionality in impact investing as the objective of generating financial returns pursued within the framework of establishing impact objectives and assessing their attainment [39]. Intentionality ensures the social impact is planned, not incidental, which is critical for distinguishing genuine impact investments. Early impact investment frameworks failed to recognise intentionality as a fundamental requirement, treating financial return and non-financial impact as distinct considerations rather than as integrated objectives [19]. This historical omission is notable because it allowed investments to be labelled "impact" without embedding social goals at their core, a gap that recent approaches have sought to fix. This has raised concerns regarding 'purpose-washing', wherein investors present themselves as impact-oriented while failing to prioritise quantifiable social outcomes [39]. The mention of purpose-washing underlines the importance of credibility: stakeholders worry that some claimed "impact" investments might be more marketing than substance. Furthermore, ambiguous and poorly defined social and environmental objectives lead to insufficient investments when there is a misalignment between expectations and execution on both sides [65, 76, 98]. In other words, if an investor and a company do not agree on specific impact targets, neither is likely to commit fully, resulting in underperformance of the social goals.

The risk of impact investors essentialising culture and adopting paternalistic attitudes toward marginalised communities is heightened because impact investments typically originate from high-income countries and are directed toward projects in low- and middle-income countries. This may result in outcomes contrary to the objectives investors aim to accomplish with their policies [19, 63, 95]. Highlighting this cultural risk is crucial, as it reminds us that well-intentioned initiatives can falter or even cause harm if they impose external values without local buy-in, stressing the need for cultural sensitivity in project design.

Market Maturity

Another key challenge for impact investors is market maturity. As the sector is still at an early stage of development, some scholars speak of a niche market with limited scale and a relatively small pool of established investment opportunities [65, 78]. In practical terms, impact investing has yet to achieve broad scale, so investors often operate in a less developed, experimental market. A key barrier to market growth is the scarcity of high-quality, investment-ready deals with proven track records, which makes it difficult for investors to expand their portfolios [65, 78]. Even willing impact investors may struggle to find projects that meet their impact criteria and financial return expectations, limiting the field's growth. This deficit is made worse by a lack of suitable capital and a lack of quality investment opportunities [83]. In addition, the limited number of well-documented success stories reinforces investors' reluctance. Many believe that impact investing cannot deliver market-based, risk-adjusted returns comparable to traditional investments [65, 76]. Such scepticism creates a credibility challenge: mainstream investors remain wary of the model without more examples of competitive returns. As a result, investors remain

hesitant, given the risks of entering a young market with small scale and uncertain long-term financial viability [65]. Impact investors not only face higher perceived risk when pursuing social goals but also bear the burden of demonstrating that their approach can achieve sustainable financial performance to encourage broader participation.

2.3. Research and Knowledge Gap

The interplay between impact investment and corporate wage policies remains poorly understood. While extensive research has examined government regulation and corporate wage-setting, the specific role of impact investors in shaping LW outcomes has received far less attention. The existing literature offers no established framework for how these financial actors influence wage structures within their portfolios, leaving their impact on wage-setting largely ambiguous. This literature review identifies a clear knowledge gap: there is limited understanding of the mechanisms and negotiation tools available to impact investors seeking to promote LW adoption. Questions remain about how investors articulate wage-related demands, what strategic approaches they use during negotiations, and how these efforts translate into durable social outcomes.

These gaps reflect broader structural challenges in aligning LW ambitions with investment practice. Measuring wage-related impact remains complex without standardised methodologies, and lingering doubts about investors' intentionality raise concerns about the consistency and credibility of LW enforcement. In addition, market immaturity limits the availability of scalable projects that combine financial viability with fair wage commitments. Without more straightforward guidelines or stronger empirical evidence, many impact investors remain uncertain about how to engage meaningfully with LW policies. Whereas minimum wage policies and corporate wage strategies have been the subject of extensive study, far less is known about the strategic interactions between impact investors and firms during ESG-aligned investment negotiations. This study addresses that gap by analysing how such negotiations unfold, what trade-offs are made, and which factors shape the long-term credibility of LW commitments. The study adopts an evaluative, ex-post case study approach to address these issues. It examines the local socio-economic context, assesses the strategies employed by the investor, and evaluates their influence on wage outcomes within the company.

3

Research Approach

This research uses a mixed-method approach with an evaluative case study and integrates game theory to systematically examine the dynamics between an impact investor and a private sector firm when negotiating commitments to a LW. Building on the contextual foundation established in Chapter 1 and the literature review in Chapter 2, which identified critical challenges in matching investors' intentions with firms' wage practices, this chapter outlines the research approach that guides the analysis. The study uses a deductive game-theoretical lens to evaluate the strategic interactions and incentive structures underlying LW implementation in a private agri-food investment case study. The rationale of this approach is in line with Hermans, Cunningham, and Slinger [50], who argue that game theory is a robust tool for policy evaluation by revealing how actors with diverse interests strategically influence implementation outcomes. It transcends descriptive analysis by 'opening the black box' of stakeholder interactions, revealing why specific outcomes emerge despite shared objectives. Specifically, it applies the P-A framework identified using the game identification tool (Figure 3.1) from Bekius and Gomes [10] and builds upon the literature from Martin, Casson, and Nisar [64], to model the inherent asymmetries in information, power and priorities between the investor (principal) and the company (agent). This approach clarifies systemic barriers to LW compliance and identifies entry points for enforceable contractual mechanisms.

This mixed-method approach combines qualitative case data with formal game-theoretic modelling to generate generalisable insights. Semi-structured interviews and contractual documents are triangulated to reconstruct the strategic decisions of the actors involved. This method balances theoretical rigour with empirical grounding: abstract game structures are systematically derived from real-world observations, ensuring that formal representations reflect actual constraints, incentives, and behaviours. Moving iteratively from empirical insight to theoretical formalisation, the analysis bridges the gap between the practical realities of impact investing and the conceptual clarity of game theory. The result is a methodologically transparent framework that supports both academic analysis and actionable recommendations for investors and policymakers.

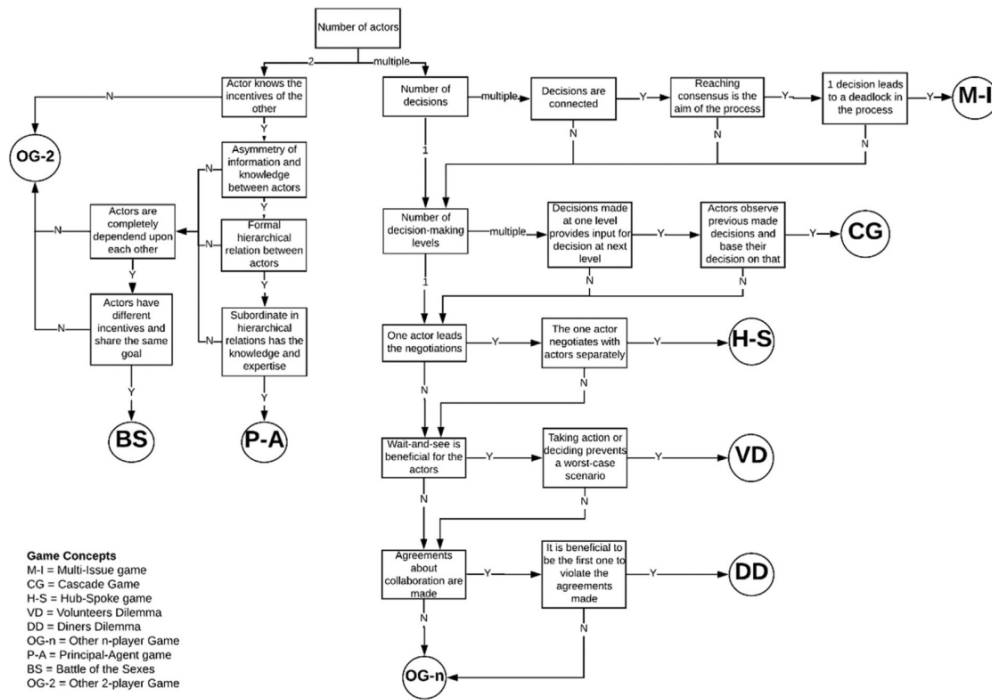


Figure 3.1: Overview of Game Concepts and Decision Framework

To address the central research question, introduced in Chapter 1, this study is structured across four sub-questions, each of which has a different focus in the study:

1. Descriptive:

- What engagement mechanisms and contractual instruments do impact investors use to promote living wage adoption in private sector projects?

2. Evaluative:

- What were the key objectives, conflicts, and trade-offs between the investor and the company, and what engagement mechanisms were employed concerning the living wage policy?

3. Game theory application:

- How does a principal-agent game-theory framework explain the strategic choices of the investor and the company under the baseline wage negotiations?

4. Game theory application:

- How do specific investor engagement strategies alter the asymmetries in the principal-agent game and shift the equilibrium outcomes towards living wage compliance?

The sub-questions are designed to address both academic and practical dimensions of the research, aligning with the Engineering and Policy Analysis (EPA) evaluation criteria. The study engages directly with a grand societal challenge—fair wages—closely tied to core SDGs, and examines the complex interplay between impact investors, companies and policy makers.

Analytically grounded, the thesis applies a principal-agent framework and systematically integrates EPA-relevant methods, including stakeholder mapping, scenario analysis, and conceptual modelling. It adopts both a systems perspective and a multi-actor lens to explore how financial instruments can shape corporate wage practices. By addressing a defined knowledge gap at the intersection of public and private governance, the study contributes to academic debates in institutional economics and impact investing. At the same time, it offers practical insights for decision-makers aiming to align private-sector incentives with public social outcomes. A detailed Research Flow Diagram can be found in Figure 3.2.

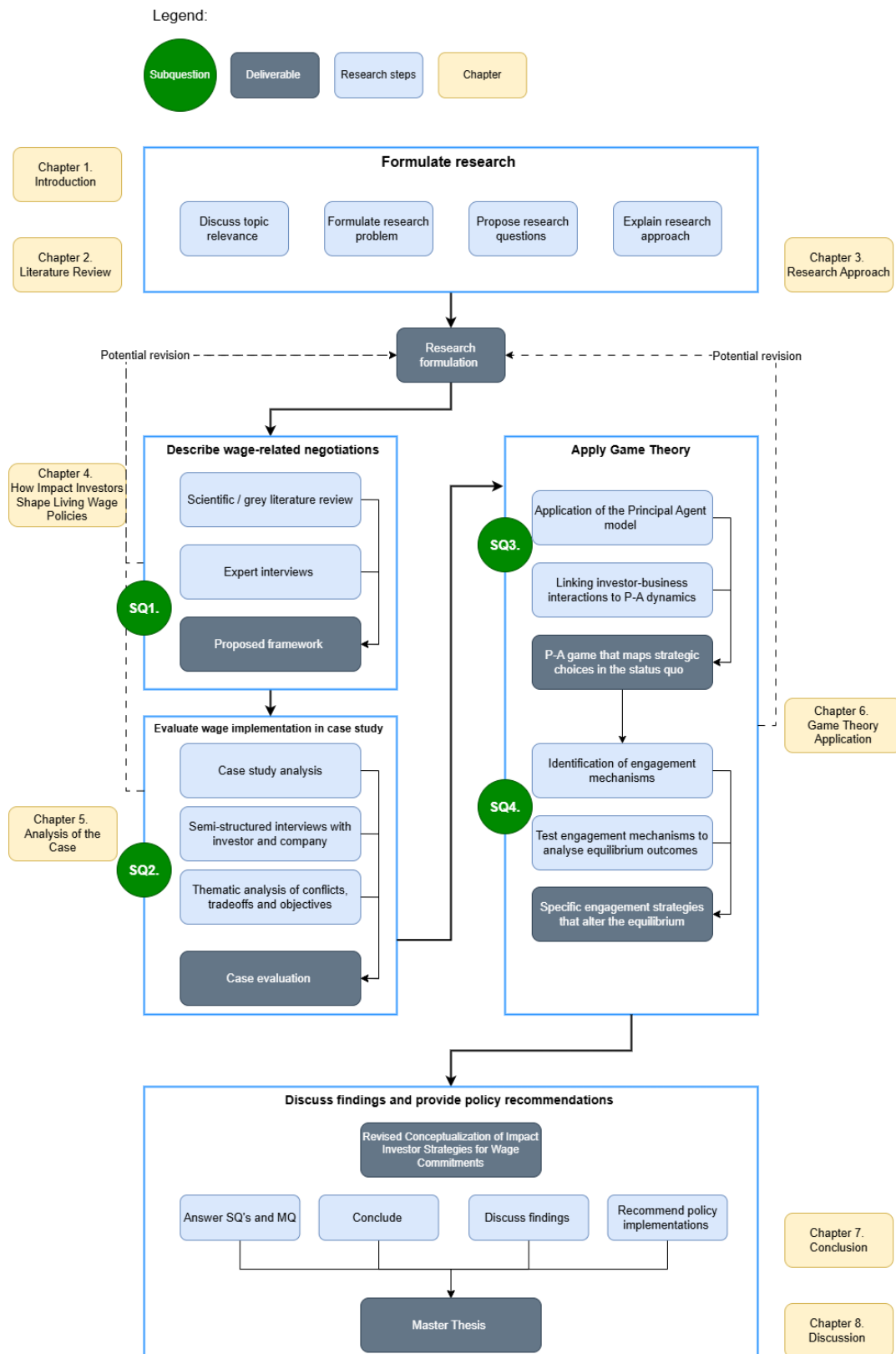


Figure 3.2: Research Flow Diagram of this Study

3.1. Methods and Approach

This study adopts a mixed-method s research strategy. It uses a single, in-depth case to examine how an impact investor and a company negotiate a LW clause. To explain why the negotiation unfolded as it did, the analysis applies a principal-agent game-theoretic lens. Framing the Investor as principal and the Company as agent highlights where leverage exists, where it breaks down, and which mechanisms can shift the equilibrium toward LW compliance. The methodological design integrates three layers:

1. A case study to generate rich, contextual insights.
2. Semi-structured interviews and document review to reconstruct decision paths and payoffs
3. Formal game trees to assess how different incentives or information structures alter outcomes.

3.1.1. A Case Study

The case study method provides an analytical framework for examining complex socio-economic phenomena within their real-world context. It is particularly suitable for analysing dynamics between investors and firms around the introduction of LWs. As defined by Yin [99], a case study is 'an empirical investigation that examines a contemporary phenomenon (the "case") in depth and within its real-world context' (p. 16). This approach is particularly relevant when the boundaries between the phenomenon and the context are blurred and when the research attempts to answer 'how' and 'why' questions [8]. In the present study, negotiating and enforcing commitments for LWs cannot be separated from the policy, economic and social context of ESG-based impact investing. Moreover, the case study method allows researchers to retain the holistic and meaningful characteristics of real events, making it possible to conduct exploratory and theory-testing research. It is an intensive study of a single unit to generalise across a larger set of units [42, 99].

Despite its strengths, case study research is often criticised for its perceived lack of generalisability, susceptibility to researcher bias and risk of anecdotalism [42]. However, this criticism misunderstands the methodological purpose of an instrumental case study. As Stake [86] and Yin [99] argue, case studies can provide transferable insights through analytical generalisation when they are based on a clear theoretical framework, use systematic data collection and remain transparent in their interpretation. This study ensures this accuracy by analysing the case in a formal model from game theory - a P-A framework - that structures the analysis of investor-firm negotiations. These theoretical propositions are tested against triangulated empirical evidence. This makes the findings applicable to this case and similar impact investment contexts where social and financial objectives must be negotiated.

3.1.2. Semi-structured Interviews

These paragraphs describe the study's process for collecting and interpreting semi-structured interview data. They explain why qualitative interviews are powerful tools for revealing rich insights, how interview transcripts were thematically coded, and discuss ethical issues such as participant confidentiality and reflexivity, which are essential to the integrity of qualitative research.

Data Collection through Interviews

This study uses in-depth, semi-structured interviews with key stakeholders to examine how a private agri-food sector project negotiated and implemented LW commitments. This study used qualitative interviews to reveal complex causal mechanisms and context-specific insights that quantitative data collection methods would miss. In contrast to surveys or observations, in-depth interviews involve active knowledge co-construction between interviewer and interviewee [58]. This interactive process enables participants to articulate their experiences, resulting in detailed accounts of negotiation processes, motivations, and constraints. This depth is essential for clarifying the reasons and mechanisms underlying outcomes, such as the success or failure of specific strategies, which cannot be uncovered through solely quantitative or document-based analyses. Interviews are a versatile method for understanding complex social phenomena across various study topics. Excellent for providing information and fostering understanding [49].

Analysis and Processing of Interview Data

Audio recordings, complete transcriptions, and thematic coding were used to analyse all interviews. Using best practices for thematic analysis [17], the researcher first read the transcripts repeatedly. Next,

key concepts or actions were coded line-by-line in open-coding. Using inductive coding, key themes emerged from the data without preconceived notions. While using the study’s conceptual framework on LWs to inform a preliminary code list, deductive analysis was used to identify themes such as “negotiation tactics” and “stakeholder incentives”. To avoid overlooking important data outside the initial framework, the researcher created provisional codes for novel ideas and remained attentive to unexpected insights. Codes were then iteratively reviewed and clustered into themes like “Investor-Company Power Dynamics” or “Verification of Wage Compliance” based on interview patterns.

Qualitative analysis software (Atlas.ti) organised the transcripts, retrieved codes, and documented the coding trail. Software kept an audit log of code decisions and linked extracts to code for verification, promoting transparency. New themes were constantly compared to the raw data and theoretical framework to improve their definition and relevance. The results include representative participant quotations (identifiers removed) to demonstrate each theme in participants’ own words. Visual mapping tools such as code network diagrams were also employed to explore relationships between themes [69]. Systematic coding, theory-informed reflection, and illustrative quotes kept the analysis data-driven and analytically aligned with the study’s conceptual lens.

Ethics and Integrity in Qualitative Research

This study followed strict ethical standards to protect participants and integrity. All interviewees received detailed information about the study’s purpose and procedures and gave written consent before data collection. Participants were told their participation was voluntary and they could decline to answer any question or withdraw. Transcripts and the thesis text used pseudonyms or anonymised descriptors to protect confidentiality. The consent form stipulated that reports and publications would not reveal individual identities.

According to data protection guidelines, all interview recordings and transcripts were stored on encrypted devices with limited research team access. The researcher acknowledged his positionality and practised reflexivity for research integrity. Reflexivity involved the researcher continually reflecting on how his background, assumptions, or work on sustainable finance might influence interactions and interpretations [12]. Qualitative researchers must consider their “position” relative to the subject matter and participants, such as power dynamics between outside researchers and local stakeholders [12]. The researcher explicitly considered these factors to minimise participant bias and interpret data in good faith. These measures and honest and transparent reporting maintained high research ethics and integrity throughout this study.

3.1.3. Game Theory

The dynamics of the investor-company relationship can be framed within the context of principal-agent theory of corporate governance [64]. However, for a more rigorous analysis, it is beneficial to apply the principles of game theory. Game theory is the study of strategic interactions between interdependent actors (see Table 3.1 for a comparison of single-actor vs. multi-actor decision frameworks), offering a structured framework to model decisions where outcomes depend on the actions of multiple parties [82] [79]. It is linked to the pioneering work done in the 1940s and early 1950s by John Nash, Morgenstern, and Von Neumann. Game theory, therefore, is not new and is widely applied in political science and economics. Yet, in the evaluation literature, few applications have been reported to date [50]. Originating in mathematics and economics [72], its principles now extend to public administration, international relations, and complex decision making [11]. Its essential components —players, actions, payoffs, and information- define the rules of the game, and the combined strategies of these players determine the outcome, often measured through equilibrium and Subgame-Perfect Nash Equilibrium (SPNE) [71, 87].

	1 payoff	n payoffs
1 player	Optimization	Multi-objective optimization
n players	Team theory	Game theory

Table 3.1: Classification of decision problems based on number of players and payoffs

Games can be classified as simultaneous or sequential, zero-sum or non-zero-sum, and vary by the

number of players, institutional structure, and whether behaviour is individual or collective [7, 34]. Traditional game theory assumes rationality, where actors maximise their payoffs based on common knowledge of the game structure. However, real-world decision-making often features bounded rationality, dynamic processes, and asymmetric information. It is helpful at this stage to differentiate between two interpretations of game theory: the "hard" definition and the "soft" definition [84]. The hard definition emphasises the application of mathematical models. In contrast, the soft definition (the definition used in this study) views game theory as the exploration of how two or more individuals make decisions in scenarios where the results depend on the choices made by all participants [84].

In policy contexts, game theory is especially valuable for analysing complex actor interactions and unravelling the "black-box" of network governance [50]. It allows us to simplify and isolate the key strategic elements of the LW negotiation. For instance, how the presence of information asymmetry or outside options might impact each side's decisions, while still accounting for the interdependence of those decisions. By simplifying social interactions into a formal model, game theory illuminates the choices and dilemmas decision-makers face, helping to explain why certain outcomes occur despite all parties seemingly aiming for success. However, real-world applications of game theory are rarely black and white, as multiple forms of "games" can be observed simultaneously. By simplifying social interactions into formal models, it illuminates the choices and dilemmas that decision-makers face, helping to explain why specific outcomes occur despite the presence of capable, well-intentioned actors [82, 84]. This approach is best applied when there is access to information and direct communication with key informants, ensuring that the basic mechanisms driving observed outcomes are understood. It also acknowledges that additional empirical tools are needed for a comprehensive evaluation [50, 10, 11].

3.1.4. The Principal Agent Game

The P-A game describes a situation where one party (the principal) delegates authority to another (the agent) to act on their behalf. The principal relies on the agent due to the agent's specialised expertise or information advantage [44]. Central to this model is the problem of asymmetric information, meaning the agent has more knowledge about their actions and capabilities than the principal does [59]. This informational asymmetry can lead to conflicts of interest, as agents may act in their best interests, which may differ from the principal's. Typically, principals mitigate this risk through incentive structures, often formalised contracts that reward agents based on observable outcomes [44, 59]. Such arrangements must carefully balance providing sufficient incentives for the agent while minimising costs for the principal. The P-A framework illustrates the complexities of decision-making and contractual negotiations in hierarchical settings [59]. In classical P-A games, several key characteristics are present: (i) goal misalignment between principal and agent; (ii) hidden action or moral hazard, where the principal cannot perfectly observe the agent's efforts; (iii) contract incompleteness or enforceability (v) information asymmetry; and (vi) a need for outcome-based or behaviour-based monitoring and incentive mechanisms [59]. These conditions create strategic tensions that must be managed through formal contract clauses or informal trust-based coordination.

In this research, this P-A game applies to the dynamics between the impact investor (principal) and the company (agent) negotiating the implementation of a LW. The model provides insights into how conflicting goals, informational imbalances, and incentive structures shape strategic interactions and influence compliance with investor-driven wage policies (see Figure 3.3 for a schematic overview of the P-A game within the case). The analysis in this study includes both the classical P-A structure and an extended view of strategic negotiation tools, to test for incentive-driven outcomes.

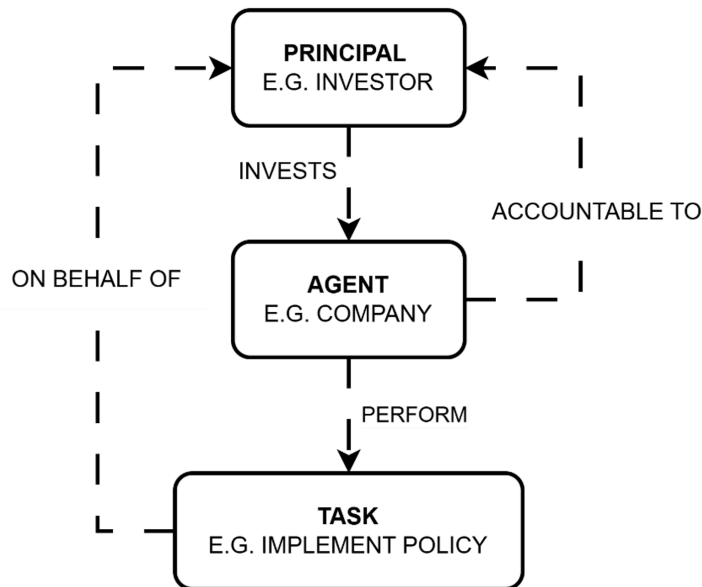


Figure 3.3: Principal Agent Game in the context of this research

3.1.5. The Game Tree and Extensive Form Games

To apply game theory, through the P-A lens, to this mixed-method research, an extensive-form representation known as a game tree is used. The game tree is a foundational analytical tool for capturing multi-actor interactions, sequential and strategic dynamics. It provides a structured representation of how individual decisions influence overall outcomes, delineating the timing of moves and the information available to each player at various stages [4] (see Figure 3.4 for a simple representation of a game tree). This framework makes key decision points, strategic options, and their associated payoffs explicit, enabling a comprehensive analysis of strategic interactions. In the context of negotiations surrounding the implementation of a LW, game trees are particularly valuable for illustrating points of convergence and divergence between stakeholders, such as companies and impact investors. The model highlights strategic incentives and potential cooperative or adversarial pathways, providing insight into the conditions under which agreements are more likely to succeed or fail [4]. Techniques such as backwards induction and equilibrium analysis further elucidate the persistence or failure of specific strategies by systematically mapping out their logical consequences.

In extensive form games, the structure is typically modelled as a rooted tree, an acyclic connected graph in which each node represents a decision point and is linked by a unique path to any other node. The tree's root marks the game's starting point, from which branches extend toward terminal nodes or "leaves," each signifying a possible outcome. This rooted architecture captures both the temporal flow of actions and the informational context of each decision. Every non-terminal node is assigned to a specific player, who chooses from a set of available actions, directing the game toward a particular branch. Terminal nodes are labelled with payoffs, which reflect the preferences or utilities of each player for the corresponding outcome. Although other outcome representations exist, assigning payoffs to leaves remains the most analytically transparent and widely used approach.

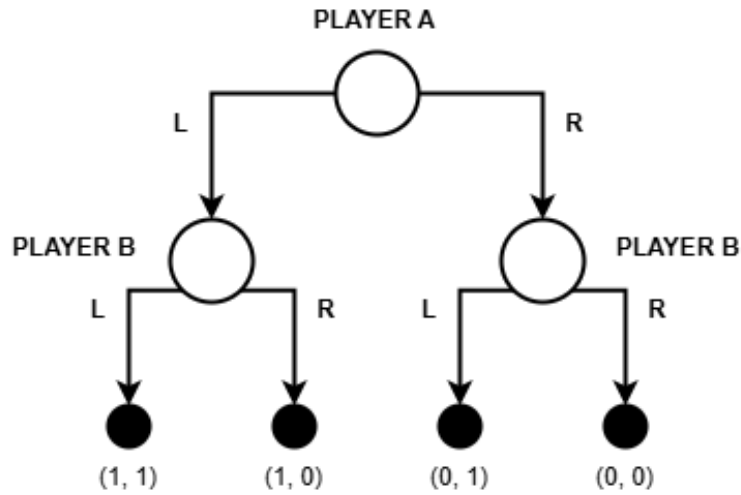


Figure 3.4: Simple Game Tree

Constructing a game tree involves more than visual representation; it requires a formal specification of actors, actions, and outcomes within a coherent framework [51] (see Figure 3.5). This begins with identifying the agents involved and the sequence in which they act. Uncertainties, possible outcomes, and reward structures must be articulated and ranked to reflect real-world preferences and constraints. This formalisation allows for discovering latent interdependencies and sources of conflict while uncovering potential avenues for improved coordination or mutual gain. By making strategic options and their implications explicit, the game tree fosters a more rigorous and transparent basis for negotiation, replacing assumption-driven reasoning with empirically grounded strategic foresight.

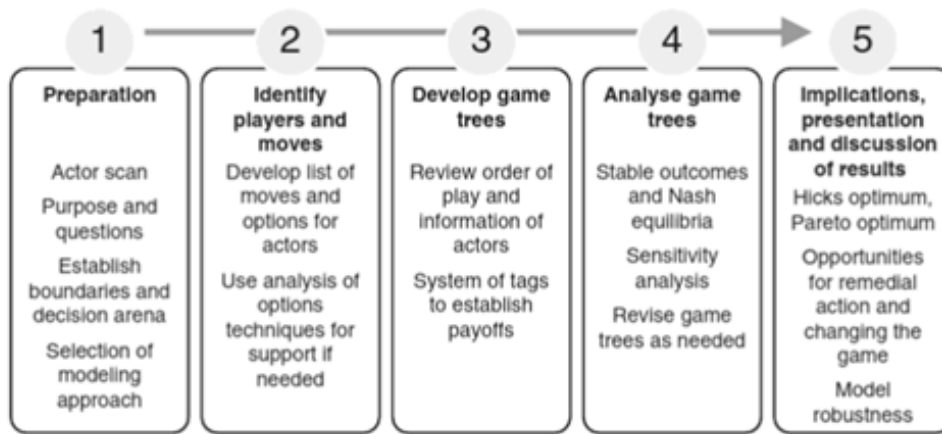


Figure 3.5: Steps to formalize a Game Tree [51]

4

How Investors Shape Living Wage Policies

Chapter 4 identifies and categorises the engagement mechanisms and contractual instruments used by impact investors to encourage the adoption of LWs, combining a literature review with interviews to build an evidence-based framework that answers Sub-question 1 and provides the foundation for chapters 5 and 6. Section 4.1 outlines the methodological approach, Section 4.2 analyses investor engagement dynamics, Section 4.3 presents empirical insights from impact investors, and Section 4.4 synthesises the findings and concludes the chapter.

4.1. Methodological Approach

As part of the mixed-methods design described in Chapter 3, Chapter 4 adopts a two-stage qualitative research design tailored specifically to address Sub-question 1: *“What engagement mechanisms and contractual instruments do impact investors use to promote living wage adoption in private-sector projects?”* The analytical aim is to identify, structure, and critically evaluate the mechanisms through which impact investors influence wage-setting in portfolio companies.

The first phase consists of a focused desk review of peer-reviewed literature on investor engagement. Core frameworks such as stakeholder salience theory [70] are extracted and used as theoretical frameworks for the empirical analysis. Building on these conceptual foundations, the second stage involves a series of 13 semi-structured interviews with experienced professionals across institutional investors, Non-Governmental Organizations (NGOs) and consultancies (Table 4.1). All interviews were subjected to systematic analysis using the procedure outlined in Section 3.1.2.

By synthesising theoretical perspectives with insights from practice, Chapter 4 creates an empirically validated set of engagement mechanisms. The goal is not only to document what investors do, but to clarify under what conditions their efforts succeed, thus meeting the objective of answering sub-question 1.

Expert	Institutional Investor	Coalition/NGO	Consultancy	Investment Type
Expert 1	X			Direct
Expert 2	X			Direct
Expert 3	X			Direct
Expert 4	X			Direct
Expert 5		X		Indirect
Expert 6	X			Direct
Expert 7			X	Indirect
Expert 8		X		Indirect
Expert 9		X		Indirect
Expert 10	X			Direct
Expert 11	X			Direct
Expert 12	X			Direct
Expert 13		X	X	Direct

Table 4.1: Expert overview by affiliation and investment type

4.2. Investor Engagement

Investor engagement is widely recognised as a strategic tool through which (impact) investors seek to influence corporate behaviour, particularly in advancing ESG goals such as implementing a LW [66, 64]. This section explores the typologies, mechanisms, and effectiveness of investor engagement, drawing from recent literature while critically assessing their limitations in the context of wage reform in low-margin, labour-intensive sectors.

4.2.1. Engagement Mechanisms

Investor engagement typically operates through three main channels: informal dialogue, formal or contractual rights and collaborative coalitions. Informal engagement relies on trust-based, non-adversarial dialogue between investors and firms. It is often preferred for its relational nature and potential to build legitimacy over time [47]. Its success depends on continuity, depth, and mutual understanding. Still, its influence can be limited when investors lack sector-specific knowledge or companies perceive wage reform as threatening cost structures [21].

Formal engagement includes tools such as shareholder resolutions, contractual agreements, and participation in general meetings. These instruments allow for more structured influence but may create adversarial dynamics if not preceded by informal dialogue [43, 67]. While they increase enforceability, they can damage investor-company relations when perceived as coercive rather than collaborative. Formal instruments can provoke defensive reactions or lead to superficial compliance in contexts like the agri-food sector, where companies operate on tight margins and their labour cost share is high.

A third category — collaborative engagement — has gained traction as investors increasingly form coalitions to enhance legitimacy and coordinate influence. A prominent example is the Platform Living Wage Financials (PLWF), a coalition of 24 financial institutions launched in 2018 to integrate LWs into investment mandates. Such efforts reduce reputational risk for individual investors and amplify sector-wide pressure. They also align with international labour norms, such as the ILO’s advocacy for collective wage-setting processes: “Good faith collective bargaining aimed at reaching mutually acceptable agreements can result in a more equitable distribution of economic growth” [55]. Yet, while collaborative engagement boosts credibility, its effectiveness hinges on enforcement capacity across coalition members.

4.2.2. Strategic Depth

Beyond engagement mechanisms, the level of investor commitment and positioning varies considerably and can be complex. Winter [97] identifies three levels of investor engagement: compliance, intervention, and stewardship. Compliance reflects minimal adherence to stewardship codes without strategic engagement. Intervention targets underperforming firms to unlock latent value. Stewardship represents the deepest form of engagement, characterised by long-term relationships aimed at sustainable value creation.

Building on this typology, Busch [22] introduces a maturity matrix mapping engagement along two axes: intensity (x-axis) and breadth (y-axis). This framework allows investors to assess and refine their engagement strategies based on internal resources and external opportunities. Intensive and broad engagement (Box 10 in the model) is ideal but resource-intensive. Busch suggests prioritising laggard firms or key sectors with the highest marginal impact. The model also differentiates four discursive strategies and underlines the trade-offs involved.

The strategic choices investors make are not solely driven by formal mandates or tools but are also shaped by their underlying beliefs and motivations. Investor orientation—whether grounded in intrinsic ESG values or instrumental logic—critically influences the consistency and credibility of engagement strategies.

4.2.3. The Role of Stakeholder Salience

The effectiveness of engagement is not determined by mechanisms alone; it also depends on how the investee firm perceives the investor. Stakeholder salience theory offers a valuable framework for un-

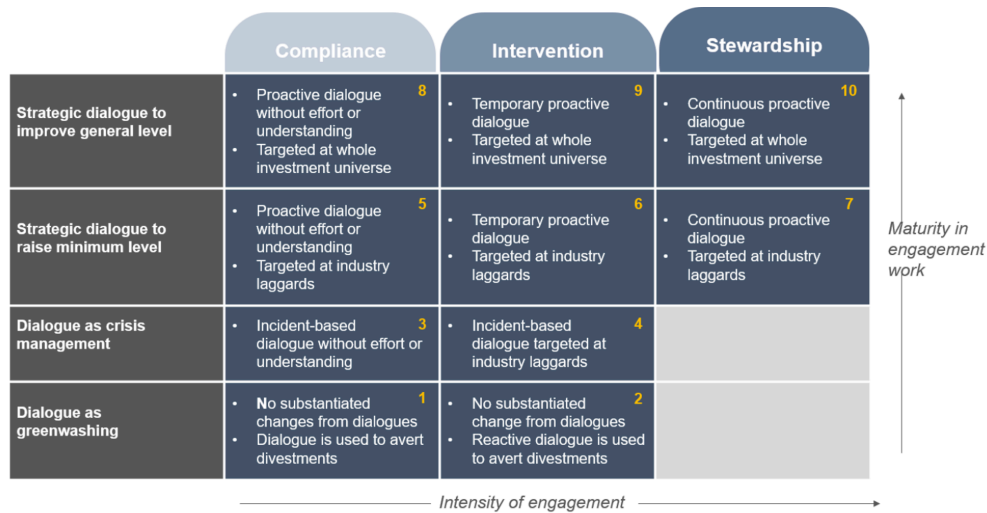


Figure 4.1: Engagement strategy matrix [22]

derstanding why some investor engagements succeed in influencing wage practices while others fail. According to the theory, three key attributes- legitimacy, power, and urgency- determine an investor's influence [70].

Legitimacy refers to the perceived appropriateness of the investor's claim. This is typically derived from ESG mandates, alignment with global labour norms, and credible expertise. In low-wage sectors, however, legitimacy must be earned through contextual knowledge, particularly of wage systems and cost structures. Investors who apply abstract ESG metrics without engaging with these operational realities risk being perceived as outsiders, reducing their authority in wage negotiations [38, 33].

Power relates to the investor's ability to impose conditions or influence decisions. This can manifest through financial leverage, such as conditional disbursements, or soft power based on reputation and signalling. Yet in practice, power is constrained. In some cases, the investor can exercise conditional power by linking financial disbursements to compliance with LW targets. However, power can be constrained by the investor's limited ability to monitor implementation or to enforce wage compliance without damaging the project's financial feasibility.

Urgency reflects the perceived immediacy of the investor's claim. In theory, the moral urgency of poverty alleviation and the reputational risks of ignoring wage issues should raise the salience of LW demands. Yet, from the company's perspective, urgency was framed around operational continuity and market competitiveness. This strategic misalignment dilutes the perceived urgency of wage-related reforms. Moreover, urgency is not an objective fact but a construct shaped by framing strategies. Investors who fail to translate urgency into material risks, such as reputational damage or supply chain disruption, are unlikely to gain traction.

The interaction of these dimensions determines how seriously a firm takes the investor's demands. In the case studied, the investor exhibited high legitimacy, moderate power, and low urgency (from the company's view), positioning it as a "dependent stakeholder" [70]. This partially explains why the company acknowledged wage goals but delayed or downscaled their implementation.

4.2.4. Structural Constraints

The effectiveness of investor engagement is shaped by stakeholder salience and structural conditions within investment institutions. Investors with internal asset management and dedicated ESG teams tend to engage more consistently and with greater strategic depth [43]. In contrast, externally managed funds, relying on intermediaries such as asset managers and consultants, often experience diluted engagement [91]. This structural fragmentation introduces accountability gaps and weakens the insti-

tutional memory needed for sustained stewardship [56].

Short-term return pressures further obstruct long-term social objectives. As noted by McLaren [66], aligning financial timelines with ESG goals remains a persistent challenge. The temporal misalignment between investors' return cycles and the long-term nature of systemic reforms, such as LW implementation, reduces the credibility and consistency of engagement efforts.

Given these constraints, impact investors must actively manage how they are perceived across the three salience dimensions—legitimacy, power, and urgency—to improve the effectiveness of engagement. This involves:

- Enhancing legitimacy through alignment with global labour norms and participation in sector-wide alliances (e.g., PLWF).
- Converting soft power into enforceable leverage by embedding wage commitments into contractual clauses.
- Framing urgency is not solely a moral imperative but also a material concern linked to reputational risk, labour unrest, and long-term value erosion.

At the same time, internal structures must support these efforts. Investors should invest in ESG expertise, minimise dependency on intermediaries, and extend time frames for engagement to accommodate systemic reforms. Without this dual approach—external salience management and internal capacity building—engagement efforts risk being performative rather than transformative.

4.2.5. Analytical Implications

The literature underscores that engagement is not a singular intervention but a continuum, from passive compliance to deep stewardship. Informal, formal, and collaborative approaches are not mutually exclusive; their effectiveness depends on context, complementarity, and timing.

In practice, impact investors aiming to promote LWs must tailor their strategies to match internal capabilities and the characteristics of investee firms. Strategic combinations of informal dialogue, contractual enforcement, and coalition-based pressure offer a flexible toolkit. The maturity matrix introduced by Busch [22] helps visualise how different engagement types can be sequenced or escalated to maintain influence throughout the investment cycle. While investor engagement holds potential to influence wage policies, its effectiveness is bounded by structural and strategic limitations. The impact of informal, formal, and collaborative tools hinges on the investor's credibility, relative power, and the perceived urgency of their demands. Crucially, firms respond not only to the content of investor requests but also to how investors are perceived. Internal resources, investment time horizons, and sector-specific expertise further shape engagement outcomes. Engagement efforts risk becoming symbolic gestures rather than drivers of meaningful change without enforceable commitments and long-term alignment.

4.3. Insights from Impact Investors

The previous section outlined how the literature frames investor engagement as a strategic tool to promote ESG outcomes, including LWs. It introduced dialogue, formal conditionality, and collaborative initiatives, and identified factors that influence effectiveness, such as salience, institutional structure, and investor beliefs. However, there remains a gap between theoretical potential and observed practice. Literature assumes a level of influence and consistency often moderated by pragmatic trade-offs, operational constraints, and organisational priorities.

The following section presents empirical insights from interviews with institutional investors and experts in the field of LWs to better understand how these dynamics unfold in real-world settings. These interviews explore how investors operationalise LW goals, when and why they escalate engagement, and how formal requirements are used or avoided in practice.

4.3.1. Engagement Strategies: Living Wage and Informal Dialogue

Investor engagement on wage issues frequently commences through informal, trust-based dialogue, which interviewees widely perceive as a foundational strategy for promoting LW adoption. This approach is

favoured for its relational and less confrontational nature and its ability to create an open channel for mutual understanding, particularly in sensitive and resource-constrained settings. Informal engagement mechanisms are grounded in the notion that long-term change is more likely when companies perceive wage improvements not as externally imposed obligations but as internally motivated and strategically valuable actions.

In line with the literature (see Section 4.2.1), investors viewed informal dialogue as a critical entry point for understanding operational realities, cultural norms, and financial constraints faced by investee companies. Several respondents underscored that early-stage engagement must avoid triggering defensive postures, especially in low-margin sectors where wage pressures are politically and economically fraught. Informal dialogue thus serves to de-risk the conversation and establish a foundation of trust. As one investor described:

“We prefer a collaborative engagement approach: we set targets and timelines, then maintain close dialogue to track progress. Instead of imposing demands immediately, we show them the long-term benefits for both workers and the company.”

— Interview 1

This quote illustrates a phased approach in which investor influence is gradually normalised, allowing room for adaptation and internal alignment within the company. Furthermore, dialogue is often supplemented with empirical evidence to reinforce credibility and business relevance. Another interviewee stated:

“We illustrate the business case for paying better wages, presenting examples of reduced turnover and improved staff loyalty. Companies need to see that these are not just moral arguments, but also long-term economic benefits.”

— Interview 11

This indicates that persuasion in informal engagement is rooted in instrumental logic as much as ethical reasoning. Data is not used solely to assess compliance but to demonstrate how improved wages contribute to operational resilience, productivity, and reputational gains—thereby aligning social and financial incentives.

However, the effectiveness of informal dialogue is context-dependent and fragile. A recurring concern raised by several investors was its reliance on individual relationships and key personnel. One investor cautioned:

“Informal dialogue tends to be relationship-dependent; if key champions leave, momentum can stall.”

— Interview 6

This reflected a recurring challenge in informal governance models: the absence of institutionalisation. Without binding provisions or formal enforcement mechanisms, commitments to paying a LW remain vulnerable to leadership changes, financial pressures, and external shocks. Interviews consistently revealed that informal dialogue is the primary tool investors use to promote LW reforms, albeit with varying degrees of success (Interviews 1, 2, 4). While investors acknowledged that their influence is limited, due to the lack of contractual consequences for failing to meet LW targets, many reported that investees are at least receptive to discussions. Several respondents noted that investees often appreciate the broader benefits of higher wages, even when this understanding does not translate into concrete action. Nevertheless, where companies were resistant to change, informal engagement typically had little effect.

Investor engagement on LW often rested on the efforts of a few dedicated individuals or small teams (without much formal power), rather than on organisation-wide strategies. This concentration of responsibility underscores a key finding: LW remains a niche concern for many investors, reliant on

personal persuasion rather than collective financial leverage. Respondents frequently described informal dialogue as an early-stage tool and an opportunity to build trust, align expectations, and identify potential barriers before formalising requirements (Interviews 1, 6). Trust-building emerged as a critical factor, supported by regular, in-person interactions and a consistent presence over time (Interviews 1, 2, 4).

Informal dialogue also serves as a platform for benchmarking: investors use case studies, comparative data, and sector-specific examples to highlight the feasibility and value of LW improvements (Interviews 1, 2, 3). Yet, challenges persist, including data limitations and internal resistance within investment teams (Interviews 1, 3, 10). Informal dialogue offers a space where companies can engage without fear of punitive consequences, encouraging openness but also risking superficial progress. Ultimately, the effectiveness of informal dialogue depends on sustained relational investment, the strategic use of evidence, and the willingness of companies to engage in good faith.

In sum, informal engagement is a critical but limited tool within the broader LW strategy: it can catalyse change by fostering trust and shared understanding, but its impact is often constrained by structural and organisational factors. A more systematic approach, integrating informal dialogue with formal incentives and clear accountability measures, appears necessary to translate good intentions into lasting wage improvements. (For supporting quotes, see Appendix A)

4.3.2. Engagement Strategies: Living Wage as a Formal Requirement

While formal and contractual instruments are available to impact investors, interview data suggest they are infrequently applied as primary enforcement tools. Investors generally refrain from imposing strict sanctions in response to individual wage shortcomings, opting instead for a phased, persuasive approach. As one investor noted:

”We don’t find a lack of a living wage serious enough to exclude the company immediately if there haven’t been repeated, severe violations. ”

— Interview 3

This sentiment was echoed by others, who emphasised that exclusion or divestment is typically reserved for severe or repeated violations, rather than minor or one-off instances of non-compliance. Nonetheless, some investors do incorporate LW clauses into contractual agreements, not necessarily to enforce immediate compliance, but to underline the seriousness of the commitment. One interviewee explained:

”Our contracts embed ESG clauses, and living wage is one of them. It’s not always a hard threshold, but it signals our seriousness and provides leverage if companies show no progress.”

— Interview 3

In this sense, contractual provisions serve more as strategic signalling devices than rigid enforcement mechanisms. Their presence creates a formal anchor for dialogue and accountability, without precipitating an adversarial posture. This cautious and context-sensitive deployment of formal conditions reflects a deliberate effort to maintain relational capital and avoid undermining cooperative engagement. For example, one respondent stressed that divestment remains ”a last resort,” but acknowledged its latent influence:

”Ultimately, we *can* decide to stop investing in a company if it scores too poorly. ... Our living wage approach is not binding, but it is a very active form of engagement that not many other parties use. ”

— Interview 6

Here, the formal possibility of withdrawal functions as a deterrent, reinforcing the weight of informal commitments without immediately escalating to punitive measures. In practice, then, formal mechanisms tend to operate as latent pressure points rather than as immediate triggers. Their primary

function is to institutionalise expectations and keep wage issues on the agenda over time. By embedding these terms in investment contracts, investors create procedural and symbolic reinforcement, which can be drawn upon if informal approaches stall. Importantly, investors highlighted that the credibility of such provisions lies in their potential for escalation, not in routine enforcement. In some cases, formal provisions are not only used to enforce compliance but also to reward progress. Several investors described using positive financial incentives, such as interest-rate reductions, to motivate companies toward LW adoption. As one investor explained:

”If companies pay a living wage and this can be proved, then they will get an interest-rate reduction from us.”

— Interview 12

Formal clauses—such as Impact-Linked Loans (ILL) mechanisms—often act as performance-based triggers, aligning social outcomes with business incentives. These tools strengthen the credibility of LW commitments by integrating wage improvements into long-term strategy, while avoiding coercive enforcement.

Contractual mechanisms complement informal dialogue by providing a structured fallback that enhances investor leverage without sacrificing flexibility. Though rarely applied forcefully, they allow for enforcement when needed. Investors generally favour phased persuasion over rigid ultimatums, reflecting a strategic mix of legal structure and relational engagement in LW negotiations. (See Appendix A for supporting quotes.) Interviewees described formal tools, such as LW clauses or ESG-linked contracts, as essential to progress, despite practical challenges (Interviews 1, 2, 3, 4, 6). Stepwise commitments were preferred over strict mandates, with trust-building and adjustment time seen as crucial (Interviews 2, 6, 11). Legal constraints often hinder enforceability, particularly in markets with weak protections (Interviews 4, 6, 12). Internal resistance, especially from portfolio managers concerned about returns, also complicates uptake (Interviews 1, 3, 11). Still, formal tools are valued as escalation options when dialogue stalls, especially in collective action contexts (Interviews 6, 10).

Overall, formal requirements serve as structured escalation tools in investor engagement. While appreciated for their accountability role, rigid enforcement is often impractical. Investors favour incremental approaches that balance ideal ESG goals with financial and operational realities. Rather than imposing demands, formal clauses work best as collaborative targets that support gradual progress and build trust.

4.3.3. Engagement Strategies: Living Wage in Collaborative Coalitions

Collaborative engagement, typically operationalised through multi-investor coalitions, was consistently identified as a powerful strategy for enhancing influence on wage-related issues. Interview participants emphasised the limitations of unilateral investor action, noting that collective initiatives significantly strengthen the legitimacy, coherence, and pressure of engagement efforts. Coalitions allow investors to amplify their voice, coordinate messaging, and share technical expertise. As one respondent observed:

’By joining forces in a coalition, we speak with a united voice. That’s far more persuasive for management teams than just one investor asking for changes. We also share best practices and wage benchmarks.”

— Interview 5

This statement highlights the added strategic weight that collective engagement brings, particularly when seeking to influence companies that may otherwise resist isolated or inconsistent demands. Coalitions such as the PLWF) were cited as examples of effective coalitions for coordinated action. These platforms offer structured frameworks for setting expectations, monitoring progress, and communicating with investee companies. Importantly, they also create opportunities for peer learning among investors and establish reference points for wage benchmarks, reducing informational asymmetries between parties.

However, interviewees also acknowledged that coalitional bargaining introduces its own governance and coordination challenges. One investor remarked:

It's effective, but aligning multiple agendas is not trivial. Each investor has slightly different priorities for social metrics and engagement style."

— Interview 2

Even when consensus exists at the level of guiding principles, practical divergences frequently emerge. Another participant explained:

"Each investor might define it slightly differently. Harmonising these definitions and timelines requires ongoing negotiation within the coalition."

— Interview 4

These observations highlight a fundamental tension: while collective action amplifies investor influence, it also introduces complexity in aligning diverse mandates and impact frameworks. Maintaining internal coordination is therefore an ongoing challenge, one that requires mechanisms such as shared benchmarks, as well as flexibility and relational trust between members. Despite these challenges, collaborative engagement is seen as an effective investor strategy. When successfully executed, coalitions enhance pressure on companies and create reputational incentives for LW adoption. (For supporting quotes, see Appendix A.)

Respondents consistently emphasised the value of collective action through investor coalitions (Interviews 3, 6, 10, 11, 12). Such coalitions enable investors to pool influence and share resources, thereby increasing leverage over companies (Interviews 6, 11). Sector-specific collaborations were seen as particularly effective, as they can standardise benchmarking metrics and facilitate peer learning for LW implementation (Interviews 2, 10). Beyond tactical advantages, coalitions provide moral support for investors championing LW goals, helping to mitigate reputational risks (Interview 12).

However, respondents also acknowledged operational challenges. Misaligned priorities and varying levels of member commitment can hinder progress (Interviews 3, 11). Some expressed concerns that, without robust accountability structures, coalitions risk devolving into "box-ticking" exercises, lacking the enforcement mechanisms to drive substantive change (Interviews 6, 12).

In sum, collaborative coalitions serve as amplifiers of investor voice, allowing participants to overcome individual limitations of scale and influence. By pooling resources and presenting a unified front, coalitions can exert stronger collective pressure on companies and shape sector-wide norms. Their value extends beyond engagement outcomes to include knowledge-sharing and peer support, fostering a shared commitment to LW adoption. Nevertheless, coalition effectiveness depends on internal alignment and a credible pathway to measurable action. Without clear accountability mechanisms, there is a risk that coalitions may stagnate into symbolic gestures, limiting their potential to drive systemic change.

4.3.4. Salience Factors

The effectiveness of living wage engagement also depends on how firms perceive investor legitimacy, power, and urgency.¹ (More supporting quotes on these themes can be found in Appendix A)

Legitimacy

Legitimacy emerged as an important factor affecting investor influence. Participants stressed that demonstrating credible expertise and local knowledge increases trust. One respondent cautioned,

"Engagement without contextual understanding risks being seen as top-down or naive, leading to fewer tangible outcomes."

— Interview 3

Another noted:

¹See Mitchell et al. (1997) for the classic stakeholder salience framework, as discussed in Section 5.1.2.

“Too often, investors apply generic ESG metrics. But if you show real awareness of the region’s living cost and wage benchmarks, the company sees you as a credible partner rather than an outsider.”

— Interview 10

These comments indicate that context-appropriate dialogue carries much more weight than standard mandates. In summary, legitimacy comes from speaking the language of the company. Investors who base their wage demands on local realities and are often seen as partners, which in turn increases the likelihood of meaningful results. For example, one interviewee noted that showing knowledge of local labour market data immediately increases credibility, while general demands risk being rejected. The consensus was that this kind of context-sensitive engagement makes the investor come across as a constructive partner rather than an outsider. In practical terms, high legitimacy emerged when investors aligned their pay expectations with the operational reality of the company, increasing the likelihood of cooperative responses. In other words, investors cultivate legitimacy by aligning their demands with international labour standards while expressing them in locally relevant terms.

Power

The power dimension was discussed as the influence of investors on companies. Respondents noted that their direct power is usually limited by their shares. One investor said:

“As a bank, we have limited shares in most companies, so direct power is minimal. But collectively, we can exert pressure by publicly highlighting wage shortfalls or by filing resolutions if needed.”

— Interview 4

Another noted that if progress falters, investors can escalate behind closed doors or through coalitions, although divestment remains ‘a last resort’. These comments illustrate that investor power is often exercised indirectly - through collective influence, reputational pressure and the credible threat of eventual withdrawal - rather than through direct control. Investors thus use private dialogue and collective action to increase their influence. Actual divestment or public confrontation is held back as leverage to ensure companies take wage demands seriously. In short, power often comes from the potential to mobilise collective pressure and see an interest as a credible threat, rather than from large equity interests or direct authority.

Urgency

Creating urgency around wage issues was mentioned as a crucial challenge. One investor noted that a short-term financial focus often trivialises labour issues:

“The short-term financial lens in many investment committees can dilute the perception of ‘urgency’ in wage reforms”.

— Interview 6

Companies often present LW targets as distant, long-term ambitions, which can easily delay them. To counter this tendency, investors deliberately portray wage gaps as immediate risks. For example, one showed managers how low wages can lead to immediate problems, such as labour unrest or reputational damage, so that addressing the issue ‘feels urgent, not optional’. Another noted that without such efforts, engagement can easily stagnate if companies do not feel immediate pressure. Some investors stressed the use of concrete data (such as revenue costs or benchmarks) to make the case. The consensus was that without a clear link between low wages and tangible short-term results, companies tend to deprioritise wage reforms. These insights suggest that urgency needs to be actively created by framing deficits in living wages as short-term operational or reputational threats rather than long-term policy goals.

4.4. Conclusion of the Chapter

This chapter analysed how impact investors engage with investee companies to promote the adoption of LW standards. It aimed to answer Sub-question 1: *What types of engagement mechanisms and contractual instruments do impact investors use to promote living wage adoption in private sector projects?* The findings from Section 4.2, reinforced by interview insights, demonstrate that investor engagement on LW issues varies across contexts and does not follow a standardised approach. Instead, impact investors adopt a mix of strategies, often deploying them in tandem or sequence, depending on the specific situation and level of company responsiveness.

The interviews reveal that investors rely on three main types of engagement to promote the adoption of a LW:

1. **Informal dialogue and trust-building**, refers to ongoing, relationship-based engagement with investee companies. Through regular dialogue, investors communicate expectations regarding the LW and gauge the company's commitment. This informal approach serves as a flexible entry point that builds trust and early buy-in, though it relies on persuasion and has no legal force.
2. **Formal or contractual mechanisms**, including embedding LW requirements into investment agreements and exercising shareholder rights to enforce wage standards. Formal mechanisms provide clarity and accountability by making wage standards contractual; however, they typically require sufficient leverage and may be seen as intrusive, leading to minimal compliance if not paired with genuine commitment.
3. **Collaborative coalitions**, where investors join forces through alliances, industry initiatives, or multi-stakeholder partnerships to collectively push for LW adoption. By pooling influence, participants enhance their legitimacy and amplify pressure on companies. Coalitions send a unified signal that LW is a broader investor expectation, not just one investor's concern.

These mechanisms become more effective when supported by three stakeholder salience factors. First, *legitimacy*—investors who demonstrate familiarity with local wage benchmarks and align their demands with accepted standards tend to gain credibility. Second, *power*—whether through financial leverage or reputational influence—helps reinforce investor positions during negotiations. Third, *urgency*—when investors link wage improvements to imminent business risks such as operational disruptions, reputational harm, or workforce instability, companies are more likely to see action as a necessity rather than a moral appeal.

Interviewees consistently highlighted that investors seldom rely on a single approach. Instead, they strategically combine and sequence these engagement mechanisms. Typically, they begin with informal dialogue to surface the topic and assess receptivity. If this proves insufficient, they escalate by introducing contractual conditions or pursuing shareholder actions. Throughout this process, coalitions often play a parallel or supporting role. By participating in collective platforms, investors can enhance the legitimacy of their demands while avoiding direct confrontation, thus preserving relationships and strengthening their position simultaneously.

The insights developed in Chapter 4.4 lay the groundwork for the subsequent analysis. Chapter 5 applies the engagement framework—comprising informal dialogue, formal agreements, coalitions, and stakeholder salience—as an analytical tool to examine how the Investor interacted with the Companies in the context of LW implementation. This framework allows for a systematic assessment of which engagement strategies were employed, how they functioned in practice, and what outcomes or obstacles emerged during implementation.

Building on this analysis, Chapter 6 incorporates the engagement framework into a game-theoretic model to explore investor decision-making. The model captures how the Investor selects among the different engagement strategies—either individually or in combination—to shape the Company's responses. It also integrates core elements such as legitimacy, power, and urgency to assess under which conditions specific strategies are most likely to succeed in driving the adoption of a LW.

5

Analysis of the Case

This chapter analyses the case introduced in Chapter 1, which follows an impact investment in the agri-food sector. The investor included a LW clause in the agreement to ensure fair wages in a labour market where statutory MWs are below subsistence levels. However, implementation proved difficult due to several constraints discussed in this chapter.

Building on the engagement and stakeholder-salience model from Chapter 4, this chapter addresses Sub-question 2: *What were the key objectives, conflicts, and trade-offs between the investor and the company, and what engagement mechanisms were used regarding the living wage policy?* Section 5.2 outlines key actors; Section 5.3 maps core conflicts; Section 5.4 identifies potential alignment; and Section 5.5 reflects on implications for practice.

5.1. Methodological Approach

The analysis presented in this chapter follows the single-case study strategy outlined in Chapter 3, designed to answer Sub-question 2. Empirical data were primarily gathered through four semi-structured interviews—three with Investor representatives and one with a senior Company executive (Table 5.1). The objectives, conflicts, and trade-offs between the stakeholders are mapped to offer an overview of their interests and provide an understanding of the case study outcomes on LW policy, and triangulated with official contract documentation. Interviews were coded using the approach described in Section 3.1.2.

To explore underlying tensions, stakeholder objectives were compared through a conflict matrix that links stated goals to areas of friction. Four thematic conflict types emerged from this mapping: definitional ambiguity, governance uncertainty, power–trust dynamics, and internal misalignment. These are analysed in detail in Section 5.3. The stakeholder-salience framework by Mitchell, Agle, and Wood [70] was used to assess how each party interpreted the legitimacy, urgency, and power of the other. In addition, interviewees were asked to evaluate hypothetical implementation scenarios to assess alignment on phased versus immediate compliance strategies. This approach offers an explanation of the challenges in advancing LW commitments and informs the game-theoretic analysis in Chapter 6.

Stakeholder	Company	Investor	ESG Team	Investment Manager
Stakeholder 1	X			
Stakeholder 2		X	X	
Stakeholder 3		X	X	
Stakeholder 4		X		X

Table 5.1: Stakeholder mapping by organisational role

5.2. Stakeholder Profiles

This section analyses the case from two distinct perspectives: the Investor and the Company. It identifies and ranks each party's objectives, supported by evidence from semi-structured interview data. From the Investor's perspective, the analysis includes an examination of the engagement instruments discussed in Chapter 5, and assesses the substance of the LW policy using the stakeholder salience framework (Section 4.2.3). This framework is also applied to the Company's perspective.

5.2.1. The Investor Perspective

The Investor supported the Company's production expansion via a long-term loan. While the loan was structured within an impact-oriented mandate, the Investor's primary role remained that of a creditor, with its function as a social change agent being secondary. This dual identity is reflected in the Investor's strategic priorities and internal organisational tensions. The loan repayment is not in question and is regarded as the Investor's foremost priority in this case. All internal stakeholders within the investment institution confirm that this objective is grounded in its core identity as a financial entity. Furthermore, as discussed in Section 2.2.2, the institution must actively pursue social and environmental objectives to credibly maintain its status as an impact investor. This constitutes its second strategic priority. Third, the Investor aims to minimise reputational and operational risks, an objective aligned with its long-term institutional sustainability. Finally, maintaining a positive relationship with the Company is considered essential. This priority ranks highest for the investment manager, but somewhat lower for the Investor's internal ESG team, whose focus is more strongly aligned with achieving social impact.

Objectives and Priorities

Table 5.2 distils four objectives from the interview evidence. Financial security dominates, followed by social impact and risk containment. Collaborative partnerships are explicitly valued, yet they primarily serve as a means to the first three ends.

Objectives	Illustrative quotes
Secure financial returns	<i>"The primary goal is simple: ensure the Company can repay its loan plus interest."</i>
	<i>"From a credit standpoint, ensuring that loans are repaid without defaults is critical."</i>
	<i>"As long as the repayment schedule is maintained in full and on time, other factors become less critical."</i>
Deliver social impact	<i>"Living wage is a key component of our impact framework."</i>
	<i>"We made paying living wages a hard requirement in the facility agreement."</i>
Manage operational & reputational risk	<i>"Poor practices can tarnish a client's reputation."</i>
	<i>"Non-compliance can lead to strikes, sabotage, or broader social unrest."</i>
Maintain collaborative partnerships	<i>"They prefer a collaborative approach rather than simply imposing policies."</i>
	<i>"If issues arise, we work with clients to find a mutually acceptable resolution."</i>

Table 5.2: Objectives of the Investor supported by illustrative quotes

The quotes show an credit-first logic. The table positions the investor primarily as a lender. All three quotes anchor the discussion in the discipline of loan repayment; only after 'full and timely repayment' do other considerations emerge. Social impact language thus makes its appearance as a secondary but still explicit mandate, and points to the dual identity of financial agent and change agent described earlier in this study (see Section 2.2.2). The management of operational and reputational risks acts as a protective buffer linking the two main objectives: it preserves the stability of the loan while maintaining

the investor's credibility in terms of impact. Finally, the partnership objective is seen as an important goal that increases the chances of financial compliance and impact creation.

Instruments in Practice

Building on the three-track engagement framework developed in Chapter 4, the case evidence shows that the Investor ultimately activated only two channels—informal dialogue and formal contractual leverage—while keeping coalition-based action on standby. This selective mix reflects the Investor's dual approach: informal touchpoints help maintain the loan relationship and preserve goodwill, while the LW covenant embedded in the loan agreement and Environmental Social Action Plan (ESAP) provides a credible, enforceable backstop if persuasion fails. (Supporting quotes on every theme can be found in Appendix A)

Informal dialogue

The investor's initial strategy was rooted in informal dialogue and trust-building. Rather than immediately resorting to enforcement, the investor team held regular conversations with the company, using discussion and information-sharing to explain the LW concept. For example, interviews indicate that the investor conducted biannual advisory meetings and on-site visits to review the LW policy and plan its implementation. These meetings were used to maintain momentum on the issue without confrontation. The importance of this relational approach is evident from interview quotes. One investor representative noted that

"We review how they are handling the ESAP items and receive periodic updates. Last year, we reviewed that policy together in a face-to-face meeting"

— ESG officer

This suggests that the Investor needed to negotiate and persuade rather than demand. In practice, this meant focusing on mutual understanding and problem-solving. Another officer remarked

"We also conduct advisory meetings on a biannual basis. During these meetings, we review the development of their living wage policy and create a roadmap"

— Impact officer

Highlighting the investor's emphasis on joint problem-solving. Together, these remarks show how the Investor engaged through open communication, presenting the case for higher wages in terms that also resonated with the Company's interests. By framing the LW as part of a broader business case, the Investor used informal dialogue to gradually align the social goal with the firm's priorities while preserving a positive relationship.

Contractual leverage

Alongside informal dialogue, the Investor also leveraged formal contractual mechanisms to reinforce the LW objective. The loan documentation explicitly tied the investment to LW compliance, and interviewees confirmed that LW terms were written into the agreement. In fact, one officer recalled that

"It was a formal requirement that the client must achieve... and I made it a hard requirement with consequences for non-compliance."

— Impact officer

Indicating that the policy was a formal condition of the loan. This clause provided a clear legal anchor for expectations. However, the Investor balanced this with some leniency. Because the clause was embedded in the Loan Agreement and the ESAP document, the team initially assumed it had to be carried out, but also recognised that a strict stance might not always succeed. Indeed, one representative observed that

"Legally, the default clause is there; using it is often counter-productive."

— ESG officer

Implying that the Investor softened its enforcement in this case. Interview evidence suggests the Investor deliberately avoided imposing strict penalties or deadlines. The LW clause instead served as a signal of commitment and a formal reminder to keep the issue on the agenda. In practice, the Investor left the implementation timetable largely to the Company, treating the contract as an anchor rather than a trigger for immediate sanction. This combination of explicit contractual requirements and flexible enforcement aimed to underscore the importance of LW while preserving the cooperative working relationship.

Representatives from the Investor were also asked about the potential of ILL within their investment strategies (ILLs were found to be a potential instrument in Chapter 4). The Investor views an interest rate reduction as an attractive theoretical lever but acknowledged that, in the present case, it remains unrealistic. Legal counsel warned that granting a bespoke discount would breach competition rules because they are not allowed to offer lower rates as an incentive, so no positive pricing trigger was written into the facility. Attempts to structure a concessionary rate were explored, but such conditions must be incorporated at the product level rather than on a deal-by-deal basis:

"No, that was not discussed here. In my previous experiences at [...], there was sometimes a possibility of a minor interest rate reduction when certain criteria in the ESAP were met. However, here, such discussions have never been introduced."

— Investment manager

Yet the Investor concluded that the current product suite lacks the architecture to embed ILL. As a result, while individuals recall minor rebates in other institutions, they confirm such discussions have never been introduced as a formal product feature. This unused potential is later explored in Section 6.4.

Collective bargaining

The Investor, in practice, didn't make use of a form of coalition building or collective bargaining in the analysed case.

Strategic Depth: Legitimacy–Urgency–Power

The Investor's stance combines high moral authority with restrained enforcement. Her claim is recognised as valid and reinforced by a legal 'big stick', yet the timetable for action is deliberately abandoned, and the default clause remains unused. In practice, this positions the Investor as a credible yet patient creditor: powerful enough to keep the LW issue on the table, but not forceful enough to accelerate implementation when the pressure mounts. The Investor's position and LW claim are analysed using the salience criteria of Mitchell, Agle, and Wood [70]. Supporting quotes can be found in Appendix C.

Legitimacy

The Investor repeatedly framed the LW demand as inherently appropriate, underlining its own legitimacy. One impact officer emphasised that:

"Living wage is a key component of our impact framework. It is one of the three key impact pillars of our Company."

— Impact officer

Explicitly linking the demand to core objectives (notably sustainable job creation under SDG 8). They described a LW as almost a proxy for job decency, implying the expectation was grounded in shared ethical values. Similarly, another interviewee declared:

"I firmly believe in fair remuneration"

— Investment manager

And insisted that paying a wage adequate for a decent standard of living was important. These statements show the Investor regarded LW not as an arbitrary request but as a valid and proper condition.

Moreover, the investor saw strategic value in success. A representative wanted a flagship success story client implementing a LW, signalling that demonstrating a model case would reinforce legitimacy. In sum, the investor asserted a strong moral legitimacy by situating LW at the heart of its impact mandate and aligning with widely recognised development goals. This sense of appropriateness strengthened its engagement: the investor could insist on the LW clause with confidence, treating it as consistent with its identity and mandate, which in turn could support the use of relational and contractual tactics.

Urgency

While urgency is communicated softly. In theory, the moral urgency of poverty alleviation and the reputational risks of ignoring wage issues should increase the urgency of implementing a LW policy. In practice, however, the Investor's communication of urgency was deliberately moderate. Interviewees acknowledged the moral urgency of wage reforms but indicated that the Investor applied only gentle pressure. One representative explained :

"Our bottom line is that the living wage must be met by the end of the investment period—although, of course, earlier achievement is preferable since it generates a positive impact sooner."

— Impact officer

Indicating that while compliance by loan maturity was required, there was flexibility. Another representative echoed this by saying:

"The understanding is that the earlier they implement it, the better."

— Impact officer

These statements show that the investor set a clear overall deadline for themselves (the end of the loan term) but left the schedule to the Company. In practice, no fixed milestones or penalties were imposed within that time frame. Instead, the Investor framed LW adoption as an essential part of the project but maintained a lenient, phased approach. This meant the Company did not feel forced into immediate action; the Investor effectively nudged compliance by emphasising long-term benefits and reputational risks rather than demanding an immediate start. In sum, urgency was communicated as an eventual expectation rather than a short-term demand, reflecting the Investor's judgment that keeping the Company on board was a priority even as it pressed for progress on wages.

Power

Power is *credible but untested*. The Investor has the power to effect a clause of default when LW standards are not met, but hasn't used this power yet. Also, there is some ambiguity about whether and when to use this power within the Investor's team. Interviewees described the Investor's power as credible but primarily held in reserve. They noted that formally, the Investor had significant leverage (a contractual default clause), but it chose not to invoke it aggressively. In other words, the investor could force penalties, but had not done so. One representative observed:

"They are not enthusiastic about being dictated to; they prefer a collaborative approach."

— Investment manager

So the investor refrained from imposing threats. Consistent with this, a representative explained:

"We normally do not impose such conditions on our own terms and prefer that the client fully understands what they are signing."

— Impact officer

These remarks suggest the Investor viewed its formal financial leverage as a background tool rather than an immediate weapon. The cautious use of power reflected the priority of preserving the partnership. Overt enforcement would likely have provoked resistance or halted the project. In practice, the Investor held the default clause quietly as a latent threat, relying on persuasion and informal dialogue instead

of explicit sanctions, and keeping any punitive option as a final resort. This dynamic left the Company with considerable autonomy in timing implementation, consistent with the Investor's preference for negotiation over confrontation.

In summary, the Investor combined relational commitment with formal conditionality, reflecting its assessment of the issue's importance. A strong sense of legitimacy—viewing the demand for a LW as central to its mission—enabled the Investor to apply pressure through both informal dialogue and a binding clause. At the same time, the Investor recognised its limited power and exercised restraint: it emphasised contract terms but avoided harsh enforcement. The Investor communicated urgency as an ultimate expectation, requiring compliance before the end of the loan term, while allowing for gradual progress. Each strategy was thus tailored to the Investor's perceptions of urgency, power, and legitimacy in context. The interview data show, for example, that while the Investor insisted on including a binding LW requirement in the agreement, it emphasised phased implementation and partnership in practice. Legitimacy gave the Investor confidence to pursue the LW objective; power was held in reserve, and urgency was applied with a light touch. By integrating confidence-building dialogue with formal clauses, the Investor secured a negotiation outcome that possibly advanced its social objectives without jeopardising the deal.

5.2.2. The Company perspective

The Company, as the loan recipient, utilised the funds to expand its operations internationally. Access to the loan was contingent upon fulfilling several formal conditions established by the Investor, one of which was the implementation of a LW across its workforce. However, as previously discussed, the contract did not specify a clear timeline or enforcement mechanism for implementation. This omission grants the Company substantial flexibility to delay or defer the policy's execution. The Company's primary objective is the expansion of its production capacity, enabled by the financial injection. Operating within the agricultural sector, the Company faces relatively high labour costs, which constitute a significant portion of its overall expenditure. It contends that the introduction of a LW would considerably increase these costs, thereby undermining its ability to meet loan repayment obligations. This concern informs the Company's second strategic priority: preserving a balanced equity position while securing additional financing. Additionally, the Company places strong emphasis on retaining complete control over its value chain, highlighting the importance of maintaining vertical integration across its operations.

Objectives and priorities

Table 5.3 distils three objectives from the interview evidence. Expand production dominates, followed by secure external finance & leverage own equity. Maintaining vertical integration and own chain control is explicitly valued, yet it primarily serves as a means to the first two ends.

Objectives	Illustrative quotes
Expand production	<p><i>"The Company now operates around 500 ha of product X, with plans to expand to approximately 1020–1030 ha."</i></p> <p><i>"We initially expanded from 2.5 ha to about 40 ha ... The plan was to eventually reach around 1000 ha."</i></p> <p><i>"The ambition was even set to build an additional 120 ha of greenhouses."</i></p>
Secure external finance & leverage own equity	<p><i>"Any deal should also secure debt financing to leverage our own equity elsewhere."</i></p> <p><i>"The Investor wasn't the only option, but it was very attractive given our previous experience with another investor."</i></p>
Maintain vertical integration and own chain control	<p><i>"We prefer to manage many functions in-house, such as building and supervising greenhouse complexes."</i></p> <p><i>"We also participate in a temp agency, operate a packaging station, and run our own sales cooperative."</i></p>

Table 5.3: Prioritised objectives of the Company supported by illustrative quotes

The prioritisation of the Company's objectives aligns with the classical aims of firms operating in competitive sectors [1, 73], namely business expansion and profit maximisation. These objectives reflect the commercial logic underpinning the Company's strategic decisions.

Strategic Depth: Legitimacy–Urgency–Power

As discussed in Section 4.2.3, the effectiveness of investor engagement is mainly dependent on how it is perceived and received by the investee firm. This theoretical lens offers a valuable framework for understanding why specific engagement strategies are effective while others are not. It is therefore essential to analyse this not only from the Investor's standpoint, but also from the perspective of the Company itself. In the following section, the concept of stakeholder salience is assessed from the company's viewpoint, following a structure parallel to that of Section 5.2.1. This analysis is supported by interview quotations (see Appendix C), offering empirical insight into the Company's perceptions of the Investor's legitimacy, urgency, and power.

Legitimacy

The Company's view of the Investor's legitimacy was nuanced. On one hand, it recognised the Investor's standards as a valuable "license to operate." The Company acknowledged that partnering with a reputable investor added credibility. Conducting parts of the process in a common language and aligning with international norms made the Investor's social-impact framework acceptable. On the other hand, legitimacy was tempered by mixed internal attitudes. Some staff saw the LW requirement as burdensome:

"Internally, feelings were mixed. Some colleagues thought, What a hassle, we'll address it eventually."

— Company

Given that base pay was already above the statutory minimum with bonuses and benefits. Thus, while the Investor's involvement carried moral weight, the Company only partially embraced the concept. Section 5.2.1 shows that the LW clause was taken seriously only as long as it aligned with commercial realities. The Company compared its practices (e.g. Fairtrade premiums, transport allowances) to the Investor's benchmark and felt justified in its interpretation. In negotiations, the Company tacitly accepted the Investor's legitimacy; it did not flatly reject the demand, but it exploited ambiguities and alternative standards (for example, adopting IFC ESG procedures) to dilute the demand. In sum,

legitimacy gave the Investor a seat at the table, but the Company's pragmatic view of "fair" pay limited the pressure this factor exerted in reaching an agreement.

Urgency

The Company consistently downplayed any immediacy in adopting the LW. It explained that there was no sense of urgency once the deal was signed. Most pressure occurred years earlier, during contract finalisation. Indeed, the formal agreement imposed no timeline for wage increases, giving the Company considerable flexibility to delay or postpone implementation (Section 5.2.1). In practice, the Company devoted the new capital to expanding production, treating the wage clause as a long-term goal rather than a pressing demand. One representative noted:

"Another factor is the IFC, which, since this year, represents a larger investment than the Investor. They don't focus on the LW at all. In fact, we agreed with the Investor to follow the IFC's ESG reporting procedures, meaning the LW might sometimes take a back seat

— Company

This low urgency aligned with Table 5.3 findings: the Company's top priority was capacity growth, and labour-cost compliance was deferred in the absence of fixed deadlines. The negotiations thus stalled because the Company felt no immediate sanction for delay and even relied on external requirements to justify delay. In sum, the Company interpreted the Investor's moderate pressure and the absence of a deadline as license to focus on expansion, illustrating how low perceived urgency from the Company's side underpinned a lack of momentum in the bargaining process.

Power

The Company perceived the Investor's formal power as quite limited, leveraging its alternative options and contractual ambiguities. As one executive remarked, the Investor "wasn't the only option" for financing; indeed, despite valuing the Investor's credibility, the Company could have pursued its own capital, albeit with more uncertainty. Legally, the LW clause was porous:

"Legally, the Investor is not obliged to enforce the living wage clause, even if it appears in the contract—there's always sufficient ambiguity about its precise meaning.

— Company

And even contemplated removing the clause altogether to avoid being bound. These comments reflect Table 5.3 conflict analysis, which showed the Company fiercely guarded its autonomy (e.g. vertical integration) and was wary of "intrusive oversight" in contracts. In practice, the Company used this sense of power to resist strict enforcement. By highlighting its internal resources (own equity, diversified operations) and the possibility of other investors, the Company neutralised the Investor's leverage. Consequently, the negotiation shifted towards compromise: the Company effectively dictated pacing, knowing the Investor was reluctant to force harsh penalties. In short, the Company viewed power as balanced or even in its own hands, shaping a dynamic where the Investor had to moderate its demands.

The Company's perceptions of legitimacy, urgency, and power combined to create a low-salience threat of enforced wage increases. With no imminent deadline, urgency was effectively absent, and the LW issue receded behind expansion goals. At the same time, the Company perceived sufficient leverage through ambiguous contract language and operational self-sufficiency to resist Investor pressure. Although the Investor's reputation and compliance frameworks lent some credibility, the Company treated these more as formalities than compelling mandates. In effect, the Investor was salient enough to be acknowledged but not strong enough to compel change.

This dynamic reflects stakeholder salience theory: the Investor, holding high power and moderate legitimacy but low urgency for this issue, commanded only the minimal attention required for the LW agenda. The case illustrates, for theory, how asymmetries in urgency can tilt an ostensibly balanced stakeholder framework towards inertia. In practice, it suggests that impact investors should establish clearer timelines and stronger incentives -or penalties- to heighten urgency and shift the balance of power and legitimacy in favour of meaningful wage reform.

5.3. Synthesis of Conflicts

This chapter brings together the key tensions identified between the Investor and the Company. After outlining each party’s objectives in Section 5.2, the focus here is to pinpoint where these goals conflict. The aim is to clarify the core disagreements that emerged during the negotiation of the LW clause and to trace their underlying causes. This section links the analysis of stakeholder objectives (Section 5.2) to the discussion of potential alignments (Section 5.4) and places the identified trade-offs within the broader case context. These insights form the basis for the game-theoretic and policy analysis in later chapters by highlighting the main barriers to implementing a successful LW commitment.

5.3.1. Conflicting Objectives

Table 5.4 summarises the central tensions between the Investor and the Company. Each row links one investor objective with a corresponding company goal and explains the resulting conflict. For instance, the Investor’s aim to “secure financial returns” conflicts with the Company’s goal to “expand production.” Implementing a LW increases labour costs, which may limit the firm’s repayment capacity. A similar clash arises when the Investor seeks to “deliver social impact,” while the Company prioritises “competitive labour costs”; here, wage increases are seen as a threat to growth.

Another point of tension involves control and oversight. The Investor’s use of monitoring tools and default clauses to manage operational and reputational risks conflicts with the Company’s preference for autonomy and vertical integration. The firm views mandatory ESG reporting as external interference. Not all objectives are at odds. Both parties value “maintaining collaborative partnerships.” While this is not a source of conflict, it represents a shared interest that could support future alignment.

Investor Objective	Company Objective	Nature of Conflict
Secure financial returns	Maintain competitive labour costs (implicit in expansion)	Higher labour costs from a LW increase financial burden, risking loan repayment capacity.
Deliver social impact (living wage)	Expand production	Social-wage requirements clash with the Company’s goal to keep unit costs down for competitive growth.
Manage operational & reputational risk	Preserve vertical integration & autonomy	ESG monitoring and default clauses are viewed by the Company as intrusive oversight, limiting its control over processes. While the Investor seeks to mitigate reputational hazards through compliance checks, the Company fears prescriptive standards will constrain its flexible, in-house management model.
Maintain collaborative partnerships	Maintain collaborative partnerships	-

Table 5.4: Conflict dynamics between Investor and Company objectives

Table 5.4 reveals that investors’ priorities (profitability tempered by social goals and risk management) systematically oppose the company’s priorities (growth, cost control, and operational autonomy). This visual summary makes clear where the bargaining friction lies. By laying out these objective-level conflicts, Table 5.4 underscores that the LW clause sits at the intersection of financial feasibility and social commitment, and it illustrates why compromises will be necessary if both parties are to move forward.

5.3.2. Main Conflicts

The negotiation over the LW clause gave rise to four principal conflicts. Each conflict involves a fundamental question of definition, authority, or trust, and each has implications for how a LW can be implemented. These are detailed below. The following sections elaborate on each of the four main conflicts highlighted above.

Definition of a Living Wage

This conflict centres on the practical interpretation of the LW. The Investor and the Company held divergent understandings regarding its scope and calculation. The Investor adopted a precise, ex-ante definition: a cash wage threshold based on external benchmarks, including data from the WageIndicator Foundation and the Anker methodology. In contrast, the Company applied a more flexible, ex-post interpretation, combining statutory minimum wages with non-cash benefits such as meals, daycare, and other employee perks. This definitional impasse essentially paralysed the clause's implementation. A dispute that mirrors the observation of no universally accepted methodology (see Section 2.1.1)

In interviews, the Investor explicitly acknowledged uncertainty about which items “*fall under the living wage concept*” while the Company expressed frustration that the definition remained undetermined. Appendix C documents these differing perspectives. For instance, the Company representative questioned how to calculate the LW and whether certain benefits should be included. Also, the Company highlighted its comprehensive employee benefits package and resisted the idea that such provisions should be excluded simply to meet a numerical cash threshold.

This conflict stems from fundamentally different reference frames and institutional motivations. The Investor prioritised consistency and comparability across its portfolio and thus relied on standardised benchmarks. The Company, operating under narrow profit margins, viewed non-cash benefits as integral components of employee remuneration. The mismatch in assumptions, such as urban versus rural cost of living and cash-only versus total compensation, led to disputes over the validity of each party's figures.

As supported by interview evidence in Appendix C, this definitional ambiguity impeded clear communication and hindered compliance efforts. For future implementation of a LW, the absence of a shared definition constitutes a significant barrier. Without agreement on what constitutes remuneration, neither party can credibly assess or verify compliance. Resolving this issue will require early, explicit consensus on both the definition of the LW and the underlying cost model, ensuring that all stakeholders operate from a common understanding.

Governance and Implementation Uncertainty

The second conflict concerns the enforcement of the LW and the question of who holds responsibility for its implementation. This issue stemmed from ambiguity surrounding governance structures, timelines, and accountability. Interview data indicate that the Investor only assumed the project lead role midway through the initiative, a delayed involvement that hindered effective oversight. The Investor later described this as a “*missed opportunity*,” while the Company stated that key elements had already been determined before the Investor's engagement (Appendix C).

The absence of a clearly designated lead created uncertainty about how the LW clause would be operationalised. Similarly, the loan agreement lacked a defined timeline for wage increases, affording the Company considerable discretion to defer implementation, precisely the type of governance vacuum flagged in the impact-measurement literature in Section 2.2.2. Without concrete enforcement mechanisms, the clause remained largely symbolic. This conflict can be traced to the contract design and underlying negotiation dynamics. The Investor may have been hesitant to impose rigid conditions, while the Company preferred a flexible approach. As a result, governance responsibilities became ill-defined. The absence of interim milestones created a classic moral-hazard scenario in which the Company could postpone wage adjustments with little fear of sanction. In practice, this meant that the LW provision functioned more as an aspirational goal than as a binding obligation.

For future implementation, this conflict highlights the necessity of robust governance frameworks. Contracts should clearly specify leadership roles, implementation milestones, and accountability mecha-

nisms, for example, by designating a responsible party to monitor progress. Without such clarity, even well-intentioned LW provisions risk being neglected or indefinitely delayed.

Power and Trust Dynamics

This conflict centres on the relational dynamics between the Investor and the Company, particularly concerning power asymmetries and the erosion of trust. Although the Investor provided the financing, its practical leverage over the Company was limited. The Company maintained operational control and had access to alternative sources of capital. This exemplifies a classical trust failure: once the Company realised the Investor would not enforce penalties, asymmetric information allowed it to delay the LW timeline with impunity.

Trust deteriorated when the Company renegotiated the terms of the LW clause in a manner that contradicted prior understandings. As documented in interview data (Appendix C), the Investor reported negotiating “*in good faith*,” only to find that the Company “*put a completely different spin on things*”. This conflict arose from the unequal stakes each party held in the LW outcome. The Investor prioritised social impact, whereas the Company focused on financial stability and growth. Once it became clear that the Investor would not enforce strict penalties or timelines, the Company recognised it could delay implementation with minimal consequence, illustrating the ‘purpose-washing’ risk outlined in Section 2.2.2, where asymmetrical power and opaque incentives erode trust. This asymmetry shifted the power balance: the “principal” (Investor) opted for compromise, such as allowing phased implementation, while the “agent” (Company) capitalised on the flexibility.

The implications for future LW initiatives are significant. Low mutual trust and uneven power dynamics suggest that voluntary commitments may be insufficient. In this case, the Investor’s credibility was undermined when the Company failed to meet expectations. To avoid similar breakdowns, future agreements may require stronger assurance mechanisms, such as penalty clauses, ILL, or independent third-party oversight. Equally important is the cultivation of trust. The Investor may need to demonstrate ongoing commitment through regular engagement or the use of non-financial incentives to secure the Company’s cooperation. In summary, unresolved issues of power and trust can render LW provisions ineffective. Addressing these relational dynamics proactively is essential for successful implementation.

Internal Misalignment

An additional conflict arose internally, originating within the Investor organisation itself, reflecting a divergence between the investment manager, primarily focused on financial returns, and the ESG/impact officer, who championed the LW policy. Interview data reveal that the investment manager regarded the LW clause as a late-stage requirement to be accommodated, whereas the ESG officer approached it as a core policy objective, this undermined the Investor’s leverage (Appendix C).

An apparent tension in strategic priorities also emerged. The investment manager acknowledged that financial considerations generally carry greater weight within the institution, while the ESG officer expressed concern that excessive operational demands might cause the front office to “*switch off*”. This misalignment stemmed from the differing mandates and levels of commitment across internal functions. The investment manager, newly introduced to the LW requirement, prioritised loan repayment. In contrast, the ESG officer had advocated for the clause but lacked enforcement authority.

Consequently, the Investor’s external position appeared fragmented, which the Company was able to discern. Even if the agreement was reached between the Investor and the Company, internal divergence within the Investor organisation risked undermining implementation. For future applications, recognising and aligning internal priorities is essential. Without such alignment, internal tensions may weaken the enforcement of social provisions, as financial imperatives overshadow impact goals or as internal support erodes due to competing demands.

5.4. Areas for Potential Alignment

In a negotiated setting, alignment refers to the presence of overlapping interests or shared objectives between the Company and its Investor. Identifying such common ground is critical: where both parties recognise mutual benefit, these areas can serve as a foundation for agreement. In this case, examining

potential alignment offers insights into how the Company and the impact Investor might collaboratively advance LW objectives, rather than remain in conflict. The following sections explore three key dimensions of alignment—perceived benefits of the LW, reputational considerations, and implementation strategy—by comparing each party’s viewpoint and identifying points of convergence.

5.4.1. Living Wage Benefits

Literature on LW identified several key benefits such as higher productivity, lower turnover, improved health, and economic stability, that enhance both social outcomes and firm performance (see Section 2.1.1). These themes also emerged from the case interviews:

1. **Decent work and livelihoods.** The investor’s impact advisor connected LWs to sustainable development, noting that a LW *“acts almost as a proxy for job decency”* under SDG 8.
2. **Job creation and social impact.** The investment manager linked the Company expansion directly to social outcomes, emphasising that the four new greenhouses *“create jobs and deliver social impact”*, suggesting that fair wages support broader community benefits [53].
3. **Employee retention and satisfaction.** The company’s representative highlighted the importance of existing benefits—*“a daycare, warm lunches, team days, outings, company parties, etc.”*—and warned that cutting these to meet a wage threshold *“would undermine the overall attractiveness of the employment package”*. This illustrates how a holistic compensation package helps maintain a stable and motivated workforce.
4. **Credibility and market value.** The representative stated that the Company *“already adheres to Fairtrade standards”* and proposed that additional certifications *“could also add value”*. In other words, meeting higher wage standards can enhance the company’s market legitimacy via recognised labels.

These insights reveal a significant degree of convergence in how both parties perceive the value of a LW. The Company expresses confidence in its compensation practices, one manager noted, *“we pay good wages... we’re Fairtrade certified and pay well above the minimum”* (Appendix C) and complements wages with employee benefits aimed at enhancing worker well-being.

The Investor, meanwhile, formalised the LW provision within the loan agreement, even treating non-compliance as a default event, thereby institutionalising the moral and economic rationale for fair pay (Appendix C). Both parties acknowledge that adequate wages contribute to worker welfare and support overall project success. While the Company focuses on practical remuneration and benefit structures, the Investor frames these efforts in terms of development impact and contractual compliance. Although each party articulates the benefits differently, both share an underlying commitment to fair compensation, stability, dignity, and long-term impact, indicating strong potential for alignment.

5.4.2. Reputational Gains

Reputation and public image were key concerns for both parties, though framed through different lenses. For the Investor, poor labour standards pose reputational risk, even when financial returns are strong. As one investment manager warned, *“poor practices – such as mistreatment of employees... can tarnish a client’s reputation”*. In this context, compliance with LW provisions is viewed as both risk mitigation and a marker of credibility. The ESG officer reinforced this view, noting that the Company received *“positive attention”* at a conference despite its LW policy being *“inadequate”*—raising concerns about greenwashing and the need for more substantive compliance (Appendix C). For the Investor, then, LW serves not just a social function but also acts as a signal of genuine ESG performance.

The Company framed reputational value more pragmatically. The representative described LW as *“still a relatively niche topic,”* while emphasising the Company’s strong position in consumer-facing certifications such as Fairtrade (Appendix C). He argued that additional labels, like PlanetProof, could *“add value”* to the product, suggesting that fair-pay practices enhance market credibility, especially when embedded in trusted certification schemes. However, he acknowledged ongoing scrutiny of what constitutes a *“real”* LW, recognising that reputational benefits depend on clearly defined, verifiable standards. Although the Company did not cite direct reputational returns from adopting a new wage policy, it implicitly linked fair compensation to brand identity through its certification strategy. Mechanisms

such as Fairtrade committees, which democratically manage premium distribution, further reinforced the Company's responsible image (Appendix C).

Both parties view reputation as a strategic asset and associate it with fair pay, albeit through different mechanisms. The Investor sees LW compliance as essential to managing reputational risk and maintaining ESG integrity, while the Company uses third-party certification to signal its values to consumers. This alignment, centred on reputational legitimacy, creates a shared incentive to uphold credible labour standards. Neither party wishes to appear exploitative, and both recognise the reputational cost of failing to act. Thus, although framed differently, both parties see fair pay as tied to their legitimacy and long-term image. Their perspectives are not identical, but they are complementary and convergent.

5.4.3. Phased Implementation Strategies

Both parties expressed a clear preference for a phased approach to achieving full LW compliance, rather than an immediate transition. When presented with hypothetical implementation scenarios, the Company respondent selected the phased option as most viable: *"Scenario 2 – the most flexible option – is the most attractive,"* while committing to full compliance upfront or disregarding the clause entirely were seen as *"tricky"* or least attractive (Appendix C). The ESG officer echoed this view: *"Scenario 2 is my preference,"* acknowledging that although immediate compliance would be *"fantastic"*, it was not realistic. Rejecting the clause outright was similarly dismissed as undesirable (Appendix C). These perspectives show strong alignment around a gradual trajectory.

This shared stance was reflected in the contract design. The Investor's impact officer confirmed that no formal timeline was imposed; instead, the requirement remained in effect until the end of the investment period, providing flexibility while preserving long-term intent. Strict annual benchmarks were deliberately avoided to give the Company autonomy and incentive to progress at its own pace (Appendix C).

The Company also recognised the risk of rigid deadlines. Scenario 3, disregarding the wage requirement and risking fund withdrawal, was seen as *"especially difficult,"* particularly because financing had already been disbursed (Appendix C). The ESG officer confirmed that withdrawal was unlikely: *"I do not expect that we would actually withdraw our investment,"* further reinforcing the mutual preference for a patient, flexible approach (Appendix C).

In summary, both the Investor and the Company support a phased rollout of LW compliance. While the Company emphasised the risk of losing financing, and the Investor underscored contractual flexibility, both perspectives converge on a shared, pragmatic strategy. The agreement's design reflects this alignment and provides a basis for negotiating a realistic, multi-year upgrade path. The Investor offers space and incentives; the Company steers gradual progress to avoid breaching expectations.

5.5. Conclusion of the Chapter

Chapter 6 addressed Sub-question 2: What were the key objectives, conflicts, and trade-offs between the Investor and the Company, and what engagement mechanisms were employed concerning the LW policy? The chapter explored the distinct objectives of the Investor and the Company, the tensions that emerged between them, and the mechanisms used to manage these tensions in the pursuit of a LW.

From the Investor's perspective (Section 5.2.1), the main goals were securing loan repayment and fulfilling its impact mandate by promoting LW standards. Additional aims included managing reputational risk and maintaining a constructive client relationship. The Company (Section 5.2.2), by contrast, prioritised production expansion, cost control, and strategic autonomy.

This divergence resulted in an initial misalignment: while the Investor approached the issue from an ethical and long-term risk perspective, the Company viewed it through a short-term commercial lens. The core conflict centred on the timeline and scale of implementing a LW. The Investor advocated ambitious changes, while the Company expressed concern about immediate financial impacts and competitive pressure. The negotiations led both parties to consider necessary trade-offs:

- The trade-off between social impact and short-term profit emerged as a recurring theme. For instance, the Company contemplated accepting slightly reduced profit margins in the near term in exchange for the long-term benefits of a more stable and motivated workforce.
- The Investor, in turn, showed willingness to compromise by phasing in the LW over a realistic time frame, rather than insisting on instant full compliance – thus balancing the urgency of ethical compliance with the practical realities of the business.

These trade-offs underscore a key finding of the chapter: **successful outcomes require flexibility from both the Investor and the Company**, acknowledging each other's constraints while upholding the shared goal of fair worker compensation.

Crucially, the chapter detailed the engagement mechanisms that enabled the Investor and Company to navigate these conflicts. The Investor employed a combination of formal and informal engagement strategies:

- Informal dialogue involved sustained dialogue with the Company, sharing knowledge, presenting thresholds, and building trust over time. It held regular meetings and site visits, framing the LW as part of a broader sustainable business strategy. These informal interactions helped align the social goal with the Company's commercial interests.
- Formal mechanisms included incorporating LW clauses into investment and contract agreements. For example, the investment deal was structured such that continued financing was contingent on the Company making verified progress towards paying a LW, thereby legally binding the Company to its commitment.
- The Investor didn't leverage collaborative initiatives to reinforce external pressure.

In summary, Chapter 6 demonstrated how an impact investor negotiated, structured, and initiated the enforcement of a LW commitment in a private-sector project, thereby addressing Sub-question 2. It showed that the Investor's objectives (loan security and impact) were in tension with the Company's priorities (growth and cost-efficiency). The main conflicts revolved around these opposing goals. The Investor managed these trade-offs by combining dialogue with knowledge sharing for progress on LW, while allowing flexibility in timing (Section 5.2.1). Ultimately, in the absence of strong urgency or binding incentives, the LW commitment progressed only incrementally. The conflicts and trade-offs analysed here illustrate that while tensions between impact goals and business interests are real, they can be resolved. These findings set the stage for the game-theoretic analysis in Chapter 6.

6

Game Theory Application

This chapter applies formal game-theoretic models to analyse the negotiation dynamics between the Investor and the Company on LW commitments. Building on the empirical findings from previous Chapters 4 and 5, the study systematically translates qualitative insights into game and strategic models through the lens of the P-A game and answers sub question 3: *How does a P-A game-theory framework explain the strategic choices of the Investor and the Company under the baseline wage negotiations?* and sub question 4: *How do specific investor engagement strategies alter the asymmetries in the P-A game and shift the equilibrium outcomes towards LW compliance?*

6.1. Methodological Approach

Drawing on the literature reviewed in Chapter 2 and guided by the game identification tool in Figure 3.1, the P-A framework was selected as the most appropriate model to represent the interaction between the Investor and the Company. Accordingly, the semi-structured interviews and supporting data collection were designed to surface the core dynamics of a P-A game.

As Bekius and Gomes [10] note, multiple games may coexist in real-world settings. Alternative game types were considered, like a simultaneous model, but were rejected, as they fail to capture the sequential structure of investment covenants. The data, collected through semi-structured interviews (Section 3.1.2), were thematically coded and translated into strategic preferences. This translation was achieved by testing hypothetical scenarios during interviews and interpreting responses analytically. Where possible, findings were cross-validated against contractual documentation to enhance reliability.

As discussed in Section 6.1.3, game trees are well-suited to situations where information asymmetry and strategic sequencing shape outcomes. They clarify who knew what, when, and how incentives shaped each actor's options. By doing so, they reveal whether choices stemmed from genuine conflict or from structural misalignment. The game-tree construction followed the method proposed by Hermans et al. [51], summarised in Figure 3.5 and outlined below:

1. **Preparation:** Conduct an actor scan, define the primary objectives and research hypotheses, and delineate the boundaries of the problem.
2. **Identify players and moves:** Generate a comprehensive list of potential actions per actor. This includes identifying the status quo as well as plausible alternatives. Not all actions need to be optimal; the goal is inclusiveness.
3. **Develop the game tree:** Establish the sequence of actions and the information available to each actor at every decision point. Clarify the distinction between actual and desired outcomes, and classify outcome types. Create and score system tags for outcome discovery and payoffs.
4. **Analysis of the results:** Organise outcomes and strategies into a strategic matrix or conflict graph. This step includes identifying stable outcomes, Nash equilibria, and performing a sensitivity analysis.
5. **Implications:** Analyse the strategic implications, identify Pareto improvements or Hicksian opportunities for remedial action, and evaluate the robustness of the game model.

6.1.1. Preparation

This section formalises the strategic setting underpinning the negotiations between the Investor and the Company over adopting a LW policy. Building on the empirical insights synthesised in Chapter 5, which mapped each party's objectives, trade-offs, and engagement mechanisms. The Investor seeks to secure loan repayment while promoting social impact through LW implementation, while the Company focuses on securing capital for production scale-up without wage-related cost escalations.

Three strategic hypotheses guide the modelling of the game trees:

- The Investor's main preference is capital preservation; consequently, LW enforcement relies first on informal dialogue and secondarily on explicit contractual sanctions, reflecting a generally conflict-averse policy.
- The Company values production expansion and managerial autonomy. Management may engage in hidden action because the marginal cost of paying a LW is perceived to jeopardise competitiveness.
- Redesigning incentives and strengthening verification protocols could shift both actors toward outcomes that jointly improve financial and social payoffs.

These hypotheses condense the richer narrative evidence reported in Chapter 5 into testable, game-theoretic conjectures about preferences, information asymmetry, and credible incentives. The hypotheses guide the research into what will and will not be modelled. This is a better alternative than modelling first and trying to explain what you modelled later.

6.1.2. Identifying Players and Moves

The next step in the game-theoretical analysis is to identify the key actors and their available strategies. For analytical clarity, each stakeholder group is treated as a single, rational decision-maker; intra-organisational dynamics are assumed to be resolved internally before any external move is made. While finer distinctions (e.g., differences between departments, Section 5.3.2) exist, they are abstracted for clarity and to maintain focus on the P-A relationship.

The Players

Below, the main players of the game are listed and described:

1. *The Investor (I)*. An impact investor that provides growth capital to the Company and wishes to safeguard both financial returns and the adoption of a LW policy.
2. *The Company (C)*. The Company is seeking external financing to expand production while maintaining operational autonomy and cost competitiveness.

Player Strategies

In an extensive game, a *strategy* is a complete, contingent plan that prescribes an action at every information set accessible to a player, including those that may never be reached in equilibrium. For this research, each actor's strategy set is distilled to the mutually exclusive actions listed below. These strategies are distilled from the interviews in Chapter 5.

The Investor:

1. *Immediate enforcement (E_{now})*. The Investor makes compliance with the LW a strict and immediate condition for funding. In the case under consideration, this approach reflects the Investor's desire to show urgency and power and prevent strategic delay by the Company. It involves strict contractual obligations and immediate consequences for non-compliance as defined in the loan agreement.
2. *Phased enforcement (E_{phased})*. The Investor accepts a phased LW schedule, tied to predefined and verifiable milestones. This strategy reflects the real-world trade-offs observed in the case: balancing social impact goals with operational feasibility for the investee. It builds gradual pressure without overwhelming the Company's cash flows, but requires monitoring and trust that incremental steps will eventually reach full compliance.

3. *No enforcement* (E_{none}). The Investor provides the loan without LW enforcement. This was observed as a fallback option where maintaining the financial relationship was prioritised over full wage compliance. Although this approach keeps projects moving, it weakens the LW legitimacy and urgency and exposes the Investor to risks of "purpose-washing" (Section 2.2.2).
4. *Withdraw investment* ($E_{withdraw}$). The Investor withdraws from the investment for any given reason.

The Company:

1. *Immediate adoption* (A_{now}). The Company commits to paying all relevant workers a LW immediately following the investment agreement. This option is rare, especially in low-margin sectors, but signals full alignment with investor expectations and avoids potential conditional financing complications.
2. *Phased adoption* (A_{phased}). The Company proposes a timeline with intermediate steps, gradually moving toward full LW compliance. Specific milestones are negotiated to allow adaptation of cost structures.
3. *Deferred adoption* (A_{none}). The Company doesn't adopt the LW, either refusing LW implementation, signalling future intent or quietly maintaining current wage levels until compelled otherwise.

The seven strategies described above represent the critical decision points that directly influence LW outcomes within the defined boundaries of this study (Section 6.1.2). Each player must choose a single enforcement (the Investor) or adoption (the Company) strategy for the relevant negotiation phase; once selected, other options within the same decision set are no longer available. Table 6.1 shows the preferred ordering of the strategies based on the insights from Chapter 5. This structure reflects the real-world negotiation process observed in the case study, where strategic choices by both actors, such as accepting phased implementation or withdrawing investment, locked in specific pathways and closed alternative strategies.

Table 6.1: Preference Ordering of Strategies per Actor (from most to least preferred)

Actor	Preference Ordering of Strategies
Investor	Phased > Immediate compliance > Continue without > Withdraw investment
Company	No LW > Phased implementation > Immediate implementation

6.1.3. Developing the Game Tree

With the players and their strategy sets defined, the next step is translating the sequential interaction into an explicit, extensive-form representation. This subsection explains (i) the information available to each party at the moment of decision, (ii) the order of moves, and (iii) the procedure used to attach payoffs to every terminal node.

Information Structure.

In the status quo, the Investor fully observes its own decisions, such as the implementation of ESG criteria, while the Company also has visibility over these terms. This setting forms a sequential game of perfect information. However, the Company holds detailed wage data and insights into the day-to-day efforts required to raise wages, information that the Investor can only access through irregular self-reports and occasional audits. Although the Investor and the Company can communicate regarding the contract's content, this exchange does not eliminate the underlying information asymmetry. Moreover, in the game's structure, the information held by a player who moves after the first player is hidden from the player who moves first. In other words, the player on the left makes their move without knowledge of the subsequent choices of the player who moves after. The game remains sequential and finite, and the simple two-move format permits analysis via backward induction, assuming both players form rational beliefs about each other's private information.

Sequence of Play.

Consistent with the contracting reality described in Chapter 5, the *Investor* (I) moves first by selecting one of the enforcement options in E_I . The *Company* (C) then observes this choice and selects an

adoption option from A_C . The resulting two-stage structure yields a game tree with one initial decision node for I and three subsequent decision nodes for C , producing $3 \times 3 + 1 = 10$ outcomes. Although the sequence is short, it captures the essential bargaining leverage of the P-A relationship: I sets the contractual frame, C decides on compliance.

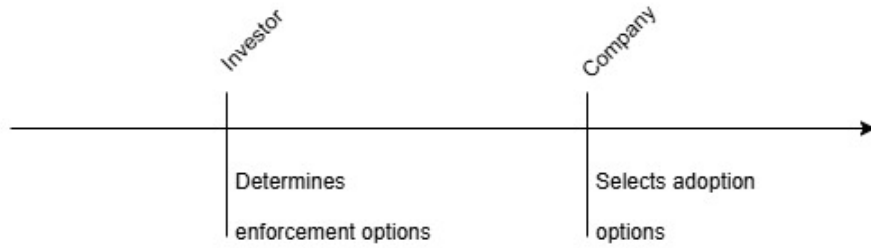


Figure 6.1: Sequence of Play

6.1.4. Initial Game Tree

The next steps in the process involve setting up the game tree. The game tree is constructed based on the sequence of play, with possible moves identified for all actors (Figure 6.2). It follows the logical structuring described in Section 6.1.3 and captures the initial ex post contract dynamics between the Investor and the Company.

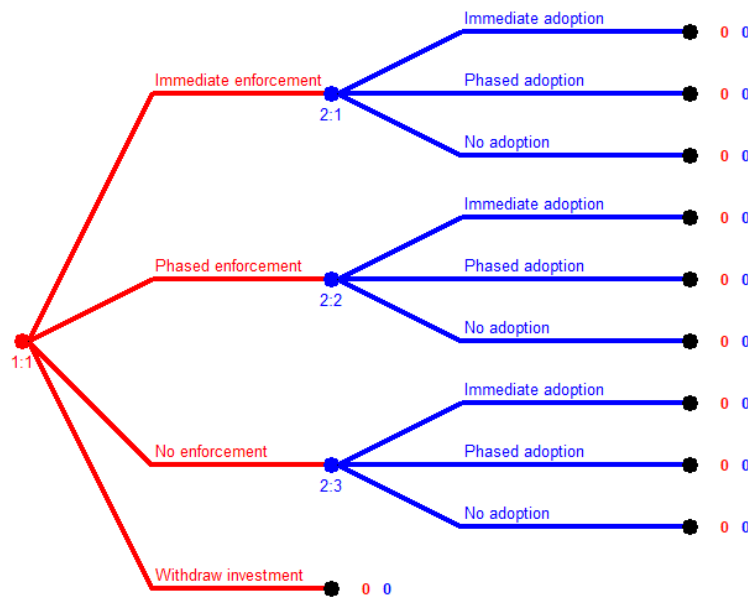


Figure 6.2: Initial game tree without payoffs and information sets

Payoffs

Evaluating ten distinct terminal nodes directly is cognitively costly and empirically non-transparent. Following standard guidance in extensive game analysis, the outcomes are therefore "tagged" with a limited set of qualitative attributes (Table 6.2). The six tags *Social Impact*, *Operational Costs*, *Conflict*, *Flexibility*, *Reputational Damage* reflect the criteria most frequently cited by both parties during interviews. Each terminal node in Table 6.3 is labelled with a combination of these tags, ensuring sufficient variation for preference discrimination.

Table 6.2: Tag definitions and their contextual conditions

Tag	Description	Occurs or Is Possible...
[Social Impact]	Social impact generated by the LW adoption	...when a LW is implemented in full by the Company
[Operational Costs]	Costs incurred to implement LW measures	...whenever the Company implements the LW into their practices
[Conflict]	Conflict between both actors	...whenever both actors do not align
[Flexibility]	Flexible implementation or policy	...whenever an actor has the possibility to take autonomous control
[Reputational Damage]	Reputational harm arising from unmet promises	...when an actor behaves differently from what is communicated externally

Table 6.3: Outcomes and Associated Tags

Outcome #	Tags
1	[Social Impact], [Operational Costs]
2	[Social Impact], [Operational Costs], [Conflicts]
3	[Reputational Damage], [Conflicts]
4	[Social Impact], [Operational Costs]
5	[Social Impact], [Flexibility], [Operational Costs]
6	[Reputational Damage], [Conflicts], [Flexibility]
7	[Social Impact], [Operational Costs], [Flexibility]
8	[Social Impact], [Operational Costs], [Flexibility]
9	[Reputational Damage], [Flexibility]
10	[Reputational Damage], [Conflicts]

Tags are then ranked ordinally for each player (Table 6.4). This indirect procedure reduces the dimensionality of the task: there are only $5! = 120$ ways to rank five tags, compared with $10! = 362.880$ ways to rank ten raw outcomes. The goal is to create and justify a complete preference ordering over all the outcomes. In the end, tags are employed to ensure that the process of determining payoffs is transparent and rational.

Table 6.4: Preference Ordering of Tags per Actor (from least to most preferred)

Actor	Preference Ordering of Tags
Investor	[Conflicts] < [Operational Costs] < [Reputational Damage] < [Flexibility] < [Social Impact]
Company	[Operational Costs] < [Conflicts] < [Reputational Damage] < [Social Impact] < [Flexibility]

The ordinal rankings are converted to a rudimentary cardinal scale to operationalise the game tree. The present analysis assigns the values $\{-3, -2, -1, +1, +2\}$ to successive positions in each actor's tag hierarchy. Although this is a strong assumption, this five-point spread satisfies two pragmatic requirements: it preserves ordinal relations and creates enough separation to model (Table B.24). Robustness checks in Appendix B test this assumption by perturbing payoffs and resolving the game.

Table 6.5: Preferences of Investor and Company per Impact Tag

Tag	Investor Preference	Company Preference
Social Impact	+2	+1
Flexibility	+1	+2
Reputational Damage	-1	-1
Operational Costs	-2	-3
Conflicts	-3	-2

Assigning these payoff preferences to the tag outcomes of Table 6.3 results in the payoffs shown in Table 6.6.

Table 6.6: Detailed Payoff per Outcome for Investor and Company

Outcome	Calc	Inv. Payoff	Calc	Comp. Payoff
1	$(+2) + (-2)$	0	$(+1) + (-3)$	-2
2	$(+2) + (-2) + (-3)$	-3	$(+1) + (-3) + (-2)$	-4
3	$(-1) + (-3)$	-4	$(-1) + (-2)$	-3
4	$(+2) + (-2)$	0	$(+1) + (-3)$	-2
5	$(+2) + (+1) + (-2)$	+1	$(+2) + (+1) + (-3)$	0
6	$(-1) + (-3) + (+1)$	-3	$(+2) + (-1) + (-2)$	-1
7	$(+2) + (-2) + (+1)$	+1	$(+1) + (-3) + (+2)$	0
8	$(+2) + (-2) + (+1)$	+1	$(+1) + (-3) + (+2)$	0
9	$(-1) + (+1)$	0	$(+2) + (-1)$	+1
10	$(-1) + (-3)$	-4	$(-1) + (-2)$	-3

6.2. The Status Quo

6.2.1. Analysis

The game tree presented in Figure 6.3 was analysed using Gambit, a software tool designed for computing equilibria in strategic and extensive-form games. The model yields an apparent Nash equilibrium: the Investor selects a phased implementation strategy for the LW, and the Company, when capable, chooses to implement it in a phased manner. This outcome represents a SPNE and aligns with the intuitive balance of incentives and constraints faced by both actors.

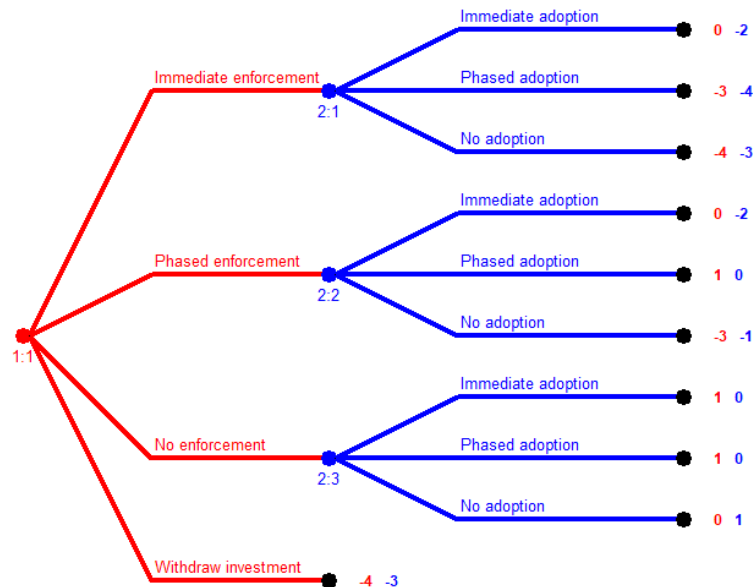


Figure 6.3: Game tree with payoffs

Sensitivity Analysis

A sensitivity analysis was conducted to assess the robustness of this result. The initial payoffs were derived using a straightforward tagging and scoring method. However, it is essential to test whether different but plausible assumptions about utility scaling would affect the model's conclusions. This was done by applying proportional distortions and conducting pairwise adjustments to the utility values presented in Table 6.6. The results, detailed in Appendix B, confirm that the equilibrium remains stable across a range of perturbations. This indicates that the model's findings are not sensitive to the precise cardinal valuations and are driven by the underlying structure of preferences and strategic interaction.

Subgame Perfect Nash Equilibrium

The Investor (red) moves first, choosing *Immediate enforcement*, *Phased enforcement*, *Non-enforcement*, or *Withdrawal*. The Company (blue), fully informed of that choice, then decides whether to adopt the living-wage standard *Immediately*, to make a *Phased* commitment, or to make *No adoption* at all.

Table 6.7: Subgame Perfect Nash Equilibrium (SPNE) outcomes

Investor strategy	Company's best reply	Resulting pay-offs
Immediate enforcement	Immediate adoption	(0, -2)
Phased enforcement	Phased adoption	(+1, 0)
Non-enforcement	No adoption	(0, +1)
Withdraw investment	—	(-4, -3)

Backward induction gives the Company's optimal action after each Investor's move. Anticipating those replies, the Investor compares her own payoffs and strictly prefers phased enforcement (+1) over all alternatives (0, 0, -4). Knowing this, the Company selects phased adoption, yielding the outcome (+1, 0), see Table 6.7.

SPNE: Investor chooses *Phased enforcement*; Company responds with *Phased adoption*.

The strategy pair is sequentially rational and the associated beliefs satisfy Bayes' rule (no off-path beliefs are required because the game has perfect information). This analysis reveals a unique SPNE. The Investor opts for phased implementation of the LW, and the Company responds with phased implementation. This outcome reflects a compromise that balances the Investor's interest in social impact and financial returns with the Company's cost considerations and operational flexibility (Chapter 5).

Pareto Optimal Outcomes

A Pareto-optimal outcome analysis evaluates a set of feasible alternatives to identify efficient ones, meaning no other option could make at least one party better off without simultaneously making another party worse off. By systematically comparing each outcome against all others, the analysis eliminates any option that is dominated; that is, any option for which another provides equal or higher payoffs for everyone and strictly higher payoffs for at least one stakeholder. The remaining, non-dominated outcomes lie on the Pareto frontier: moving away from any point on this frontier would necessarily harm at least one participant.

The ten terminal nodes of the status-quo game tree collapse to six distinct payoff sets, Table 6.8:

Table 6.8: Distinct payoff sets across terminal nodes

Payoff set	Investor	Company	Outcomes
A	+1	0	5, 7, 8
B	0	+1	9
C	0	-2	1, 4
D	-3	-1	6
E	-3	-4	2
F	-4	-3	3, 10

- A: (+1, 0) is not Pareto-dominated: no other payoff sets give both players at least these payoffs while making one of them strictly better.
- B: (0, +1) is likewise undominated.
- Every other payoff set (C–F) is dominated by either A or B (e.g., C is weakly dominated by B, D by B, E and F by A).

Pareto-efficient set: A (+1, 0) and B (0, +1).

Hicks-Kaldor Efficiency

Hicks-Kaldor efficiency defines a policy or project as efficient whenever the total gains to those who benefit exceed the total losses to those who are harmed, such that the gainers could—at least in principle—fully compensate the losers and still come out ahead. Unlike Pareto efficiency, it allows changes that leave some parties worse off, provided society's overall economic surplus expands. The test is purely

hypothetical: no actual compensation must be paid, and distributional fairness is set aside; the focus is on whether the size of the total pie grows enough that such compensation would, in theory, be feasible.

Adding Investor and Company utilities gives the joint surplus:

Table 6.9: Total surplus for each pay-off set

Payoff set	Surplus
A	+1
B	+1
C	-2
D	-4
E	-7
F	-7

The highest attainable surplus is +1, achieved only by payoff sets A and B. No other point can give a compensating transfer that leaves both parties better off than at A or B.

Hicks-efficient set: again A (+1, 0) and B (0, +1).

6.2.2. Implications

The game's predicted outcome (Section 5.5), a phased implementation by both the Investor and the Company, corresponds to the SPNE. Backward induction shows that the Investor's ability to threaten either immediate enforcement or withdrawal makes Phased Enforcement its weakly dominant first move. Anticipating this, the Company rationally selects Phased Adoption, yielding payoffs of (+1, 0). The outcome is both Pareto- and Hicks-efficient, as no alternative node increases the joint surplus by +1. However, efficiency masks an asymmetric split: the entire surplus accrues to the Investor, while the Company merely avoids a loss. This result highlights a classic power imbalance in P-A settings: when information is perfect, the principal can appropriate most gains by threatening less attractive enforcement paths.

The Company would prefer the alternative efficient point (0, +1). Interviews reveal that management already perceives the LW as a "significant cost burden" threatening repayment capacity. Without incentive mechanisms, the Company's incentive to exploit loopholes remains intact.. The status quo tree, therefore, flags a latent sustainability problem: efficient yet fragile outcomes are lopsided.

The game tree justifies a phased rollout as a pragmatic compromise, consistent with the empirical finding of Chapter 5 that a phased rollout was the only point of tentative agreement between the parties. Contractual renegotiations or additional payments could, in principle, take the parties from A to B without sacrificing efficiency, but such transfers are outside the current scope of the model.

6.3. The Principal–Agent Game

With the rules and structure of the observed status quo game formalised, the next step is to translate these dynamics into a P-A game tree. This rests on the interpretation, grounded in both theory (Section 3.1.4) and empirical analysis (Chapter 5), that the Investor–Company relationship exhibits key features of a classical P-A game.

In a P-A structure, a *principal* delegates authority to an *agent* to act on their behalf. This delegation introduces core frictions: information asymmetry, power imbalance, and divergent interests (Section 3.1.4). Typically, the agent has superior knowledge about its intentions or internal operations, which opens the door to opportunistic behaviour. The principal, though in control of capital or incentive tools, cannot fully observe or enforce the agent's decisions.

These asymmetries give rise to two main risks. Adverse selection occurs ex-ante, when the agent's hidden information distorts contract formation. Moral hazard arises ex-post, when the agent's actions cannot be perfectly monitored and may deviate from the principal's expectations. Both risks are relevant in the studied case and are captured in the extensive-form game. This chapter aligns the theoretical mechanics of P-A games with empirical insights from the case, showing how power, information, and incentives interact to shape strategic choices. The resulting game tree models these dynamics, clarifying why certain outcomes, such as phased implementation, emerged and under what conditions alternative outcomes might become viable.

6.3.1. Types of Asymmetric Information

Information asymmetry in a P-A relationship appears in two main ways. *Adverse selection* (hidden information) happens when the agent has private knowledge before or during the contract, which the principal does not. This can lead to agreements that benefit the agent's hidden qualities. *Moral hazard* (hidden action) occurs after the contract is signed, when the agent's actions are difficult to observe, allowing them to act in ways that may not align with the principal's interests. These imbalances reduce trust and make it harder for the principal to ensure the agent behaves as expected.

Hidden Information: Adverse Selection

Adverse selection was evident in the case (Section 5.3). The Investor entered the agreement without full clarity on the Company's stance or interpretation of the LW clause. While the Investor defined a LW ex-ante using a benchmark cash amount, the Company applied an ex-post interpretation, combining statutory wage floors with in-kind benefits such as meals and childcare (Section 5.3.2). The Company representative acknowledged that *"what constitutes a LW has yet to be fully defined between the Investor and us"*, revealing a critical information asymmetry. This mismatch meant the Investor could not determine whether the Company genuinely intended to pay a LW, or merely planned to appear compliant by including non-wage elements.

The dispute over wage data further illustrates the asymmetry (Table C.4). The Investor used third-party benchmarks to define the LW level, while the Company described these figures as *"unrealistically high"* and questioned their relevance to the local context. The Investor, in turn, admitted to taking such claims *"with a grain of salt"*, reflecting uncertainty about whether the Company was exaggerating or whether the benchmarks were indeed flawed. This is a classic adverse selection scenario: the agent held superior knowledge of wage realities and cost structures, while the principal operated under informational disadvantage. The resulting misalignment not only complicated contract negotiations but also sowed the seeds for future compliance disputes, as each party began from a different understanding of what the policy required.

Hidden Action: Moral Hazard

Once the contract was signed, moral hazard became a clear risk. The Investor's ability to monitor or enforce the LW condition was limited, giving the Company room to act opportunistically. A key example is the absence of a fixed timeline for implementation (Table C.5): although the contract required LW adoption, *"the urgency and deadline for implementation were not specified in the contract"*, which allowed the Company significant flexibility to delay or defer action (Section 5.3.2). In practice, this is exactly what occurred. The Company prioritised expansion over wage improvements, knowing that no

immediate sanctions would follow. The gap between the formal agreement and its practical execution became increasingly visible.

The Company also engaged in strategic reinterpretation of the wage clause to weaken its substance. As discussed earlier, it sought to fulfil the requirement by including in-kind benefits. For instance, Company representatives claimed compliance by counting items such as meal allowances and CSR-related perks: *“They include elements such as meal allowances and other CSR-related aspects that do not correspond to our definition of a wage. Thus, it appears as though they are paying a LW, but according to our definition, they are not.”* This quote from the Investor underscores the core issue: the agent’s hidden actions—redefining what counts as “pay”—subverted the intention of the agreement (Section 5.3.2).

From the Investor’s perspective, the Company inflated its wage claims by including non-cash items like housing, meals, and bonuses, while actual pay still fell short of the intended LW. Such interpretive flexibility, along with attempts to renegotiate key terms, illustrates classic moral hazard. Once funded, the agent pursued cost-saving measures that the principal could neither easily observe nor credibly penalise. The Investor lacked direct, ongoing visibility into how wages were calculated and disbursed, which created room for non-compliance. Delays in implementation and dilution of wage standards thus exemplify how moral hazard played out in this case.

Power Asymmetry

Power asymmetry refers to the imbalance in the ability to influence outcomes between the Investor (principal) and the Company (agent). While principals can use tools such as incentives, contract clauses, or oversight to guide behaviour (Section 4.3.2), these tools, however, are not always effective in practice. In theory, the Investor held leverage through its financial role and contractual authority. In reality, this power was limited. The Investor depended on the project’s success—and on loan repayment—making it reluctant to apply sanctions (Section 5.2.1). Day-to-day operational control rested with the Company, and formal mechanisms proved weak. ESG clauses and default provisions were included in the contract, but attempts to monitor compliance were perceived by the Company as intrusive. One respondent noted that *“prescriptive standards from the Investor”* threatened the Company’s internal management autonomy. This resistance weakened the Investor’s ability to enforce terms.

Crucially, no strict deadlines or penalties were attached to the LW condition. The Investor pursued a co-operative approach without binding timelines, reducing the Company’s sense of urgency (Section 5.2.2). Once the Company recognised the Investor’s reluctance to escalate, the balance shifted further. Game-theoretic analysis confirmed that the Investor’s best option was phased enforcement, avoiding direct confrontation (Section 6.2). Strict enforcement—such as threatening default—would have imposed costs that outweighed the expected gains. As a result, the Company retained discretion over when and how to implement the LW. The absence of financial rewards or meaningful sanctions further reduced the Investor’s influence, reinforcing the agent’s position.

Divergent Interests

Principals and agents often pursue different objectives. In this case, the Investor prioritised achieving a social outcome—ensuring workers were paid a LW—as part of its broader ESG agenda. The company, by contrast, focused on business performance: expanding production, managing costs, and retaining operational control. From its perspective, adopting a LW conflicted directly with financial goals. Labour was a major cost in its agricultural operations, and management feared that *“introducing a LW would significantly increase these costs, thereby complicating its ability to repay the loan”*. The firm prioritised financial stability and growth over compliance with the wage clause. The Investor, by contrast, was willing to accept lower returns in exchange for social outcomes (Section 5.2.1).

These diverging goals meant that alignment could not be assumed. The Company saw the LW requirement primarily as a condition for accessing capital, not as an intrinsic business value. Once the investment was secured, its incentive shifted to minimising implementation costs. For the Investor, however, the LW remained a core objective. This asymmetry generated friction and strategic delays, as discussed in Section 5.3. The Investor’s push for social performance clashed with the Company’s effort to contain costs. Without direct financial incentives, the firm had little reason to pursue the LW

proactively. The absence of shared value around the LW created a structural tension that limited the effectiveness of voluntary engagement alone.

Implications

Overall, the P-A relationship in this LW negotiation was characterised by significant information asymmetry, a skewed power balance in implementation, and fundamentally divergent interests. The presence of adverse selection and moral hazards meant that investors had to navigate hidden information and actions, while limited power and incentive alignment made enforcement challenging. The conflicting objectives of social good versus economic gain lie at the root of the P-A dynamic. Having established that the negotiation can indeed be described as a P-A game, the analysis now requires a formal game-theoretic P-A model to capture the asymmetries. The obvious candidate is an extensive-form Principal-Agent game in which a move by the Company precedes the Investor's decision, assigning the Company either a "normal" or an "opportunistic" type. This additional node allows the game tree to mirror the very uncertainty the Investor faced about the firm's actual intentions, while still preserving the sequential power dynamic in which the Investor sets the contractual frame and the firm chooses its level of compliance (as described in Section 6.1.3).

6.3.2. Methodological Approach

The methodological approach presented closely resembles the methodology of Section 6.1 and the initial game tree associated with the status quo, but it additionally incorporates an additional node of the Company. Further details and elaborations, together with the sensitivity analysis, can be found in Appendix B and the resulting game tree is shown in Figure B.2.

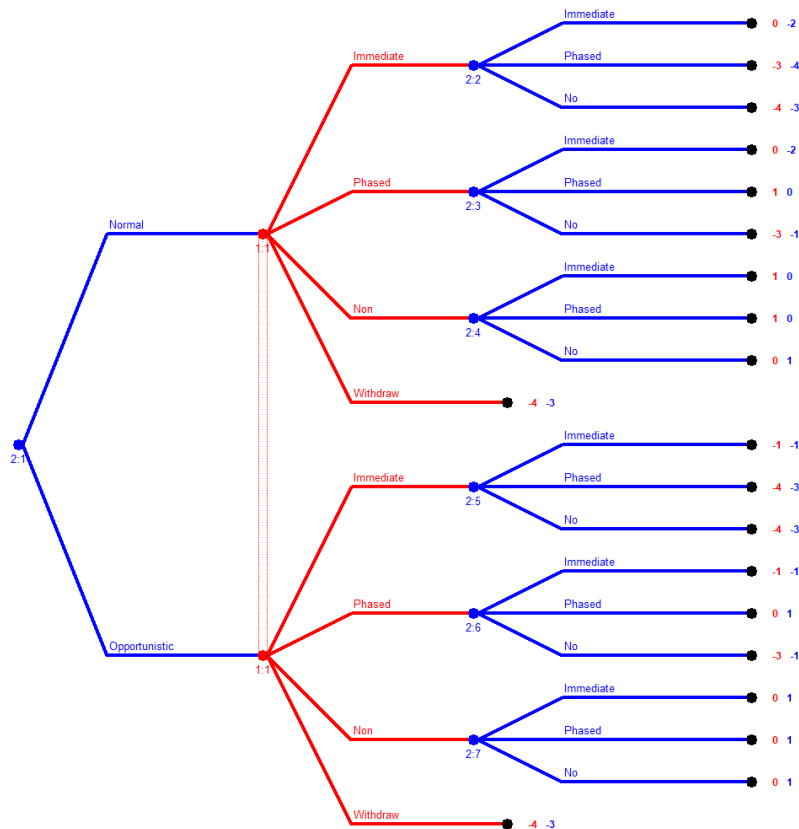


Figure 6.4: Game tree with P-A dynamics

6.3.3. Analysis

Subgame Perfect Nash Equilibrium

The Company (blue) decides first whether to behave normally or opportunistically. The Investor (red) then chooses one of four engagement strategies – *Immediate enforcement*, *Phased enforcement*, *Non-enforcement*, or *Withdrawal* – without being able to observe the Company’s earlier move (the two red decision nodes are in a single information set). Finally, the Company, now knowing everything, elects to implement the living-wage clause *Immediately*, in a *Phased* manner, or *Not at all*.

Investor	Company best reply		Investor pay-off u_I
	$C = \text{Normal}$	$C = \text{Opportunistic}$	
E_{now}	A_{now}	A_{now}	0, −1
E_{phased}	A_{phased}	A_{phased}	+1, 0
E_{none}	A_{none}	any	0, 0
E_{withdraw}	—	—	−4

- E_{phased} *weakly* dominates E_{none} , because it is strictly better when the firm is Normal and identical otherwise.
- Both contracts strictly dominate E_{now} and E_{withdraw} .

Hence, the Investor’s unique sequentially rational choice is

$$s_I = E_{\text{phased}}.$$

Knowing that E_{phased} will be chosen, the first-stage comparison is

$$u_C(C = \text{Normal}) = 0 < u_C(C = \text{Opportunistic}) = +1,$$

So the firm prefers to behave ***Opportunistically***.

SPNE

$$\text{SPNE} = \left\{ \langle E_{\text{phased}}, A_{\text{phased}} \mid_{\theta=N}, A_{\text{phased}} \mid_{\theta=O} \rangle \right\}$$

Along the equilibrium path, the terminal pay-off vector is $(u_I, u_C) = (0, +1)$.

Pareto-optimal Outcomes

Across the 20 terminal nodes only seven distinct payoff sets occur:

Table 6.10: Distinct payoff sets across terminal nodes

Payoff set	Investor	Company	Outcomes
A	+1	0	5, 7, 8
B	0	+1	9, 15, 17, 18, 19
C	0	−2	1, 4
D	−1	−1	11, 14
E	−3	−1	6, 16
F	−3	−4	2, 12, 13, 20
G	−4	−3	3, 10

A point is Pareto-dominated if another point is at least as good for both parties and strictly better for one of them. Running that test:

- A (+1, 0) is not dominated – no alternative gives the Investor $\geq +1$ and the Company ≥ 0 with a strict improvement somewhere.
- B (0, +1) is also not dominated – any attempt to lift the Investor above zero must cut the Company below +1, and vice-versa.
- Every other payoff set (C–G) is dominated by either A or B.

Pareto-efficient set: A (+1, 0) and B (0, +1).

Hicks efficiency

Under the Kaldor-Hicks compensation principle an allocation is Hicks-efficient if there is no other allocation with a higher joint surplus (Investor + Company). Computing the sums:

Table 6.11: Total surplus for each payoff set

Payoff set	Surplus
A	+1
B	+1
C	−2
D	−2
E	−4
F	−7
G	−7

The maximum attainable surplus is +1, achieved only at payoff sets A and B. No feasible node delivers a surplus of +2 or higher; thus, nothing can finance a hypothetical compensation that would make both parties better off than at A or B.

Hicks-efficient set: A (+1, 0) and B (0, +1).

6.3.4. Implications

The SPNE obtained- the Company behaves opportunistically, Investor chooses phased enforcement and the Company then implements phased – terminates at payoff set B (0, +1) that alligns with outcomes 15,17,18 and 19. These outcomes:

- Are Pareto-efficient (no feasible change benefits one party without hurting the other),
- Are Hicks-efficient (joint welfare is maximal),
- But is not Investor-optimal within the efficient set (the Investor would strictly prefer payoff set A (+1, 0)).

The above analysis highlights critical insights for the Investor:

1. **Efficiency does not guarantee fairness:** The game-theoretic model demonstrates that even when an equilibrium satisfies both Pareto and Hicks efficiency criteria, the resulting surplus distribution is skewed in favour of the Company.
2. **The role of information asymmetry:** Information asymmetry systematically benefits the Company, enabling it to act opportunistically and capture a disproportionate share of the surplus.
3. **The need for contractual and informational interventions:** Achieving fairer outcomes requires the Investor to design contractual amendments or engagement mechanisms that shift current outcomes towards more favourable outcomes. Tools identified in Chapter 4 might potentially reshape these equilibria.
4. **Redistribution of surplus without loss of efficiency:** Contractual clauses that explicitly divide the available surplus can correct distributional inequities while maintaining overall efficiency. This highlights the importance of contract design in ensuring that a LW is realised in practice.

6.4. Implications for Future Strategies

The following section builds upon the insights from Section 6.3, outlining the implications for future strategies and concrete mechanisms investors can employ to promote LW adoption and ensure a fairer distribution of surplus in practice. A range of strategic options exists within the framework of a P-A game. As noted by Bekius and Gomes [10], the principal can exert power, modify contractual terms, or choose to accept or reject the agent's decisions. Chapter 4 demonstrated that various mechanisms can be employed to influence the balance of bargaining power between investors (principals) and companies (agents). One approach involves the strict enforcement of existing contractual obligations, which effectively precludes the adoption of a LW policy and results in a rigid and inflexible relationship. Alternatively, contracts can be designed to offer conditional incentives, such as an interest rate reduction, if the Company complies with LW standards. These were found to be an effective approach by some impact investors (Section 4.3 and are called ILLs. ILLs are a valuable way of linking impact to benefits for the investee. This introduces greater adaptability into the relationship and aligns agent behaviour more closely with SRI goals.

This section analyses key strategic elements, identified in Chapter 4, in the P-A dynamic, with a particular focus on incentive structures (ILL), strict adherence to the LW clause and informal dialogue. These strategies are modelled and empirically evaluated within a series of game-theoretic scenarios, allowing for a systematic assessment of their impact on the outcomes of the P-A interaction.

6.4.1. Contractual mechanisms: Impact Linked Loan

To incentivise truthful behaviour by the Company, a bonus of +2 (applicable to the Company only) is added to each outcome in which a *normal-type* company fully implements the LW commitment. This bonus simulates a reduction in the interest rate as a reward for fulfilling the LW condition. All other payoffs, including those assigned to opportunistic types, remain unchanged. Investor utilities are also held constant across all outcomes. Viewed through the stakeholder salience framework of Mitchell, Agle, and Wood [70], the Company's perceived legitimacy increases. By introducing an ILL, the Company gains greater benefit from implementing the LW than it would if the wage were merely an investor-imposed requirement.

Methodological Approach

The methodological approach presented closely resembles the methodology of Section 6.1 and the initial game tree associated with the status quo. Further details and elaborations, together with the sensitivity analysis, can be found in Appendix B

Analysis

The Company (blue) first decides whether to behave *Normally* or *Opportunistically*. The Investor (red) then picks one of four engagement strategies – *Immediate enforcement*, *Phased enforcement*, *Non-enforcement*, or *Withdrawal* – without seeing which corporate stance was taken (the two red decision nodes are in a single information set). Finally, the Company, now fully informed, chooses *Immediate adoption*, *Phased adoption* or *No adoption* of the living-wage standard. Payoffs (Investor first, Company second) are given in Table B.11.

Subgame Perfect Nash Equilibrium

Investor	Company best reply		Investor pay-off u_I
	$C = \text{Normal}$	$C = \text{Opportunistic}$	
E_{now}	A_{now}	A_{now}	0, -1
E_{phased}	A_{phased}	A_{phased}	+1, 0
E_{none}	A_{now} or A_{phased}	any of 17–19	+1, 0
E_{withdraw}	—	—	-4

Both E_{phased} and E_{none} weakly dominate E_{now} and strictly dominate E_{withdraw} .

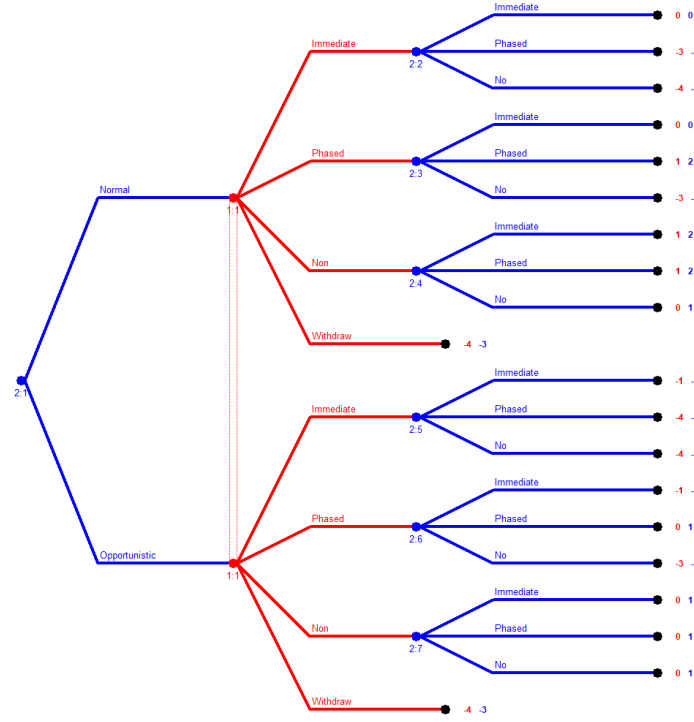


Figure 6.5: P-A game tree with reduction rate in interest

With either admissible contract,

$$u_C(N) = +2 > u_C(O) = +1,$$

so the firm strictly prefers *Normal* behaviour.

SPNE profiles

$$\begin{aligned} \text{SPNE}_1 &: \langle N, E_{\text{phased}}, A_{\text{phased}} \rangle, \\ \text{SPNE}_2 &: \langle N, E_{\text{none}}, A_{\text{phased (or } A_{\text{now}})} \rangle. \end{aligned}$$

All yield the same terminal vector $(u_I, u_C) = (+1, +2)$.

Pareto Optimal Outcomes

To identify Pareto-efficient outcomes, every distinct payoff set that appears in the game is listed (Table 6.12). One payoff, $(+1, +2)$, strictly dominates all others: it gives each party at least as much as they receive anywhere else and gives at least one party strictly more. Therefore, the Pareto frontier collapses to a single allocation, $(+1, +2)$. Any move away from it would harm at least one of the players, so the equilibrium already lives on the frontier.

Table 6.12: Distinct payoff sets across terminal nodes

Label	Investor	Company	Outcomes
A	+1	+2	5, 7, 8
B	0	+1	9, 15, 17, 18, 19
C	0	0	1, 4
D	-1	-1	11, 14
E	-3	-1	6, 16
F	-3	-2	2
G	-4	-3	3, 10, 12, 13, 20

Hicks-Kaldor Efficiency

Hicks efficiency asks whether any other feasible allocation yields a higher joint surplus (Investor + Company). Summing utilities shows that the maximum attainable surplus is +3, reached only at (+1, +2). All other payoff sets deliver a total of +1 or less (Table 6.13). Because no point can exceed a surplus of +3, the allocation (+1, +2) is also uniquely Hicks-efficient: there is no way to reallocate resources so that the combined pie is bigger and a hypothetical transfer could make both players better off than at this node.

Table 6.13: Total surplus for each payoff set

Payoff set	Surplus
A	+3
B	+1
C	0
D	-2
E	-4
F	-5
G	-7

Implications

The game's SPNE aligns with the only outcome that is both Pareto- and Hicks-efficient, meaning the available welfare is fully realised under strategic rationality. Efficiency is achieved not through penalties or coercion but by offering the Company a modest surplus (+2 instead of 0) for genuine compliance. This incentive eliminates opportunistic behaviour by making cooperation the dominant strategy. However, while welfare is maximised, the resulting distribution remains asymmetric: the Company captures two-thirds of the surplus, while the Investor retains one-third. Adjusting that split within the current model would necessarily reduce total welfare; redistribution would require instruments external to the model (e.g. side-payments or revenue-sharing clauses).

1. The SPNE corresponds with the unique Pareto- and Hicks-efficient allocation, indicating no welfare is lost.
2. A modest compliance bonus (+2) is sufficient to remove opportunism and guide the game toward a socially optimal equilibrium.
3. Surplus distribution favours the Company (+2) over the Investor (+1). Any rebalancing would reduce efficiency unless supported by mechanisms outside the formal game.

This mechanism illustrates how aligning financial incentives with social objectives can produce cooperative outcomes. For the Company, compliance with the LW standard unlocks improved loan terms, offsetting part of the increased wage bill. For the Investor, the mechanism embeds wage commitments directly into the investment agreement, exchanging a lower financial return for verified social impact. Importantly, the ILL shifts the negotiation dynamic from adversarial to cooperative. Loan conditions serve as a constructive incentive: meeting LW thresholds yields tangible financial benefits, reducing resistance to wage increases. This reframing supports a mutual gains approach, advancing both financial and social goals without recourse to enforcement or sanctions.

6.4.2. Game Tree - Contractual mechanisms: Strict Adherence

The methodological approach adopted here closely mirrors the initial game tree representing the status quo scenario. Further elaboration and detailed modelling, together with the sensitivity analysis, are provided in Appendix B. The stakeholder salience factors identified in Section 4.2.3 — particularly those related to power and urgency—intensify in this configuration.

The Strict Adherence game tree illustrates a scenario where the Investor adopts a hard-line contractual stance: the Company is explicitly required to implement a LW as a condition of continued investment, with the Investor prepared to enforce strict consequences for non-compliance. In this scenario, no explicit conflict arises; however, the contract is terminated if the LW condition is not fulfilled. This outcome is categorised under a new tag: Event of default. This tag represents the least favourable result for both parties, scored with -3 , as contract termination is detrimental to both the Investor and the Company. The inclusion of this outcome reflects the contractual stipulation that LW compliance is a binding requirement, justifying its formal representation in the game model.

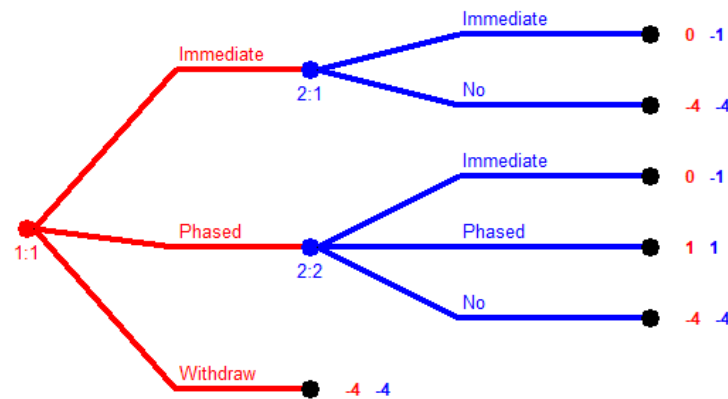


Figure 6.6: Game tree with strict adherence to living wage clause

Analysis

Subgame Perfect Nash Equilibrium

Table 6.14: Best adoption choices and pay-offs under different investor strategies

Investor strategy	Company's options	Company's best reply	Resulting pay-offs
<i>Immediate enforcement</i>	<i>Immediate</i> (0, -1) <i>No adoption</i> (-4, -4)	<i>Immediate</i>	(0, -1)
<i>Phased enforcement</i>	<i>Immediate</i> (0, -1) <i>Phased</i> (+1, +1) <i>No adoption</i> (-4, -4)	<i>Phased</i>	(+1, +1)
<i>Withdraw</i>	—	—	(-4, -4)

The Investor now compares her own pay-offs: *Immediate* \Rightarrow 0, *Phased* \Rightarrow +1, *Withdraw* \Rightarrow -4. She therefore chooses Phased enforcement. Anticipating this, the Company selects Phased adoption, giving the unique SPNE:

SPNE: Investor chooses *Phased enforcement*; Company carries out *Phased adoption*; pay-offs (+1, +1).

Pareto Optimal Outcomes

To identify Pareto-efficient outcomes, we list every distinct payoff set that appears in the game. One payoff, (+1, +1), weakly (and for at least one player strictly) dominates all others: both parties are at least as well off, and at least one is strictly better off. Consequently, every allocation except A (1, 1) is Pareto-dominated. The Pareto frontier, therefore, collapses to a single allocation: (1, 1). Any move away from it would harm at least one of the players, so the equilibrium already lives on the frontier.

Table 6.15: Distinct payoff sets across terminal nodes

Label	Investor	Company	Outcomes
A	+1	+1	4
B	0	-1	1, 3
C	-4	-4	2, 5, 6

Pareto-efficient set: the single point (1, 1).

Hicks-Kaldor Efficiency

Table 6.16: Total surplus for each payoff set

Payoff set	Surplus
A	+2
B	-1
C	-8

The maximum attainable joint surplus is 2, realised only at A. No other feasible outcome can finance a compensation that leaves both players better off than at A.

Hicks-efficient set: again the single point (1, 1).

Implications

- SPNE – Strict contractual wording that makes *No adoption* an event of default pushes the Company towards compliance. Knowing that default yields -4 to both parties, the Company prefers *Phased adoption* when enforcement is *Phased*, and the Investor chooses that enforcement mode because it maximises her own return. The game therefore settles on (1, 1).
- Pareto frontier – Because (1, 1) simultaneously improves or preserves each player's welfare relative to every alternative, it is the sole Pareto-efficient allocation. Any deviation (e.g., tougher immediate enforcement or withdrawal) would leave at least one party worse off.
- Hicks efficiency – The same outcome is uniquely Kaldor-Hicks-efficient: it produces the greatest possible combined surplus, so no hypothetical transfer scheme can beat it.
- Implication – Strict adherence to the covenant, coupled with graduated (*Phased*) enforcement, eliminates coordination problems and delivers the welfare-maximising, jointly efficient result without leaving exploitable rents on the table.

The game tree analysis indicates that, when the investor's threat is credible and sufficiently costly to the company, the likely equilibrium is compliance. Confronted with the prospect of losing a valuable investment, the rational choice for the company is to pay a LW. In this outcome, workers benefit by receiving fair pay, and the investor's social objectives are achieved, albeit with the company incurring higher wage costs.

However, the analysis also identifies key risks. If the Company assesses that the cost of implementing a LW significantly outweighs the downside of the investor's departure, it may choose to resist. In such

cases, strict contractual enforcement leads to a standoff: the Investor is compelled to follow through on their ultimatum, resulting in a lose-lose scenario. The Investor divests or withholds support, failing to improve worker pay, while the Company loses a socially motivated investor without addressing the wage issue. In practice, the strict adherence scenario demonstrates that enforcing compliance through contracts can effect change, but it requires both substantial leverage and strong conviction from the Investor.

6.4.3. Game Tree - Informal Dialogue

This thesis explores how impact investors typically begin wage negotiations with trust-based engagement, escalating only later to contractual tools. The Informal Dialogue game tree isolates this initial, relationship-led stage. In this model, the investor enters the process not through enforceable agreements, but with patient, open dialogue designed to persuade management that paying a living wage can enhance both productivity and reputation. In line with interview findings, these early conversations rely on mutual trust and voluntary data-sharing rather than threats or sanctions.

The methodological approach adopted here closely mirrors the initial game tree representing the status quo scenario. Further elaboration and detailed modelling, together with the sensitivity analysis, are provided in Appendix B.

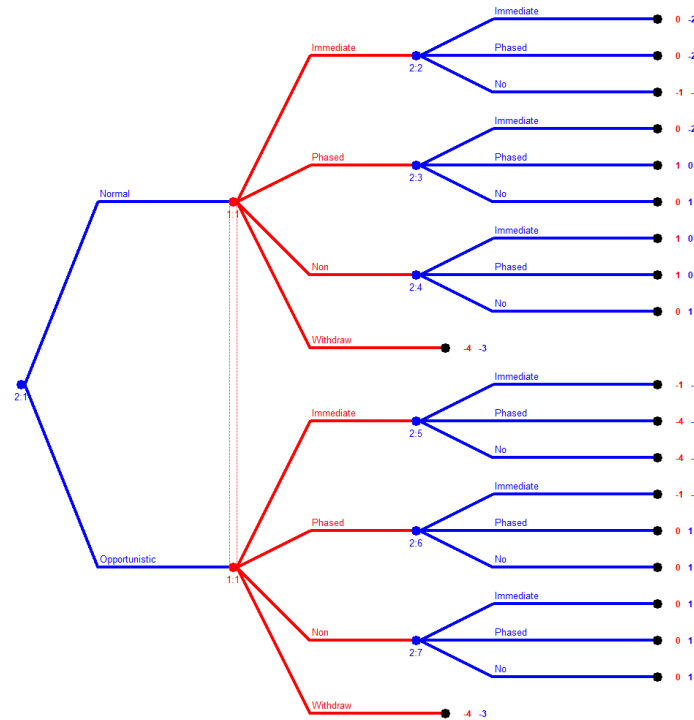


Figure 6.7: P-A game tree without conflicts

Analysis

The Company (blue) decides first whether to behave normally or opportunistically. The Investor (red) then chooses one of four engagement strategies – *Immediate enforcement*, *Phased enforcement*, *Non-enforcement*, or *Withdrawal* – without being able to observe the Company's earlier move (the two red decision nodes are in a single information set). Finally, the Company, now knowing everything, elects to implement the living-wage clause *Immediately*, in a *Phased* manner, or *Not at all*.

Supgame Perfect Nash Equilibrium

For every Investor contract $E \in \{E_{\text{now}}, E_{\text{phased}}, E_{\text{none}}\}$ the Company's best responses are read directly from the terminal pay-offs (Table B.25):

Investor	Company best reply		
	$C = \text{Normal}$	$C = \text{Opportunistic}$	Inv. pay-off
E_{now}	A_{none}	A_{now}	-1
E_{phased}	A_{none}	A_{phased} or A_{none}	0
E_{none}	A_{none}	any	0
E_{withdraw}	—	—	-4

Given the table above, both E_{phased} and E_{none} weakly dominate E_{now} and strictly dominate E_{withdraw} :

$$u_I(E_{\text{phased}}) = u_I(E_{\text{none}}) = 0 > u_I(E_{\text{now}}) = -1 > u_I(E_{\text{withdraw}}) = -4.$$

Hence the Investor's equilibrium set is $\{E_{\text{phased}}, E_{\text{none}}\}$. Because each stance ultimately yields the same best-reply payoff $u_C = +1$, the Company is *indifferent*.

SPNE

$$\text{SPNE} = \left\{ \langle E_{\text{phased}}, A_{\text{none}} | \theta=N, A_{\text{phased}} \text{ or } A_{\text{none}} | \theta=O \rangle, \langle E_{\text{none}}, A_{\text{none}} | \theta=N, A_{\text{phased}} \text{ or } A_{\text{none}} | \theta=O \rangle \right\}$$

Pareto Optimal Outcomes

Table 6.17 lists every distinct payoff pair that arises at a terminal node. Of the five vectors shown, only two — A (+1, 0) and B (0, +1) — lie on the Pareto frontier. Both A and B strictly dominate C (0, -2), D (-1, -1) and E (-4, -3): each gives both players at least as much as any of C–E, and strictly more in at least one dimension. However, neither A nor B dominates the other — A favours the investor, B favours the company. Hence, the Pareto-efficient set consists exactly of allocations A and B: any deviation from one of these would make at least one player worse off, so the equilibrium must reside on this two-point frontier.

Table 6.17: Distinct payoff sets across terminal nodes for informal dialogue tree

Label	Investor	Company	Outcomes
A	+1	0	5, 7, 8
B	0	+1	6, 9, 15–19
C	0	-2	1, 2, 4
D	-1	-1	3, 11, 14
E	-4	-3	10, 12, 13, 20

Hicks-Kaldor Efficiency

Hicks-Kaldor efficiency examines whether any other attainable allocation can raise the sum of both players' payoffs. Adding the Investor's and Company's utilities for each payoff set (Table 6.18) shows that the highest total surplus is +1, achieved only by A and B (each giving a combined payoff of +1). All other vectors — C and D at -2, and E at -7 — fall short. Because no allocation can produce more than +1 in joint surplus, neither A nor B can be Pareto-improved upon by expanding the "pie" and then compensating one party to benefit both. Thus, A and B are precisely the Hicks-efficient outcomes.

Table 6.18: Total surplus for each payoff set Informal dialogue tree

Payoff set	Surplus
A	+1
B	+1
C	-2
D	-2
E	-7

Implications

The Informal Dialogue game tree explores a collaborative, relationship-driven approach to LW negotiations. In this scenario, the impact investor does not impose formal wage requirements at the outset but instead engages the company’s management through informal dialogue and reasoning to encourage the adoption of a LW. The sequential structure of the game illustrates a softer form of influence: the company is invited to voluntarily implement fair wages, without the immediate prospect of contractual penalties or rewards.

The game’s equilibrium reveals that the firm can achieve its preferred payoff whether it appears cooperative or continues with opportunistic behaviour. Since the investor cannot observe the firm’s true stance, the company is free to give the impression of supporting the living-wage clause while avoiding real action. Promises, therefore, are meaningless—without any change in incentives, the firm has no reason to follow through

Soft engagement strategies, such as informal dialogue, offer no real leverage. The firm can agree publicly to the clause, earn reputational benefits, and then delay or quietly cancel implementation without financial consequence. In the model, every dialogue-only approach leaves the investor with a payoff of zero, while the firm still earns +1, the same as if the investor had done nothing.

Crucially, the interaction never produces a joint gain exceeding +1, and that value is always claimed by one party alone. Either the investor gains when the firm genuinely adopts the clause, or the firm benefits when it does not—there is no mutual win. This absence of shared upside explains why unenforced nudges are ineffective. To influence firm behaviour, investors must offer verified reporting, credible penalties, or positive incentives that grow the total surplus rather than simply reallocating a fixed reward.

6.5. Conclusion of the Chapter

This chapter applied game-theoretic analysis within a Principal–Agent framework to explore how impact investors and companies negotiate LW commitments. By modelling the Investor as principal and the Company as agent, the analysis examined how information asymmetries and conflicting objectives affect outcomes. The chapter addressed sub-questions 3 and 4 by showing how different engagement strategies shift the strategic logic of the “LW game.” The analysis revealed that, under baseline conditions, the negotiation settles into a SPNE where the firm rationally avoids full LW implementation. This outcome stems from misaligned incentives and information asymmetry: the Company’s dominant strategy is to act opportunistically, prioritising cost savings while assuming the Investor lacks effective means or willingness to enforce LW compliance. As a result, wage standards advance only incrementally, and the available surplus is captured disproportionately by the firm.

However, the analysis also demonstrated that specific engagement levers can fundamentally shift this dynamic by reshaping incentives, closing information gaps, and fostering fairer surplus distribution. The chapter tested three observed engagement strategies (Chapter 4):

- **Impact-linked loans (ILL):** Offering modest financial rewards (+2) for genuine compliance realigns the firm’s incentives, making full LW adoption strictly dominant. This creates a new, unique equilibrium (+1, +2) that is both Pareto and Hicks-efficient, maximising joint surplus without adversarial enforcement.
- **Strict adherence to LW clause:** Framing non-compliance as an event of default establishes a credible and enforceable sanction. The model predicts a stable outcome where both parties prefer phased adoption (+1, +1), balancing enforcement credibility with cooperative implementation.
- **Informal dialogue:** Without binding mechanisms, engagement reverts to the P-A equilibrium (+0, +1). While relational monitoring fosters trust, it lacks the power to eliminate opportunism, leaving the firm with little incentive to sustain LW compliance beyond short-term gains.

These findings highlight a critical insight: dialogue is a necessary but insufficient condition for durable wage reform. Unless paired with proportionate financial or contractual levers, soft engagement strategies fail to overcome the firm’s structural incentives to delay or dilute LW commitments. Accordingly, the analysis provides clear answers to the research sub-questions:

- Sub-question 3: The P-A framework illustrates how information asymmetry and divergent cost structures lead to a stable but suboptimal equilibrium, where the firm captures surplus at the expense of social objectives.
- Sub-question 4: Targeted engagement strategies—either enhancing rewards or strengthening sanctions—can realign incentives, reduce information asymmetries, and shift the equilibrium towards genuine LW compliance. Pure dialogue can support trust-building but cannot, in isolation, alter the firm’s fundamental pay-off structure.

In conclusion, the key to bridging the LW implementation gap lies in designing engagement mechanisms that (i) adjust the firm’s pay-off matrix, (ii) remain credible despite informational opacity, and (iii) preserve sufficient surplus for mutual gain. When these conditions are met, the model predicts—and empirical evidence confirms—that impact investors can convert conditional finance into meaningful income gains for workers.

7

Discussion

This chapter interprets and situates the study's findings within the existing literature. Drawing on the case analysis and game-theoretic modelling, it outlines the study's contributions to four key areas: the concept of the LW, the operational limits of impact investing, the dynamics of investor engagement, and the application of P-A theory. The chapter then reflects on the study's mixed-methods research design, including its single-case scope, potential interpretive bias, and underlying modelling assumptions. Together, these sections clarify how the study contributes to theory and practice while defining its relevance, boundaries, and implications.

7.1. Contributions

Chapter 1 demonstrated that MWs often fail to meet basic living requirements [24, 61, 93] and introduced impact investors as emerging actors with the potential to advance LW implementation through financial leverage [45, 21]. However, the literature review in Chapter 2 identified key structural and operational barriers that constrain their effectiveness [39, 78, 95, 83]. This study used a mixed-method approach to address this gap and clarify the strategic dynamics. In the remainder of this section, each paragraph is structured as one of three types of contributions. A theoretical contribution introduces original ideas, such as new models or frameworks that fill research gaps and advance understanding in a field. A contribution to the literature adds new evidence or insights to existing literature without expanding the theory. A methodological contribution is a novel advancement that improves how research is designed, conducted, or analysed. To facilitate assessment, each paragraph is written in such a way that it makes one recognisable contribution.

7.1.1. The Living Wage Concept

The LW concept carries strong normative appeal [55], but continues to suffer from definitional ambiguity [5]. While most of the literature agrees that a LW should cover essential needs and include a buffer for unforeseen expenses [5, 25, 52, 53, 85], the lack of a universally accepted definition remains a significant barrier to effective policy implementation [5]. Some scholars, such as Carr et al. [25], argue that definitional flexibility allows for necessary context-specific adaptation. However, this study contributes to the debate by showing how such ambiguity can hinder practical implementation. In the case examined, conflicting interpretations of what constitutes a LW led to negotiation difficulties, delayed decision-making, and reduced the clarity and enforceability of contractual commitments. This contributes to the literature by providing empirical insight into how definitional ambiguity can undermine the practical application of the LW concept.

7.1.2. Impact Investing

The case study confirmed three key challenges frequently identified in the literature: intentionality, measurability, and market maturity. Prior research points to the absence of consistent metrics for assessing social impact [36, 80, 95, 98], which makes verification difficult and opens the door to purpose-washing [65, 76, 98]. In addition, the immaturity and fragmentation of the impact investment market limit efforts to standardise practices, making a uniform approach impractical [65, 78, 76].

These structural limitations clearly surfaced in the case. The absence of a shared definition and concrete benchmarks for the LW resulted in vague targets and a lack of enforceable milestones. This ambiguity enabled symbolic compliance of the company and raised doubts about the investor's commitment.

Internal misalignment between financial and impactESG teams further undermined this commitment (Section 5.3.2). While the impact team advocated for the LW, financial priorities dominated once the deal's viability was at stake. This imbalance cast doubt on whether the LW was truly a priority or merely a conditional goal—important only if it did not endanger the financial health of the investment, thereby questioning the intentionality of the investor.

The investor's limited experience with compliance mechanisms further weakened their ability to respond when the LW commitment faltered. The findings demonstrate how weak intentionality, limited measurability, and market immaturity interact, not only constraining implementation but also exposing gaps between stated values and actual decisions. In this way, the case adds nuance to the literature by illustrating how internal conflicts within investment organisations can undermine credibility and compromise the integrity of social impact goals. By empirically showing how structural barriers manifest in real-world settings, the case contributes to a more grounded understanding of the implementation gap in impact investing. Specifically, it highlights how internal organisational misalignments can erode trust in social impact claims, offering depth to existing discussions and reinforcing the importance of aligning operational structures with stated intentions.

7.1.3. Investor Engagement

Investor engagement theory [66, 64] suggests that investors can influence firm behaviour through informal dialogue [47, 21], formal contracts [43, 67], or collaborative coalitions [55]. The choice of tool typically depends on the investor's available resources and underlying belief system. Building on this foundation, the study integrates engagement theory with stakeholder salience theory [70] and shows that engagement tools become effective only when the investee perceives them as backed by legitimacy, power, and urgency.

Expert interviews confirmed that informal dialogue has limited impact unless the investor brings deep sector knowledge and credible expertise, key sources of perceived legitimacy (Section 4.3.1). Without these attributes, investees often dismissed such dialogue as naïve or superficial. Similarly, contractual pressure proved ineffective without sufficient investor power or a clearly communicated sense of urgency (Section 4.3.2). While coalitions can provide collective leverage, they frequently lack coherence and enforcement capacity (Section 4.3.3).

Together, these findings offer a more nuanced understanding of investor engagement by showing that the effectiveness of any tool depends not only on its formal design but also on how the investee perceives it through the lens of stakeholder salience. This constitutes a theoretical contribution by refining investor engagement theory by integrating stakeholder salience theory. Specifically, the findings demonstrate that engagement outcomes hinge on the investee's perception of the investor's legitimacy, power, and urgency, adding conceptual clarity to existing literature and highlighting perception as a critical mediating factor.

7.1.4. Game Theory

Although strategic negotiation is central in impact investing, few studies have applied formal game theory to analyse it [50]. To the author's knowledge, this study is the first to examine negotiations between an impact investor and a private company using a game-theoretical P-A model. By doing so, the research introduces a formal strategic perspective into a field that is often shaped by ethical discussions [25, 53], while also capturing the "wicked" complexity of real-world impact investment, characterised by multiple stakeholders and overlapping strategic interests [35].

The study models how unobserved deviations from agreed social objectives can compromise intended outcomes, thereby extending classical P-A theory [44, 59] into the context of socially responsible investment. Following the recommendation by Hermans, Cunningham, and Slinger [50], it applies game theory to explore questions centred on multi-actor interactions and the underlying reasons behind a programme's trajectory.

The models developed in Chapter 3.1.3 show how specific incentive instruments—such as impact-linked loans or penalty clauses—can shift strategic equilibria and lead to more favourable outcomes. Consistent with findings in the existing literature [64], the study confirms that information asymmetries and

conflicting objectives shape impact investment negotiations. By formalising these dynamics, the study offers a deeper understanding of why outcomes often fall short of Pareto-optimal agreements, even when both parties express a mutual interest in success. In doing so, the study meets the key criteria for methodological contribution set out by Bergh et al. [13]: it introduces an underused technique into a new empirical context, adapts it meaningfully to that context, and demonstrates its utility in a way that can be replicated or further developed by future researchers.

7.2. Reflection and Limitations

This section critically reflects on the methodological choices and assumptions that shaped the study. By combining a single case study, qualitative interviews, and game-theoretic modelling, the research enabled a deep exploration of investor–company dynamics in LW negotiations. However, this approach also introduced several constraints. These include the limited scope and generalisability of the case, the potential for data collection and interpretation bias, and the necessary abstraction involved in modelling strategic behaviour. The following subsections examine each limitation and discuss its implications for interpreting and applying the findings.

7.2.1. Case Study Design and Scope

This study introduced a single evaluative case study of a private-sector agri-food investment in Chapter 1, following the approach proposed by Yin [99] for investigating complex real-world phenomena. The design aligns with the research objective of examining how impact investors negotiate LW commitments in practice. The chosen case offers rich, context-specific insight into both relational and contractual dynamics. As Stake [86] emphasises, the goal of such a study is not generalisation but deep contextual understanding.

However, the single-case approach introduces limitations as previously noted in Section 3.1.1. The investment’s specific economic, contractual, and sectoral context reduces the transferability of findings to other regions or industries. Although Yin [99] highlights the importance of using multiple data sources to strengthen construct validity, this study only partially addresses that standard. It mitigates the risk through triangulation, drawing on interviews, internal documents, and existing literature (Section 3.1.2). Additionally, the study’s actor-centric focus on investor–firm interaction may understate the influence of broader systemic or institutional factors. Elements such as national labour norms or regulatory frameworks likely shape LW outcomes in ways that extend beyond the two-actor relationship examined in this case. Furthermore, by choosing relatively cooperative actors, the analysis may underestimate the challenges that hostile or less coordinated scenarios would entail. This ex-post case design also means that participants’ reflections may have been influenced by the fact that they knew the outcome, which further complicates causal interpretation.

Although this study examines a single case, it identifies three closely related mechanisms whose logic extends beyond the agri-food sector: (i) performance-related financing, which alters how investors weigh costs and benefits; (ii) clearly defined, phased objectives, which reduce information risk and distribute adjustment costs over time; and (iii) an investor attitude that actively combines legitimacy, power, and urgency to maximise stakeholder engagement. These mechanisms draw on widely observed contractual and behavioural patterns rather than sector-specific quirks, making them analytically – though not statistically – generalisable to other sectors and related ESG objectives involving phased capital expenditure. While no single case can provide a basis for complete statistical generalisation, these underlying mechanisms strongly support analytical generalisability: when investors incorporate incentive-compatible conditions, set clear milestones, and credibly stress their importance, they increase the chances of turning ethical intentions into practical outcomes across projects, sectors, and regions.

7.2.2. Qualitative Interviews and Bias

The qualitative component draws on semi-structured interviews with impact investors, NGOs, consultants, and stakeholders involved in the case study (Section 3.1.2). The analysis followed a two-stage process: open inductive coding and theory-informed clustering (Section 3.1.2). This approach aligns with established guidance on enhancing credibility through triangulation and consistency [62].

Several aspects of the research design strengthen its trustworthiness. First, the sample includes diverse organisational perspectives, which helps reduce the risk of presenting a single-actor narrative (Table 4.1). Second, transcription and systematic coding created an auditable data trail that supports confirmability. Third, triangulation across interviews and documentary sources enhanced the credibility of the thematic insights. Nevertheless, participants may have been inclined to present the negotiations as more favourable than they were due to social desirability or professional bias.

However, the sample of thirteen interviewees, while sufficient for the study's purpose, does not offer sector-wide representativeness. Only one company representative participated, which limited organisational depth and excluded internal variation in perspectives. Despite efforts to include a range of viewpoints, the sample may lean toward actors sympathetic to impact investing, potentially narrowing the discursive range. Most participants came from the researcher's professional network and were concentrated in North-Western Europe, introducing possible regional bias. For example, the heavy focus on European actors could overlook how cultural norms or labour relations in other regions might change negotiation dynamics.

Reflexivity also deserves attention. The researcher's background in sustainable finance may have influenced the framing of interview questions and the interpretation of responses. Although efforts were made to remain reflexive and to seek disconfirming evidence, the selection of literature may still reflect confirmation bias, favouring sources aligned with the case dynamics observed—confidentiality requirements imposed further constraints. Key stakeholders requested anonymisation and limited disclosure of sensitive information, including contract clauses and wage figures. As a result, some findings are reported only in aggregate, reducing transparency and limiting verifiability and transferability. For example, the absence of specific contractual terms in the analysis means readers cannot evaluate how enforceability clauses might have influenced outcomes. While the researcher maintained an audit trail to support accountability, readers must rely on the researcher's interpretation of confidential material that could not be fully reproduced.

7.2.3. Game-Theoretic Modelling for Policy Evaluation

Game-theoretic modelling provides a structured analytical lens for assessing how impact investors and companies interact during wage negotiations. By formalising this interaction as a P-A game, the model reveals how weak incentives and information asymmetries can obstruct the adoption of LW commitments. As Hermans, Cunningham, and Slinger [50] argue, game theory “opens the black box” of strategic interaction by mapping payoffs, credible threats, and decision paths within multi-actor constellations.

However, this explanatory power involves trade-offs. The model relies on simplifying assumptions—such as perfect rationality, clearly defined strategies, and static information structures—that do not fully capture real-world negotiations' relational and iterative nature. It cannot model informal elements such as trust-building, organisational learning, or bounded rationality, even though these factors often shape long-term compliance. Thus, the model may miss how incremental trust or social norms evolve, which could substantially alter negotiation dynamics. As a result, the model's findings are conditional: they show how incentives are structured, not what actors will definitely do.

The one-shot structure of the model further limits its realism by excluding repeated interactions and internal organisational dynamics, such as coordination challenges that may resemble alternative game forms (e.g. the “battle of the sexes”). In addition, the model includes only the Investor and the Company, omitting other stakeholders. Power asymmetries are captured only indirectly, through the distribution of payoffs.

Translating qualitative insights into quantitative payoffs introduces a degree of subjectivity. Although sector experts validated the underlying logic and actor rankings, the researcher assigned the numerical values (ranging from -3 to $+2$). While guided by informed judgment, this process abstracts from the nuance of stakeholder motivations and may oversimplify them. Robustness checks (Appendix B) showed that moderate adjustments to payoff values did not alter the model's strategic outcomes, but the abstraction remains. As such, the results should be interpreted as indicative, not predictive.

Finally, the model's fixed strategy set, comprising four engagement levers and three adoption responses, helped keep the game tree interpretable but limited its flexibility. Real-world negotiations often involve overlapping tactics, evolving priorities, and unanticipated shifts that the model could not represent. Alternative assumptions—such as reordering actor preferences or modifying the payoff scale—could plausibly affect the resulting equilibrium. While the model was tested for internal consistency, it does not aim for empirical calibration. Its purpose is to clarify incentive structures and highlight investors' strategic dilemmas, not to forecast specific outcomes.

7.3. Directions for Future Research

This study provides novel insights into how impact investors can strategically influence corporate behaviour on LWs. However, the findings remain limited by methodological and empirical constraints. Future research should build on this foundation by extending, testing, and refining the new questions that this study raised.

7.3.1. Multi-Case Study

First, researchers can improve the generalisability of findings by adopting a multi-case research design. While this study offers in-depth insight into one investment case, its conclusions remain context-specific and may not apply across other sectors or regions. By conducting comparative case studies across different industries, researchers can examine whether negotiation patterns shift based on sectoral wage norms, regulatory environments, or power asymmetries. Analysing multiple cases would enable pattern-matching across contexts and reveal the conditions under which specific engagement strategies succeed or fail. This approach would move the analysis from illustrative to analytically generalisable, refining the theoretical model and clarifying its boundaries.

7.3.2. Alternative Game Structures

Second, researchers should explore alternative game-theoretic structures. This study's extensive-form P-A model offers a logical account of strategic behaviour under asymmetric information and weak enforcement. However, real-world negotiations often involve repeated interactions, bounded rationality, and mixed motives. Repeated games could model how behaviour evolves over multiple negotiation cycles, while cooperative games may better capture coalition-building dynamics between firms or among investors. Other frameworks—such as the Battle of the Sexes—could represent internal misalignment within investment teams or conflicting stakeholder preferences. Expanding the scope of formal modelling would allow future research to better reflect the complex dynamics of investor–company negotiations.

7.3.3. Integrating System Dynamics

Third, researchers should consider using system dynamics modelling to address the limitations of game theory in capturing long-term behavioural change. While game theory provides valuable insights into strategic behaviour at fixed points in time, it cannot easily account for how outcomes evolve over extended periods. System dynamics allows tracing feedback loops and time delays that shape organisational behaviour. For example, wage increases may initially raise costs but later generate benefits through improved morale, lower staff turnover, or enhanced reputation—effects that emerge gradually and are challenging to represent in a static payoff matrix. System dynamics enables researchers to model how short-term trade-offs can lead to long-term outcomes by simulating these trajectories. It also helps identify reinforcing loops, tipping points, and time lags that influence when and how wage policies take hold.

7.3.4. Use and Benefits of Impact-Linked Loans

Fourth, future research should examine the role of ILLs as tools for LW implementation. In ILLs, interest rates are tied to achieving predefined social targets. Studying how these loan structures influence behaviour would shed light on their effectiveness: do firms adopt LWs more readily when offered better financing terms? Researchers could analyse whether ILL covenants lead to measurable wage gains without undermining investor returns. This would clarify the benefits and challenges of aligning debt financing with social performance and inform effective policy design.

7.3.5. Long-Term Benefits of Living Wage

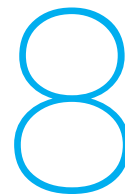
Fifth, future studies should quantify the long-term effects of introducing LW on business performance. There is growing evidence that higher wages reduce staff turnover and increase productivity. The case analysis showed that this was a frequently mentioned potential benefit, but it was not included in the modelling of the game. Establishing these links would provide empirical support for the business case for LWs and inform investors and managers about its long-term value proposition. This could potentially accelerate acceptance and implementation.

7.3.6. Coalitions and Investor Influence

Sixth, it would be valuable to investigate how coalitions of investors influence the legitimacy and success of engagement on LWs. The case study showed that the investor did not use coalitions to increase his legitimacy. Many investors now work together in alliances to increase their influence, and new research could compare the results of coalition-supported campaigns with individual efforts. Research into investor networks or formal partnerships could demonstrate whether shared resources and public commitments lead to companies introducing LWs more quickly, thereby increasing both the effectiveness and credibility of investor interventions.

7.3.7. Financial Modelling

Finally, researchers should incorporate robust financial data into future studies. This study relied primarily on conceptual analysis, supported by interviews and theoretical modelling, rather than quantitative financial metrics. To empirically test the business case for LWs, future research should integrate real wage, cost, and revenue data from portfolio companies. By doing so, researchers can simulate financial outcomes using cost-benefit analysis tools. These methods can quantify trade-offs between short-term cost pressures and longer-term gains. Testing these dynamics empirically would increase the credibility of the ILL concept and provide a more straightforward pathway for aligning social impact goals with financial performance.



Reflection

I began my master's thesis process unsure of which path to take, but the LW project immediately resonated with me. The idea that every worker should earn enough to meet basic needs felt both obvious and urgent. As a result, I was motivated to explore a practical solution. I tried several approaches – systems diagrams, financial models – before settling on game theory. This choice was driven by the strategic uncertainty I observed in early conversations with Invest International. Game theory offered a formal way to capture those interdependent decisions. In adopting game theory, I accepted its core assumption: that actors are “rational,” maximising payoffs based on known preferences. I recognised this was a simplification (real decisions often involve bounded rationality), but I embraced it as a pragmatic lens to analyse incentives.

Using game theory meant framing the investor–company interaction as a P-A model, in which the investor (principal) delegates to the company (agent) under conditions of information asymmetry. I first toyed with other structures; for example, casting the negotiation as a classic Battle of the Sexes would have depicted both parties as equal coordinators who each favour a different focal outcome, producing two rival pure equilibria (strict versus delayed compliance) and one mixed equilibrium without any built-in leverage. That symmetry blurred the real power gradient; capital and contractual clauses sit with the investor, so the model could not generate a unique prediction or show how enforcement tools shift incentives. Recognising this, I constructed a transparent P-A game tree, drawing on guidance from Leon Hermans, Femke Bekius and others. Modelling took several iterations: early versions with extra stakeholder roles and intricate payoff terms obscured rather than clarified the strategic forces at work. Simplifying the model, concentrating on the two principal actors and core incentives, proved essential, and, though reductive, ultimately yielded sharper insight into the dynamics between investor and company.

To construct the game tree, I first ranked the key considerations—impact, conflict, cost, social value and reputational risk—in order of importance. I then mapped those rankings onto a five-point numeric scale (−3 to +2). Converting ordinal preferences into cardinal payoffs was an assertive move, but it preserved the hierarchy while letting me calculate precise equilibria. I checked robustness by slightly raising or lowering each payoff. In every case, the SPNE remained intact. This suggests the outcome is driven by the ordering of preferences rather than their exact magnitudes. Had a minor tweak produced a different equilibrium, it would have exposed a fragile model: policy advice would hinge on finely tuned numbers, compelling a rethink of the scaling, further empirical calibration, or even a different game structure that absorbs uncertainty more gracefully. Because no such shift occurred, I am more confident in the model's explanatory reach and can now focus future work on pinpointing potential threshold effects.

Analysing the base case (the “status quo” game) produced a SPNE in which the Investor enforces the LW gradually (phased) and the Company responds with a phased adoption. This outcome (+1 payoff for the investor, 0 for the company) represented a compromise balancing the investor's dual goals of financial security and social impact, against the company's cost constraints. In other words, given our rational-choice model, neither side pushed for immediate, full compliance. Importantly, this equilibrium was Pareto-efficient (no other outcome made both better off) but favoured the company's interests.

The P-A model in the thesis shows that the “default” negotiation—where the Company can hide its true intentions—settles into a SPNE in which the Investor opts for phased enforcement while the Company behaves opportunistically and still adopts the LW clause in a phased manner; the final payoff vector is (0 for the Investor, +1 for the Company)

To test how assumptions shaped the results, I introduced alternative scenarios. I modelled an ILL by giving the Company a bonus (+2) if it complied with the wage commitment. This simple change realigned incentives: in the ILL scenario, the model predicted a unique equilibrium (+1 for investor, +2 for company) where full wage compliance became strictly dominant for the firm. Likewise, a strict-adherence clause (treating non-compliance as default) led to a different equilibrium: now both parties found it best to implement the wage in phases (each earning +1). In contrast, the “informal dialogue” scenario (no binding mechanism) reproduced the status quo equilibrium (0 for investor, +1 for company). In practical terms, these results show that only by adjusting the payoff matrix with contractual tools (ILLs or strict clauses) could the firm’s incentives shift towards compliance; without them, the model predicts the firm will keep hidden action and delay wage increases.

Looking back, several methodological choices stand out. I assumed a single, static game tree; the sequence of moves was fixed and fully known, which enabled clean backward induction but excluded the possibility of dynamic renegotiation or evolving trust. Had I modelled a repeated or stochastic game, reputation effects could have surfaced: the Company might have complied earlier to avoid future sanctions, or the Investor’s bargaining power could have eroded once capital was disbursed. I also worked with complete information and perfectly rational actors. If actors were *bounded* rational, the backward induction logic that yields a clear SPNE might have failed, creating room for earlier compliance based on things such as “meeting each other halfway”. The introduction of incomplete information or bounded rationality would likely have led to signalling or screening equilibria and might have revealed satisficing behaviour, shifting outcomes towards an earlier compromise or a prolonged stalemate. Converting ordinal rankings to cardinal utilities was another strong simplification; if stakeholders valued things in a non-linear way or followed strict priorities, even small perturbations could have triggered entirely different equilibrium paths. Finally, by limiting the model to two actors, I highlighted the core strategic tension but ignored regulators, unions, or NGOs. Adding even one additional player, such as a trade union, would have expanded the strategic playing field and could have redistributed the surplus at the expense of the investor-company duo, potentially completely disrupting the delicate balance between principal and agent.

These choices both enabled and constrained my conclusions. On the one hand, the P-A lens successfully revealed why the status quo of weak enforcement persists: the investor faces an incentive trade-off and the company can exploit information asymmetry. It showed that contractual design is key (changing payoffs can realign interests) and that informal engagement alone lacks power. On the other hand, by simplifying stakeholders and assuming perfect rationality, the model cannot capture all real-world nuances. For example, I ignored internal misalignments within the investor’s organisation, which in practice weakened the LW commitment in our case. I debated adding a third player or a more elaborate game for that “internal conflict,” but ultimately decided it would dilute the focus.

Notably, the outputs were not just academic. Invest International responded positively to the findings. They appreciated how the model translated qualitative tensions into a clear strategic framework. Presenting the results gave them concrete evidence that financial incentives (like ILLs) or clear sanctions can change outcomes. My work thus made a practical contribution: it gave the partner specific recommendations on structuring contracts to embed LW conditions. In combining personal conviction with academic rigour, I believe this research has put the LW issue more firmly on the agenda. It shows that formal modelling can ‘open the black box’ of negotiations, and it has provided a step-by-step framework for impact investors. In the end, I hope these insights will help investors design enforceable, incentive-based policies so that paying a LW becomes not just ethical, but also the most rational business choice.

9

Conclusion

This chapter answers the central research question by drawing on the key findings from the preceding chapters. It also outlines the study's practical implications. The chapter concludes by discussing the possible directions for future research.

9.1. The Research Objective

This study explored how impact investors can leverage financial capital to advance the implementation of LW policies within their investment portfolios. LW adoption is widely recognised as a key driver of Sustainable Development Goals (SDGs) 1 (No Poverty), 8 (Decent Work and Economic Growth), and 10 (Reduced Inequalities). The research centred on a case study of a European impact investor that issued a development loan to an agri-food firm expanding operations in a lower-middle-income country, where average wages remained below the LW benchmark. The study drew on three primary sources: a targeted literature review; thirteen expert interviews with professionals in impact investing and LW advocacy to map sector-wide practices; and four stakeholder interviews to analyse case-specific dynamics. These findings were integrated into a detailed case analysis of the investor–company relationship, highlighting their objectives, constraints, and incentive structures. The study developed a P-A game-theoretical model to assess how investor strategies influence corporate decision-making. This formal framework simulated how different financial instruments—such as impact-linked loans or enforcement clauses—could shift the firm's incentives and increase the likelihood of genuine LW implementation. The model offered a structured way to identify which mechanisms most effectively embed social commitments into business strategy.

9.2. Answers to the Sub-Questions

This section synthesises the findings from each of the four sub-questions and provides a structured understanding of how impact investors influence companies to implement LW policies. The first two sub-questions explore the tools, tensions, and trade-offs investors navigate in practice, while the latter two show how formal modelling explains observed behaviours and evaluates alternative strategies. The following paragraphs address each sub-question in turn.

- 1) *What engagement mechanisms and contractual instruments do impact investors use to promote living wage adoption in private sector projects?*

Chapter 4 identified three core strategies that impact investors use to promote the adoption of a LW within portfolio companies. The results revealed a three-part toolkit: (i) investors engage in informal dialogue, including relationship-building and moral persuasion; (ii) they apply contractual tools, such as embedding wage clauses or linking incentives to performance; and (iii) they build coalitions with co-investors or external stakeholders. The effectiveness of each mechanism depends on how much legitimacy, power, and urgency the investor holds—three attributes that determine stakeholder salience. Influence is likely to be effective only when all three are present.

- 2) *What were the key objectives, conflicts, and trade-offs between the investor and the company, and what engagement mechanisms were employed concerning the living wage policy?*

Chapter 5 examined how the investor balanced loan security with the social goal of implementing a LW. The case revealed that the investor faced a clear conflict between protecting the investment and pursuing wage improvements. A key challenge arose from the lack of shared definitions: the investor defined the LW as a cash amount, while the company included non-cash benefits. This misalignment, along with weak governance and the absence of enforcement mechanisms, reduced the wage clause to an aspirational statement rather than an actionable commitment.

3) How does a principal-agent game-theory framework explain the strategic choices of the investor and the company under the baseline wage negotiations?

Section 6.3 modelled the firm's likely behaviour under standard investor engagement, without additional incentives or penalties. The P-A model demonstrated that the firm had little motivation to act under information asymmetry and the absence of binding clauses. Without enforceable milestones or transparent monitoring, the company delays action, cites good intentions, or claims partial compliance to avoid actual wage increases. The investor, unable to verify the firm's actual wage costs, adopts a phased enforcement strategy. Anticipating this, the company opts for phased adoption, but there is a good chance it will not meet these requirements because it is concealing its actual actions. This dynamic produces a fragile equilibrium that often results in hidden action by the company.

4) How do specific investor engagement strategies alter the asymmetries in the principal-agent game and shift the equilibrium outcomes towards living wage compliance?

Section 6.4 analysed how targeted engagement strategies could shift company behaviour. The game-theoretic analysis showed that introducing either an ILL or a penalty clause significantly changed the company's incentives. In the first scenario, financial rewards for meeting wage targets aligned business interests with social goals. Second, the high cost of non-compliance compelled the company to act. In both cases, these mechanisms made adopting the LW the most rational choice. By contrast, informal dialogue alone failed to drive meaningful behavioural change.

9.3. Answer to the Main Research Question

This mixed-methods study addressed the central research question:

How can impact investors effectively negotiate and realise living-wage commitments in private-sector projects, based on the insights from an ex-post case-study?

This study provides a clear answer to the main research question: Impact investors can promote the adoption of a LW when they combine relational engagement with well-designed financial instruments, under the right conditions. Trust-based engagement remains essential for legitimacy and buy-in, but must be reinforced with contractual tools that align business incentives with the social objective of fair wages. Three conditions were identified as critical to the effectiveness of the investor's leverage:

1. A standardised LW metric: Defining a clear, shared LW metric and identifying the local wage gap to address before closing the deal ensures that both parties share the same expectations and can measure progress reliably. This clarity prevents confusion and strengthens accountability.
2. Phased implementation: Implementing a gradual roll-out with clearly defined milestones allows companies to manage the financial impact over time. This approach reduces operational risks and enables necessary adjustments. It helps investors balance their requirements with the company's operational feasibility.
3. Sequenced legitimacy, power, and urgency: Engagement must follow a clear sequence. First, investors establish the legitimacy of the LW issue using evidence and stakeholder dialogue. Next, they apply power through contractual leverage or financial tools. Finally, they create urgency by setting timelines and clear expectations. This sequence makes it difficult for companies to delay or ignore the issue.

Investors significantly strengthen their influence when they meet these three conditions. Under these circumstances, companies are more likely to integrate LW commitments into their core business strategy instead of treating them as external obligations.

In summary, impact investors can effectively negotiate and realise LW commitments of companies by combining trust and transparency with enforceable, incentive-based financial structures. Success depends on a step-by-step framework that includes clear targets, measurable progress, and strategic pressure points. Two mechanisms emerged as particularly effective: (i) impact-linked loans, which offer interest-rate reductions upon verified wage progress, and (ii) strict-adherence clauses, which treat non-compliance as a contractual default. Both tools shift the firm's payoff structure, making compliance the most advantageous strategy. When such instruments are carefully sequenced and embedded within the investment agreement, paying a LW becomes not only ethically desirable, but also financially rational for the company.

9.4. Practical Implications

This section translates the study's findings into actionable guidance for three key stakeholder groups: impact investors, companies, and policymakers. Each group plays a distinct role in advancing LW implementation, and the analysis identifies specific levers they can use to align social objectives with economic incentives better. The recommendations below aim to help each group support more effective, accountable, and scalable wage practices across the investment ecosystem.

9.4.1. For Impact Investors

LW adoption will not require the same level of intervention in every case. But for any engagement to succeed, investors must first resolve internal misalignment. When different teams within the same investment firm hold conflicting views or priorities, such as ESG officers supporting wage improvements while investment managers prefer relationship management and financial returns, this weakens the investor's credibility and confuses counterparties. A unified internal position is a precondition for negotiating enforceable agreements. Once internal coherence is secured, investors can deploy a combined strategy. They build legitimacy through relational engagement, such as dialogue, trust-building, and advisory support, but this approach has limited impact on its own. Investors must reinforce relational tools with financial incentives or binding contractual mechanisms to prevent wage commitments from becoming merely symbolic. They can, for example, offer reduced interest rates for verified wage progress or apply penalty clauses for non-compliance.

At the same time, investors must address the local wage gap explicitly in the financial structuring of the deal. They should negotiate clear definitions and milestones for LW implementation upfront and embed them into the contract. Without this clarity, the risk of drift or performative compliance increases. Investors also need to secure access to company data and establish mechanisms for ongoing monitoring. Without adequate transparency, firms may misreport progress or delay action without consequences.

However, investors must avoid overly intrusive reporting demands or excessive control, which can erode trust and suggest a lack of partnership. Striking the right balance—ensuring transparency without micromanagement—is especially important in contexts where companies are still unfamiliar with ESG-related disclosures. Finally, investors can amplify their influence by forming coalitions with like-minded peers. By coordinating expectations across multiple financiers, they send a stronger signal and create collective leverage that individual investors may lack. This coordinated approach also helps normalise LW commitments as part of standard ESG practice.

9.4.2. For Companies

Companies can ease financial pressure by introducing a LW through a phased approach. In collaboration with investors, they should develop a step-by-step plan that includes clear wage targets and timelines. Gradual implementation allows them to manage the transition more effectively. Companies should also appoint a dedicated person responsible for LW implementation—someone with a strong understanding of ESG. This appointment ensures internal accountability and helps prevent confusion around roles and responsibilities.

Companies can often offset the additional costs of raising wages through improved productivity or modest price increases. Before finalising any agreement, they should explore alternative mechanisms for meeting social targets, such as impact-linked financing. The analysis shows that, under the current structure, the investor often captures the gains from improved social outcomes. By negotiating shared incentives, companies can achieve a more equitable value distribution, leading to better outcomes for both parties. Finally, a partial commitment to a LW can strengthen a company's reputation. Early adopters often benefit from improved staff morale, reduced turnover, and positive reputational effects. These benefits, in turn, support long-term business performance.

9.4.3. For Policymakers

Effective LW governance relies on coordinated action across policymaking arenas: investor-side financial regulators, national labour authorities, and international standard-setters. While each group plays a distinct role, their impact grows significantly when they align their efforts.

First, financial regulators in capital-exporting countries can recognise the LW as a material sustainability risk. The EU's Corporate Sustainability Due Diligence Directive (CSDDD) already frames "an adequate standard of living—including a living wage" as a corporate duty [37]. As national governments transpose this directive into law, they can use it to create disclosure requirements and risk assessments that favour investments tied to verified wage improvements. To operationalise these duties and close information gaps, policymakers should mandate a harmonised "single wage report," modelled on the datapoints required under the Corporate Sustainability Reporting Directive (CSRD). For every operation, companies would disclose (i) the median wage, (ii) the benchmark LW figure, and (iii) the resulting gap. Reports would be filed on a digital platform interoperable with existing ESG databases and accessible to external parties.

Second, labour ministries and national wage councils control the statutory wage floor and can support private-sector enforcement by publishing sector-specific LW benchmarks with formal recognition. These benchmarks must follow sound methodologies, align with global guidance, such as the Organisation for Economic Cooperation and Development (OECD) 2023 Handbook [77], and be updated regularly. Investors cannot credibly enforce wage clauses or monitor compliance without recognised reference points.

Third, international bodies like the ILO and OECD provide crucial normative alignment. Policymakers should promote the ILO's consensus definition of a LW [55] as the global standard in cross-border contracts. They can also embed the OECD Guidelines and sector-specific due diligence protocols into national procurement frameworks and legislation, transforming soft norms into binding obligations.

Finally, policymakers can use reputational tools to reinforce compliance. A globally recognised "Living Wage Certified" label—similar to the UK's 60 *Living Wage Employer* scheme run by the Living Wage Foundation—could reward frontrunners and signal best practice. The company in this case also viewed such certification as a favourable option, seeing it as a way to gain public recognition and strengthen its brand reputation.

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A

Appendix A

A.1. Investor Reflections on Informal Dialogue

Quote

“We prefer a collaborative engagement approach: we set targets and timelines, then maintain close dialogue to track progress. Instead of imposing demands immediately, we show them the long-term benefits for both workers and the company.”

Interview 1

“We evaluate how many workers might be affected by sub-living wages. Then we open a conversation at the senior management level and offer resources, like benchmarking data from peer companies.”

Interview 10

“It’s like a really open dialogue ... it’s a really participatory process.”

Interview 12

“We illustrate the business case for paying better wages, presenting examples of reduced turnover and improved staff loyalty. Companies need to see that these are not just moral arguments, but also long-term economic benefits.”

Interview 11

“It’s about building a relationship. We provide examples of how improved wages can reduce turnover and enhance product quality. They’re more inclined to listen if they see the business case.”

Interview 11

“Informal dialogue tends to be relationship-dependent; if key champions leave, momentum can stall.”

Interview 6

Table A.1: Investor reflections on informal dialogue strategies

A.2. Investor Reflections on Living wage as a Formal Requirement

Quote
<p>“We haven’t made it a formal requirement yet. We don’t say, ‘If you don’t pay a living wage, we will withdraw our investments.’... We try to persuade companies with a multi-year approach.”</p> <p>Interview 4</p>
<p>“We don’t find a lack of a living wage serious enough to exclude the company immediately if there haven’t been repeated, severe violations.”</p> <p>Interview 3</p>
<p>“For a living wage, I don’t think we’d make that decision very quickly, to be honest. ... We see the potential risk: if people don’t earn a living wage, it can have economic consequences that also affect us as investors.”</p> <p>Interview 10</p>
<p>“Our contracts embed ESG clauses, and living wage is one of them. It’s not always a hard threshold, but it signals our seriousness and provides leverage if companies show no progress.”</p> <p>Interview 3</p>
<p>“Ultimately, we <i>can</i> decide to stop investing in a company if it scores too poorly. ... Our living wage approach is not binding, but it is a very active form of engagement that not many other parties use.”</p> <p>Interview 6</p>
<p>“Ultimately, we can walk away if wage violations persist. Divestment is a last resort, but it’s an important stick to have in the cupboard. Companies know we might use it.”</p> <p>Interview 2</p>
<p>“If companies pay a living wage and this can be proved, then they will get an interest-rate reduction from us.”</p> <p>Interview 12</p>

Table A.2: Investor perspectives on living wage as a formal requirement

A.3. Investor Reflections on Collaborative Initiatives

Quote

“By joining forces in a coalition, we speak with a united voice. That’s far more persuasive for management teams than just one investor asking for changes. We also share best practices and wage benchmarks.”

Interview 5

“We collaborate in the Platform Living Wage Financials. It’s effective, but aligning multiple agendas is not trivial. Each investor has slightly different priorities for social metrics and engagement style.”

Interview 2

“We all agree on the principle of a living wage, but each investor might define it slightly differently. Harmonising these definitions and timelines requires ongoing negotiation within the coalition.”

Interview 4

Table A.3: Investor reflections on collaborative initiatives

A.4. Investor Reflections on Legitimacy, Power, and Urgency

Quote	Interview	Theme
“Engagement without contextual understanding risks being seen as top-down or naive, leading to fewer tangible outcomes.”	Interview 3	Legitimacy
“Too often, investors apply generic ESG metrics. But if you show real awareness of the region’s living cost and wage benchmarks, the company sees you as a credible partner rather than an outsider.”	Interview 10	Legitimacy
“If progress is non-existent, we might escalate behind closed doors or seek support from investor coalitions. Divestment is a last resort, but companies know it’s an option on the table.”	Interview 11	Power
“As a bank, we have limited shares in most companies, so direct power is minimal. But collectively, we can exert pressure by publicly highlighting wage shortfalls or by filing resolutions if needed.”	Interview 4	Power
“Sometimes the mere possibility of withdrawing funds is enough to nudge companies toward setting living wage goals; we rarely have to carry out that threat.”	Interview 3	Power
“The short-term financial lens in many investment committees can dilute the perception of ‘urgency’ in wage reforms.”	Interview 6	Urgency
“Companies often say it’s a ‘long-term ambition.’ We try to show them that sub-living wages can create immediate problems—like labour unrest or reputational hits—so that it feels urgent, not optional.”	Interview 5	Urgency

Table A.4: Investor reflections on legitimacy, power, and urgency in living wage engagement

B

Appendix B

B.1. Robustness test status quo

B.1.1. Perturbation Analysis of the “Status Quo” Game Tree

Below, we test whether the Subgame-Perfect Nash Equilibrium (SPNE) in the “Status Quo” model remains unchanged when a small perturbation shifts each terminal payoff. We proceed as follows:

1. Original Game and Equilibrium

In the unperturbed “Status Quo” game (see Table 7.6), the Investor moves first, choosing among:

1. **Immediate enforcement (IE)**
2. **Phased enforcement (PE)**
3. **Non-enforcement (NE)**
4. **Withdraw (W)**

If the Investor picks IE, PE, or NE, the Company then selects among:

- **Immediate adoption (IA)**
- **Phased adoption (PA)**
- **No adoption (NA)**

Each path leads to a terminal payoff pair (u_I, u_C) . In the original (unperturbed) payoffs, backward induction yields:

- After IE: Company best response is IA, payoffs $(0, -2)$.
- After PE: Company best response is PA, payoffs $(+1, 0)$.
- After NE: Company best response is NA, payoffs $(0, +1)$.
- After W: payoffs are fixed at $(-4, -3)$.

The Investor compares her payoffs:

- $IE \Rightarrow 0$
- $PE \Rightarrow +1$
- $NE \Rightarrow 0$
- $W \Rightarrow -4$

Thus, the unique SPNE is:

Investor: PE, Company: PA, equilibrium payoffs $(+1, 0)$.

2. Introducing Payoff Perturbations

Real-world payoffs are never known with exact precision. To test robustness, we perturb each terminal payoff:

$$\epsilon = +0.2 \text{ (Investor)}, \quad \delta = -0.2 \text{ (Company)}.$$

Thus, each payoff (u_I, u_C) becomes $(u_I + 0.2, u_C - 0.2)$. We will show step-by-step that the SPNE path remains (PE, PA).

3. Recomputed Terminal Payoffs

Table B.1: Perturbed terminal payoffs

Outcome	Original (u_I, u_C)	Perturbed ($u_I + 0.2, u_C - 0.2$)
1 (IE \rightarrow IA)	(0, -2)	(+0.2, -2.2)
2 (IE \rightarrow PA)	(-3, -4)	(-2.8, -4.2)
3 (IE \rightarrow NA)	(-4, -3)	(-3.8, -3.2)
4 (PE \rightarrow IA)	(0, -2)	(+0.2, -2.2)
5 (PE \rightarrow PA)	(+1, 0)	(+1.2, -0.2)
6 (PE \rightarrow NA)	(-3, -1)	(-2.8, -1.2)
7 (NE \rightarrow IA)	(+1, 0)	(+1.2, -0.2)
8 (NE \rightarrow PA)	(+1, 0)	(+1.2, -0.2)
9 (NE \rightarrow NA)	(0, +1)	(+0.2, +0.8)
10 (W)	(-4, -3)	(-3.8, -3.2)

4. Company's Best Responses (Perturbed)

For each first-move choice by the Investor, the Company now compares its three perturbed payoffs and picks the highest. If the Investor chooses IE (Immediate enforcement):

- Outcome 1: Company payoff is -2.2.
- Outcome 2: Company payoff is -4.2.
- Outcome 3: Company payoff is -3.2.

The maximum is -2.2. \Rightarrow The Company chooses Immediate adoption (IA), leading to payoff pair (+0.2, -2.2).

If the Investor chooses PE (Phased enforcement):

- Outcome 4: (+0.2, -2.2).
- Outcome 5: (+1.2, -0.2).
- Outcome 6: (-2.8, -1.2).

The Company's payoffs are $\{-2.2, -0.2, -1.2\}$; the maximum is -0.2. \Rightarrow The Company chooses Phased adoption (PA), leading to (+1.2, -0.2). If the Investor chooses NE (Non-enforcement):

- Outcome 7: (+1.2, -0.2).
- Outcome 8: (+1.2, -0.2).
- Outcome 9: (+0.2, +0.8).

The Company's payoffs are $\{-0.2, -0.2, +0.8\}$; the maximum is +0.8. \Rightarrow The Company chooses No adoption (NA), leading to (+0.2, +0.8). If the Investor chooses W (Withdraw):

- There is no Company decision; the outcome is fixed at (-3.8, -3.2).

5. Investor's Payoff Comparison (Perturbed)

Given the Company's best responses:

- IE \Rightarrow Investor payoff: +0.2.
- PE \Rightarrow Investor payoff: +1.2.
- NE \Rightarrow Investor payoff: +0.2.
- W \Rightarrow Investor payoff: -3.8.

Since +1.2 (from choosing PE) exceeds all other options, the Investor's best response remains:

Choose PE (Phased enforcement).

6. Conclusion for This Perturbation

Even after shifting every terminal payoff by $\epsilon = +0.2$ for the Investor and $\delta = -0.2$ for the Company:

- The Company's best responses remain $IE \rightarrow IA$, $PE \rightarrow PA$, and $NE \rightarrow NA$.
- The Investor's best response remains to choose **PE**, because $+1.2$ still dominates.

Hence, the unique SPNE path (PE, PA) (with perturbed payoffs $(+1.2, -0.2)$) is identical in structure to the original equilibrium. In other words:

Under the perturbation $\epsilon = +0.2$, $\delta = -0.2$, the “Status Quo” SPNE remains (PE, PA).

7. Verifying Other Perturbation Combinations

To confirm full robustness, one must repeat these steps for each $(\epsilon, \delta) \in \{-0.2, +0.2\}^2$. In each case:

1. Recompute all ten terminal payoffs as $(u_I + \epsilon, u_C + \delta)$.
2. Re-derive the Company's best responses at IE, PE, and NE.
3. Re-evaluate the Investor's payoffs (given those best responses).
4. Confirm that $PE \rightarrow PA$ is still the Investor's top choice.

It turns out—once all four perturbation pairs $(-0.2, -0.2)$, $(-0.2, +0.2)$, $(+0.2, -0.2)$, and $(+0.2, +0.2)$ are tested—the SPNE (PE, PA) never changes. All payoff shifts merely adjust the numerical values (e.g., from $(+1, 0)$ to $(+0.8, -0.2)$ or $(+1.2, +0.2)$), but they do not alter the strategic ranking of outcomes.

8. Interpretation

Because the SPNE always remains (Phased enforcement, Phased adoption) under these small perturbations, we conclude:

The “Status Quo” equilibrium is robust to payoff uncertainty of up to ± 0.2 .

In practical terms, this means that—even if our estimates of costs, benefits, or reputational impacts were off by as much as 0.2 utility points on either side—the predicted outcome (PE, PA) would not shift. That stability strengthens our confidence that the “Status Quo” model's recommendation is not an artefact of precise numerical assumptions but instead reflects a genuine strategic force in this context.

B.2. Methodological Approach Principal-Agent Game

B.2.1. Preparation

Two strategic hypotheses guide the modelling of the P-A game tree:

- The Investor's main preference is capital preservation; consequently, LW enforcement relies first on informal dialogue and secondarily on explicit contractual sanctions, reflecting a generally conflict-averse policy.
- The Company values production expansion and managerial autonomy. Because the marginal cost of paying a LW is perceived to jeopardise competitiveness, management may engage in hidden action.

B.2.2. Identifying Players and Moves

The next step in the game-theoretical analysis is to identify the key actors and their available strategies. The players and moves in the P-A game are the same as the ones identified in Chapter, except for the first move made by the Company. The Company moves first, the outcome is hidden from the Investor and therefore shares the same information set (Section 6.1.2)

The Players

1. *The Investor (I)*. An impact investor that provides growth capital to the Company and wishes to safeguard both financial returns and the adoption of a LW policy.
2. *The Company (C)*. The Company is seeking external financing to expand production while maintaining operational autonomy and cost competitiveness.

Player Strategies

The Company:

1. *Normal (A_{normal})*. The Company behaves normally and performs as promised
2. *Opportunistic ($A_{opportunistic}$)*. The Company behaves opportunistically and performs hidden actions

The Investor:

1. *Immediate enforcement (E_{now})*. LW compliance is a strict precondition for funding, enforced immediately via contracts.
2. *Phased enforcement (E_{phased})*. LW compliance follows a milestone-based schedule, balancing impact and feasibility.
3. *No enforcement (E_{none})*. Funding proceeds without LW conditions, prioritising the financial relationship despite legitimacy risks.
4. *Withdraw investment ($E_{withdraw}$)*. The investor exits or refrains from the investment altogether.

The Company:

1. *Immediate adoption (A_{now})*. Company commits to full LW compliance from the start.
2. *Phased adoption (A_{phased})*. LW implementation occurs incrementally via negotiated milestones.
3. *Deferred adoption (A_{none})*. No active LW adoption; status quo is maintained or future intent is signalled.

Table B.2: Preference Ordering of Strategies per Actor (from most to least preferred)

Actor	Preference Ordering of Strategies
Investor	Phased > Immediate compliance > Continue without > Withdraw investment
Company	No LW > Phased implementation > Immediate implementation

B.2.3. Developing the Game Tree

Information Structure

Both actors possess near-complete information regarding the contractual terms and the nominal meaning of a living wage. However, informational asymmetry persists in two respects:

- *Capability uncertainty.* The Investor cannot perfectly observe the Company's true cost of immediate LW adoption, nor its internal capacity to absorb wage increases without eroding margins.
- *Hidden action.* Once the contract is signed, day-to-day wage practices remain largely unobservable to I between monitoring events, giving C discretion over the pace of implementation.

Sequence of Play

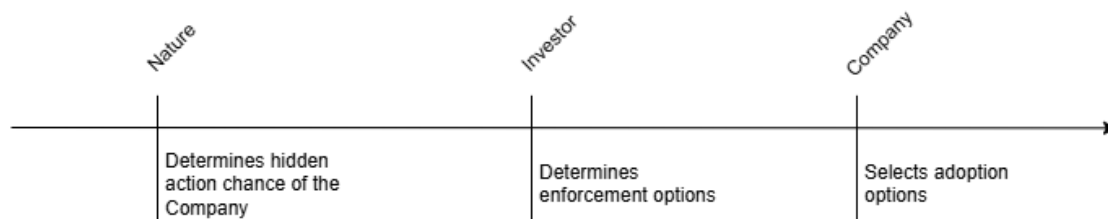


Figure B.1: Sequence of Play in PA Game

B.2.4. Initial Game Tree

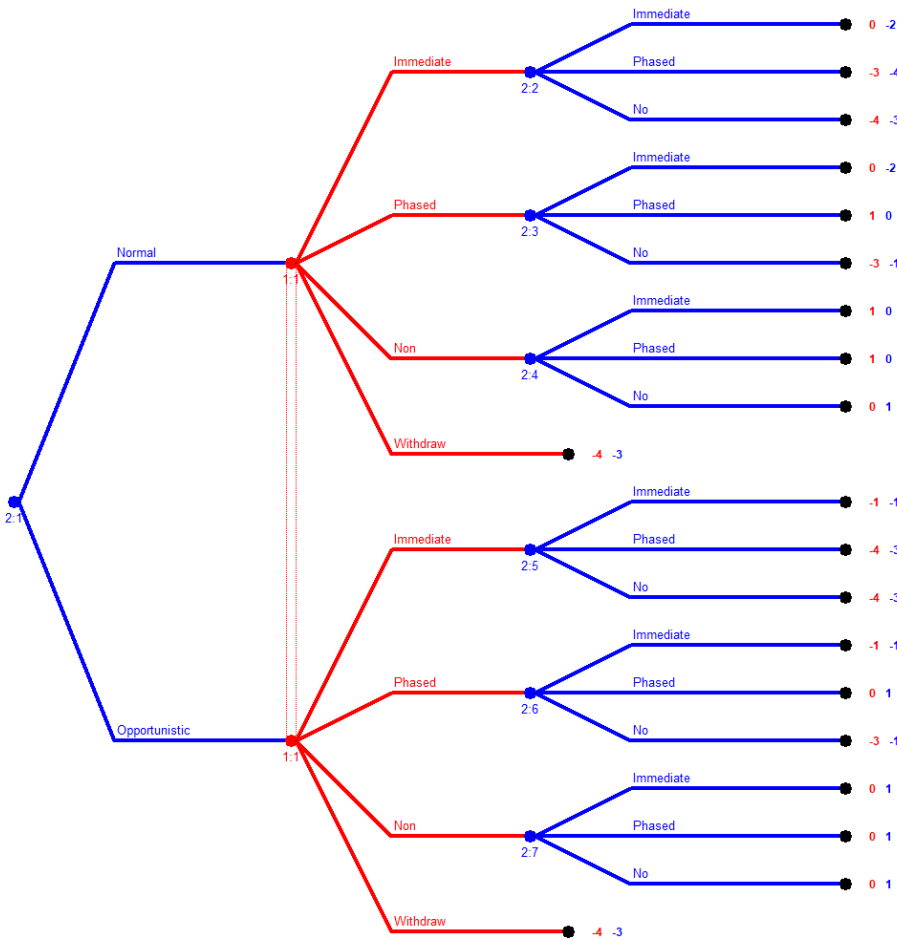


Figure B.2: P-A game tree

Payoffs

In the opportunistic branch, payoffs mirror the worst-case rows of the original matrix, reducing the Investor’s returns in scenarios where cheating is feasible. This transforms the game into a classic principal-agent setting with moral hazard.

Table B.3: Outcomes and Associated Tags for the Opportunistic Company

Outcome #	Tags
1	[Social Impact], [Operational Costs]
2	[Social Impact], [Operational Costs], [Conflicts]
3	[Reputational Damage], [Conflicts]
4	[Social Impact], [Operational Costs]
5	[Social Impact], [Flexibility], [Operational Costs]
6	[Reputational Damage], [Conflicts], [Flexibility]
7	[Social Impact], [Operational Costs], [Flexibility]
8	[Social Impact], [Operational Costs], [Flexibility]
9	[Reputational Damage], [Flexibility]
10	[Reputational Damage], [Conflicts]
11	[Reputational Damage]
12	[Reputational Damage], [Conflicts]
13	[Reputational Damage], [Conflicts]
14	[Reputational Damage],
15	[Reputational Damage], [Flexibility],
16	[Reputational Damage], [Conflicts], [Flexibility]
17	[Reputational Damage], [Flexibility]
18	[Reputational Damage], [Flexibility]
19	[Reputational Damage], [Flexibility]
20	[Reputational Damage], [Conflicts]

Table B.4: Preferences of Investor and Company per Impact Tag

Tag	Investor Preference	Company Preference
Social Impact	+2	+1
Flexibility	+1	+2
Reputational Damage	-1	-1
Operational Costs	-2	-3
Conflicts	-3	-2

Table B.5: Detailed Payoff per Outcome for Investor and Opportunistic Company

Outcome	Calc	Inv. Payoff	Calc	Comp. Payoff
1	$(+2) + (-2)$	0	$(+1) + (-3)$	-2
2	$(+2) + (-2) + (-3)$	-3	$(+1) + (-3) + (-2)$	-4
3	$(-1) + (-3)$	-4	$(-1) + (-2)$	-3
4	$(+2) + (-2)$	0	$(+1) + (-3)$	-2
5	$(+2) + (+1) + (-2)$	+1	$(+2) + (+1) + (-3)$	0
6	$(-1) + (-3) + (+1)$	-3	$(+2) + (-1) + (-2)$	-1
7	$(+2) + (-2) + (+1)$	+1	$(+1) + (-3) + (+2)$	0
8	$(+2) + (-2) + (+1)$	+1	$(+1) + (-3) + (+2)$	0
9	$(-1) + (+1)$	0	$(+2) + (-1)$	+1
10	$(-1) + (-3)$	-4	$(-1) + (-2)$	-3
11	-1	-1	-1	-1
12	$-1 + (-3)$	-4	$-1 + (-2)$	-3
13	$-1 + (-3)$	-4	$-1 + (-2)$	-3
14	-1	-1	-1	-1
15	$-1 + (+1)$	0	$-1 + (+2)$	+1
16	$-1 + (-3) + (+1)$	-3	$-1 + (-2) + (+2)$	-1
17	$-1 + (+1)$	0	$-1 + (+2)$	+1
18	$-1 + (+1)$	0	$-1 + (+2)$	+1
19	$-1 + (+1)$	0	$-1 + (+2)$	+1
20	$-1 + (-3)$	-4	$-1 + (-2)$	-3

B.2.5. Perturbation Analysis of the "Principal Agent" Game Tree

Below, we test whether the Subgame-Perfect Nash Equilibrium (SPNE) in the "Principal Agent" model remains unchanged when a small perturbation shifts each terminal payoff. We proceed as follows:

1. Original Game and Baseline Equilibrium

- **Move 1 – Company.** Chooses a type: $t \in \{\text{Normal (N), Opportunistic (O)}\}$.
- **Move 2 – Investor.** Without observing t , selects: $e \in \{\text{IE, PE, NE, W}\}$.
- **Move 3 – Company.** Now fully informed, decides: $a \in \{\text{IA, PA, NA}\}$.

The Investor's two decision nodes form one information set; backward induction only works at the final Company node.

	IE	PE	NE	W
Company = N	(0, -2)	(+1, 0)	(+1, +1)	(-4, -3)
Company = O	(-1, -1)	(0, +1)	(0, +1)	(-4, -3)

Company best replies (last move):

- Normal: IE \rightarrow IA, PE \rightarrow PA, NE \rightarrow NA
- Opportunistic: IE \rightarrow IA, PE \rightarrow PA, NE \rightarrow IA (tie)

Solving the 2×4 strategic form yields:

$$(\mathbf{O}, \mathbf{PE}) \quad \text{and} \quad (\mathbf{O}, \mathbf{NE})$$

As pure-strategy equilibria. We take as baseline:

Baseline SPNE path: $(t = \mathbf{O}, e = \mathbf{PE}, a = \mathbf{PA})$

2. Introducing Pay-off Perturbations

Perturb each terminal payoff:

$$\epsilon = +0.2 \quad (\text{Investor}), \quad \delta = -0.2 \quad (\text{Company})$$

So $(u_I, u_C) \mapsto (u_I + \epsilon, u_C + \delta)$.

3. Recomputed Terminal Payoffs

Table B.6: Perturbed terminal payoffs (only best outcomes shown)

Branch	Action	Company options	Best reply	Perturbed outcome
N	IE	$\{-2.2, -4.2, -3.2\}$	IA	$(+0.2, -2.2)$
N	PE	$\{-2.2, -\mathbf{0.2}, -1.2\}$	PA	$(+1.2, -0.2)$
N	NE	$\{-0.2, -0.2, +\mathbf{0.8}\}$	NA	$(+0.2, +0.8)$
O	IE	$\{-1.2, -3.2, -3.2\}$	IA	$(-0.8, -1.2)$
O	PE	$\{-1.2, +\mathbf{0.8}, -1.2\}$	PA	$(+0.2, +0.8)$
O	NE	tie at +0.8	IA	$(+0.2, +0.8)$
Any	W	–	–	$(-3.8, -3.2)$

4. Company Best Responses (Perturbed)

Same as unperturbed:

- Normal: IE \rightarrow IA, PE \rightarrow PA, NE \rightarrow NA
- Opportunistic: IE \rightarrow IA, PE \rightarrow PA, NE \rightarrow IA (tie)

5. Investor's Pay-off Comparison (Perturbed)

Let μ = probability that the Company is Normal.

Action	Payoff if N	Payoff if O	Expected payoff
IE	+0.2	−0.8	$\mu - 0.8$
PE	+1.2	+0.2	$0.2 + \mu$
NE	+1.2	+0.2	$0.2 + \mu$
W	−3.8	−3.8	−3.8

IE and W are dominated. PE and NE are tied.

6. Equilibrium under the Perturbation

- Company: $\pi_C(N) = -0.2$ (PE), $+0.8$ (NE); $\pi_C(O) = +0.8$ in both.
- \Rightarrow Company strictly prefers Opportunistic if PE is chosen.
- Investor is indifferent: PE and NE both yield $0.2 + \mu$.

So the perturbed equilibrium path is:

$$(t = \mathbf{O}, e = \mathbf{PE}, a = \mathbf{PA})$$

7. Other Perturbation Combinations

For all $(\epsilon, \delta) \in \{-0.2, +0.2\}^2$, the ranking is preserved:

- Company always prefers Opportunistic.
- Investor always ties between PE and NE (or weakly prefers PE).

Hence, the SPNE remains unchanged in all four perturbations.

8. Interpretation

The SPNE is robust to additive payoff uncertainty up to ± 0.2 per player.

Even with a ± 0.2 margin in payoff estimates, the strategic outcome

(Opportunistic type, Phased enforcement, Phased adoption)

remains optimal.

The Investor should therefore anticipate opportunistic behaviour and respond with Phased enforcement as the least-bad credible path.

B.3. Methodological Approach Reduction in Interest Rate

Same methodology as in Appendix B.2

B.3.1. Preparation

Same preparation as in Appendix B.2

B.3.2. Identifying Players and Moves

Same players and moves as in Appendix B.2

The Players

Same players as in Appendix B.2

Player Strategies

Same strategies as in Appendix B.2

B.3.3. Developing the Game Tree

Same development as in Appendix B.2

Information Structure

Same information structure as in Appendix B.2

Sequence of Play

Same sequence of play as in Appendix B.2

B.3.4. Initial Game Tree

Payoffs

Table B.7: Tag definitions and their contextual conditions

Tag	Description	Occurs or Is Possible...
[Social Impact]	Social impact generated by the LW adoption	...when a LW is implemented in full by the Company
[Operational Costs]	Costs incurred to implement LW measures	...whenever the Company implements the LW into their practices
[Conflict]	Conflict between both actors	...whenever both actors do not align
[Flexibility]	Flexible implementation or policy	...whenever an actor has the possibility to take autonomous control
[Reputational Damage]	Reputational harm arising from unmet promises	...when an actor behaves differently from what is communicated externally
[Bonus]	Reduction in interest rate	...when the Company implements a LW

Table B.8: Outcomes and Associated Tags

Outcome #	Tags
1	[Social Impact], [Operational Costs], [Bonus]
2	[Social Impact], [Operational Costs], [Conflicts], [Bonus]
3	[Reputational Damage], [Conflicts]
4	[Social Impact], [Operational Costs], [Bonus]
5	[Social Impact], [Flexibility], [Operational Costs], [Bonus]
6	[Reputational Damage], [Conflicts], [Flexibility]
7	[Social Impact], [Operational Costs], [Flexibility], [Bonus]
8	[Social Impact], [Operational Costs], [Flexibility], [Bonus]
9	[Reputational Damage], [Flexibility]
10	[Reputational Damage], [Conflicts]
11	[Reputational Damage]
12	[Reputational Damage], [Conflicts]
13	[Reputational Damage], [Conflicts]
14	[Reputational Damage]
15	[Reputational Damage], [Flexibility]
16	[Reputational Damage], [Conflicts], [Flexibility]
17	[Reputational Damage], [Flexibility]
18	[Reputational Damage], [Flexibility]
19	[Reputational Damage], [Flexibility]
20	[Reputational Damage], [Conflicts]

Table B.9: Preference Ordering of Tags per Actor (from least to most preferred)

Actor	Preference Ordering of Tags
Investor	[Conflicts] < [Operational Costs] < [Reputational Damage] < [Flexibility] < [Social Impact]
Company	[Operational Costs] < [Conflicts] < [Reputational Damage] < [Social Impact] < [Flexibility] < [Bonus]

Table B.10: Preferences of Investor and Company per Impact Tag

Tag	Investor Preference	Company Preference
Social Impact	+2	+1
Flexibility	+1	+2
Bonus	0	+2
Reputational Damage	-1	-1
Operational Costs	-2	-3
Conflicts	-3	-2

Table B.11: Detailed Payoff per New Outcome for Investor and Company

Outcome	Calc	Inv. Payoff	Calc	Comp. Payoff
1	$(+2) + (-2)$	0	$(+1) + (-3) + (+2)$	0
2	$(+2) + (-2) + (-3)$	-3	$(+1) + (-3) + (-2) + (+2)$	-2
3	$(-1) + (-3)$	-4	$(-1) + (-2)$	-3
4	$(+2) + (-2)$	0	$(+1) + (-3) + (+2)$	0
5	$(+2) + (+1) + (-2)$	+1	$(+2) + (+1) + (-3) + (+2)$	+2
6	$(-1) + (-3) + (+1)$	-3	$(+2) + (-1) + (-2)$	-1
7	$(+2) + (-2) + (+1)$	+1	$(+1) + (-3) + (+2) + (+2)$	+2
8	$(+2) + (-2) + (+1)$	+1	$(+1) + (-3) + (+2) + (+2)$	+2
9	$(-1) + (+1)$	0	$(+2) + (-1)$	+1
10	$(-1) + (-3)$	-4	$(-1) + (-2)$	-3
11	-1	-1	-1	-1
12	$-1 + (-3)$	-4	$-1 + (-2)$	-3
13	$-1 + (-3)$	-4	$-1 + (-2)$	-3
14	-1	-1	-1	-1
15	$-1 + (+1)$	0	$-1 + (+2)$	+1
16	$-1 + (-3) + (+1)$	-3	$-1 + (-2) + (+2)$	-1
17	$-1 + (+1)$	0	$-1 + (+2)$	+1
18	$-1 + (+1)$	0	$-1 + (+2)$	+1
19	$-1 + (+1)$	0	$-1 + (+2)$	+1
20	$-1 + (-3)$	-4	$-1 + (-2)$	-3

B.3.5. Perturbation Analysis of the PA Game with Bonus

Below, we test whether the Subgame-Perfect Nash Equilibrium (SPNE) in the “Bonus” model remains unchanged when a small perturbation shifts each terminal payoff. We proceed as follows:

1. Original Game and Baseline Equilibrium

Table B.12: Game structure

Move	Player	Options
1	Company	Normal (N) or Opportunistic (O)
2	Investor	IE, PE, NE, W
3	Company	IA, PA, NA

Table B.13: Company's last-move best responses (unperturbed)

Branch	Investor action	IA	PA	NA	$\max u_C$	Company picks \rightarrow
N	IE	0	-2	-3	0	IA
	PE	0	+2	-1	+2	PA
	NE	+2	+2	+1	+2	IA or PA (tie)
O	IE	-1	-3	-3	-1	IA
	PE	-1	+1	-1	+1	PA
	NE	+1	+1	+1	+1	Any (take IA)
Any	W	-	-	-	$(-4, -3)$	fixed

1.1 Company's Last-Move Best Responses (Unperturbed)

1.2 Strategic-Form Payoffs (Investor, Company)

	IE	PE	NE	W
N chosen	(0, 0)	(+1 , +2)	(+1 , +2)	(-4, -3)
O chosen	(-1, -1)	(0, +1)	(0, +1)	(-4, -3)

1.3 Solving for SPNE

- **Investor:** Immediate Enforcement (IE) is strictly dominated—its payoff is always less than or equal to that of PE or NE. Withdraw (W) yields the worst outcome. PE and NE yield the same expected payoff of +1 for all beliefs $\mu \in [0, 1]$, where μ denotes the Investor's belief that the Company is of type Normal.
- **Company (first move):** For every Investor action except Withdraw, the Normal type yields a higher payoff than the Opportunistic type (e.g. +2 vs +1, or 0 vs -1). Hence, the Company strictly prefers to act as type Normal.

As a result, every subgame-perfect equilibrium selects:

$$(t = \text{Normal}, e \in \{\text{PE}, \text{NE}\}, a = \text{PA or IA (as above)})$$

We label the focal equilibrium:

$$(N, \text{PE}, \text{PA})$$

because Phased Enforcement (PE) is the canonical policy in the literature and yields a strict best reply from the Company.

2. Introducing Uniform Pay-off Perturbations

Add constants $\epsilon = +0.2$ (Investor), $\delta = -0.2$ (Company):

$$(u_I, u_C) \mapsto (u_I + \epsilon, u_C - \delta)$$

3. Recomputed Terminal Pay-offs

Table B.14: Perturbed payoffs after optimal Company move

Branch	IE	PE	NE	W
N	(+0.2, -0.2)	(+1.2 , +1.8)	(+1.2 , +1.8)	(-3.8, -3.2)
O	(-0.8, -1.2)	(+0.2, +0.8)	(+0.2, +0.8)	(-3.8, -3.2)

4. Company's Best Responses (Perturbed)

Same structure as before:

$$\text{IE} \rightarrow \text{IA}, \quad \text{PE} \rightarrow \text{PA}, \quad \text{NE: tie between IA and PA (N), any (O)}$$

5. Investors Pay-off Comparison (Perturbed)

Let $\mu = \Pr(\text{Normal})$.

Action	N	O	Expected payoff
IE	+0.2	-0.8	$-0.8 + \mu$
PE	+1.2	+0.2	$0.2 + \mu$
NE	+1.2	+0.2	$0.2 + \mu$
W	-3.8	-3.8	-3.8

6. Company's First-Move Decision (Perturbed)

Action	$\pi_C(N)$	$\pi_C(O)$	Choice
IE	-0.2	-1.2	N
PE	+1.8	+0.8	N
NE	+1.8	+0.8	N

7. Perturbed SPNE and Robustness

All four $(\pm 0.2, \pm 0.2)$ combinations preserve:

- $N \succ O$ at Company's first move
- $PE \simeq NE \succ IE \succ W$ for Investor

$(t = \text{Normal}, e = \text{Phased Enforcement}, a = \text{Phased Adoption})$

8. Interpretation

Robustness result. Even if all estimates deviate by up to ± 0.2 , the equilibrium logic remains: *the Company prefers Normal, the Investor selects PE, and implementation occurs in phases.* NE is tied, but any minor refinement would break the tie in favour of PE.

B.4. Methodological Approach Strict Adherence

B.4.1. Preparation

Old hypothesis	Updated for Strict Adherence
<i>Investor is conflict-averse and starts with dialogue.</i>	Investor is willing to terminate the deal; reputational and enforcement costs are now judged lower than tolerating non-compliance.
<i>Company maximises growth; LW seen as costly but perhaps negotiable.</i>	Company faces a binary choice: comply or lose financing. It knows the Investor will monitor and act on any breach.

Table B.15: Updated hypotheses under strict adherence

Modelling implication – In the tree, we no longer need “phased” strategies for either side; the relationship is binary.

B.4.2. Identifying Players and Moves

The Players

1. **Company** (C) moves first, choosing A_{comply} or A_{violate} .
2. **Investor** (I) does *not* choose among enforcement levels ex post; the contract itself hard-codes the sanction.
3. If A_{violate} is chosen, the contract triggers an **Event of Default**, ending the game.

Because the contract stipulates strict monitoring, we assume **perfect observability** of C ’s compliance. Thus the Investor has a **singleton information set**—no uncertainty once C acts.

Player Strategies

Company

- A_{comply} : implement LW immediately.
- A_{violate} : decline to implement LW.

Investor

- Because the contract embeds automatic termination, I has no meaningful ex-post move. Strategically, his “move” is the *ex-ante* adoption of the strict clause, which we take as given in this tree.

B.4.3. Developing the Game Tree

Information Structure

- **Perfect information:** Monitoring is embedded in the contract; I verifies compliance.
- **No hidden action:** eliminates the moral-hazard branch that existed before.
- **No Nature move:** Capability uncertainty is irrelevant; C must comply or exit.

B.4.4. Initial Game Tree

Payoffs

Table B.16: Tag definitions and their contextual conditions

Tag	Description	Occurs or Is Possible...
[Social Impact]	Social impact generated by the LW adoption	...when a LW is implemented in full by the Company
[Operational Costs]	Costs incurred to implement LW measures	...whenever the Company implements the LW into their practices
[Event of default]	End of contract	...whenever LW is not implemented and therefore the investment is withdrawn
[Flexibility]	Flexible implementation or policy	...whenever an actor has the possibility to take autonomous control
[Reputational Damage]	Reputational harm arising from unmet promises	...when an actor behaves differently from what is communicated externally

Table B.17: Outcomes and Associated Tags

Outcome #	Tags
1	[Social Impact], [Operational Costs]
2	[Reputational Damage], [Event of default]
3	[Social Impact], [Operational Costs]
4	[Social Impact], [Flexibility], [Operational Costs]
5	[Reputational Damage], [Event of default]
6	[Reputational Damage], [Event of default]

Table B.18: Preference Ordering of Tags per Actor (from least to most preferred)

Actor	Preference Ordering of Tags
Investor	[Event of default] < [Operational Costs] < [Reputational Damage] < [Flexibility] < [Social Impact]
Company	[Event of default] < [Operational Costs] < [Reputational Damage] < [Social Impact] < [Flexibility]

Table B.19: Preferences of Investor and Company per Impact Tag

Tag	Investor Preference	Company Preference
Social Impact	+2	+1
Flexibility	+1	+2
Reputational Damage	-1	-1
Operational Costs	-2	-2
Event of default	-3	-3

Table B.20: Detailed Payoff per Outcome for Investor and Company

Outcome	Calc	Inv. Payoff	Calc	Comp. Payoff
1	$(+2) + (-2)$	0	$(+1) + (-2)$	-1
2	$(-1) + (-3)$	-4	$(-1) + (-3)$	-4
3	$(+2) + (-2)$	0	$(+1) + (-2)$	-1
4	$(+2) + (+1) + (-2)$	+1	$(+1) + (+2) + (-2)$	+1
5	$(-1) + (-3)$	-4	$(-1) + (-3)$	-4
6	$(-1) + (-3)$	-4	$(-1) + (-3)$	-4

B.4.5. Perturbation Analysis of the Stric Adherence Tree

Below we check that, even if each terminal payoff (u_I, u_C) is shifted by $\epsilon, \delta \in \{-0.2, +0.2\}$, the unique SPNE remains: **Investor picks Phased enforcement (PE); Company picks Phased adoption (PA)**. We proceed in four concise steps.

Game Structure

1. **Investor** chooses among:

- Immediate enforcement (IE)
- Phased enforcement (PE)
- Withdraw (W)

2. **Company** (observed) then chooses:

- Under IE: Immediate (IA) or No adoption (NA)
- Under PE: Immediate (IA), Phased (PA), or No adoption (NA)
- Under W: no choice

Terminal Payoffs

Table B.21: Payoffs in the Final Investor–Company Game Tree

Investor Move	Company Move	Payoff (u_I, u_C)
IE	IA	$(0, -1)$
IE	NA	$(-4, -4)$
PE	IA	$(0, -1)$
PE	PA	$(+1, +1)$
PE	NA	$(-4, -4)$
W	–	$(-4, -4)$

Company's Best Replies (Unperturbed)

- If Investor = IE: compare $\{-1, -4\} \rightarrow$ choose **IA**.
- If Investor = PE: compare $\{-1, +1, -4\} \rightarrow$ choose **PA**.
- If Investor = W: no choice, payoff = $(-4, -4)$.

Investor's Payoffs (Given Company's Best Reply)

- If Investor = IE \rightarrow Company chooses IA \rightarrow Investor = 0.
- If Investor = PE \rightarrow Company chooses PA \rightarrow Investor = +1.
- If Investor = W \rightarrow payoff = -4.

Since $+1$ (PE) $>$ 0 (IE) $>$ -4 (W), the unique SPNE is:

Investor chooses PE; Company chooses PA.

Equilibrium payoff = $(+1, +1)$.

Perturbation Rule

We replace each terminal payoff (u_I, u_C) by $(u_I + \epsilon, u_C + \delta)$ with $\epsilon, \delta \in \{-0.2, +0.2\}$. We check all four combinations:

1. $(\epsilon, \delta) = (+0.2, -0.2)$
2. $(\epsilon, \delta) = (-0.2, -0.2)$
3. $(\epsilon, \delta) = (-0.2, +0.2)$
4. $(\epsilon, \delta) = (+0.2, +0.2)$

For each, we:

- Add ϵ to every Investor payoff and δ to every Company payoff.
- Re-derive Company's best replies under IE and PE.
- Re-compute Investor's payoffs for IE, PE, and W.
- Verify whether "PE \rightarrow PA" still prevails.

All Four Perturbation Cases

Table B.22: Summary of Perturbation Analysis Results

(ϵ, δ)	Company Best Reply at PE	Investor's Payoffs	SPNE Path	Equilibrium Payoff
$(+0.2, -0.2)$	PA (gives +0.8 to Co.)	IE: 0.2, PE: 1.2, W: -3.8	(PE, PA)	$(+1.2, +0.8)$
$(-0.2, -0.2)$	PA (gives +0.8 to Co.)	IE: -0.2, PE: +0.8, W: -4.2	(PE, PA)	$(+0.8, +0.8)$
$(-0.2, +0.2)$	PA (gives +1.2 to Co.)	IE: -0.2, PE: +0.8, W: -4.2	(PE, PA)	$(+0.8, +1.2)$
$(+0.2, +0.2)$	PA (gives +1.2 to Co.)	IE: +0.2, PE: +1.2, W: -3.8	(PE, PA)	$(+1.2, +1.2)$

Conclusion

In **all four** perturbation combinations (ϵ, δ) , the unique SPNE remains:

Investor chooses Phased enforcement (PE); Company chooses Phased adoption (PA).

Minor uncertainties (up to ± 0.2 utility points) do **not** change the equilibrium path. Qualitatively, the "PE \rightarrow PA" recommendation is robust; only the numerical payoffs shift slightly.

B.5. Methodological Approach Informal Dialogue

Same methodology as in Appendix B.2

B.5.1. Preparation

Same steps as in Appendix B.2

B.5.2. Identifying Players and Moves

Same players and moves as in Appendix B.2

The Players

Same players as in Appendix B.2

Player Strategies

Same strategies as in Appendix B.2

B.5.3. Developing the Game Tree

Same steps as in Appendix B.2

Information Structure

Same information structure as in Appendix B.2

Sequence of Play

Same sequence of play as in Appendix B.2

B.5.4. Initial Game Tree

Same initial game tree structure as in Appendix B.2

Payoffs

Table B.23: Outcomes and Associated Tags

Outcome #	Tags
1	[Social Impact], [Operational Costs]
2	[Social Impact], [Operational Costs]
3	[Reputational Damage]
4	[Social Impact], [Operational Costs]
5	[Social Impact], [Flexibility], [Operational Costs]
6	[Reputational Damage], [Flexibility]
7	[Social Impact], [Operational Costs], [Flexibility]
8	[Social Impact], [Operational Costs], [Flexibility]
9	[Reputational Damage], [Flexibility]
10	[Reputational Damage], [Conflicts]
11	[Reputational Damage]
12	[Reputational Damage]
13	[Reputational Damage]
14	[Reputational Damage]
15	[Reputational Damage], [Flexibility]
16	[Reputational Damage], [Flexibility]
17	[Reputational Damage], [Flexibility]
18	[Reputational Damage], [Flexibility]
19	[Reputational Damage], [Flexibility]
20	[Reputational Damage], [Conflicts]

Table B.24: Preferences of Investor and Company per Impact Tag

Tag	Investor Preference	Company Preference
Social Impact	+2	+1
Flexibility	+1	+2
Reputational Damage	-1	-1
Operational Costs	-2	-3
Conflicts	-3	-2

Table B.25: Payoff Calculations for All Outcomes

Outcome	Calc (Inv.)	Inv. Payoff	Calc (Comp.)	Comp. Payoff
1	$+2 + (-2)$	0	$+1 + (-3)$	-2
2	$+2 + (-2)$	0	$+1 + (-3)$	-2
3	-1	-1	-1	-1
4	$+2 + (-2)$	0	$+1 + (-3)$	-2
5	$+2 + (+1) + (-2)$	+1	$+1 + (+2) + (-3)$	0
6	$-1 + (+1)$	0	$-1 + (+2)$	+1
7	$+2 + (-2) + (+1)$	+1	$+1 + (-3) + (+2)$	0
8	$+2 + (-2) + (+1)$	+1	$+1 + (-3) + (+2)$	0
9	$-1 + (+1)$	0	$-1 + (+2)$	+1
10	$-1 + (-3)$	-4	$-1 + (-2)$	-3
11	-1	-1	-1	-1
12	$-1 + (-3)$	-4	$-1 + (-2)$	-3
13	$-1 + (-3)$	-4	$-1 + (-2)$	-3
14	-1	-1	-1	-1
15	$-1 + (+1)$	0	$-1 + (+2)$	+1
16	$-1 + (+1)$	0	$-1 + (+2)$	+1
17	$-1 + (+1)$	0	$-1 + (+2)$	+1
18	$-1 + (+1)$	0	$-1 + (+2)$	+1
19	$-1 + (+1)$	0	$-1 + (+2)$	+1
20	$-1 + (-3)$	-4	$-1 + (-2)$	-3

B.5.5. Perturbation Analysis of the "Informal Dialogue" Game Tree

Below, we test whether the Subgame-Perfect Nash Equilibrium (SPNE) in the "Informal Dialogue" model remains unchanged when a small perturbation shifts each terminal payoff. We proceed as follows:

1. Original Game and Baseline Equilibrium

Table B.26: Game structure

Move	Player	Options
1	Company	type $t \in \{\mathbf{N}, \mathbf{O}\}$
2	Investor	$e \in \{\mathbf{IE}, \mathbf{PE}, \mathbf{NE}, \mathbf{W}\}$
3	Company	$a \in \{\mathbf{IA}, \mathbf{PA}, \mathbf{NA}\}$

Table B.27: Company's last-move best responses (unperturbed)

Branch	Investor action	IA	PA	NA	Company chooses \rightarrow
N	IE	-2	-2	-1	NA
	PE	-2	0	+1	NA
	NE	0	0	+1	NA
O	IE	-1	-1	-1	(any, pick IA)
	PE	-1	+1	+1	PA or NA (tie)
	NE	+1	+1	+1	(any, pick IA)
Any	W	-	-	-	fixed (-3)

1.1 Company Last-Move Best Responses (Unperturbed)

1.2 Reduced 2×4 Pay-off Matrix (Investor, Company)

	IE	PE	NE	W
N chosen	(-1, -1)	(0, +1)	(0, +1)	(-4, -3)
O chosen	(-1, -1)	(0, +1)	(0, +1)	(-4, -3)

1.3 Baseline SPNE Investor: IE and W dominated; PE and NE tie at 0.
Company: indifferent between N and O.

$$(t = \mathbf{N}, e = \mathbf{PE}, a = \mathbf{NA})$$

2. Introducing Uniform Pay-off Perturbations

Add constants $\epsilon = +0.2$ (Investor), $\delta = -0.2$ (Company):

$$(u_I, u_C) \mapsto (u_I + \epsilon, u_C - \delta)$$

3. Recomputed Pay-offs (after Company best replies)

Table B.28: Perturbed payoffs

Branch	IE	PE	NE	W
N	(-0.8, -1.2)	(0.2, +0.8)	(0.2, +0.8)	(-3.8, -3.2)
O	(-0.8, -1.2)	(0.2, +0.8)	(0.2, +0.8)	(-3.8, -3.2)

4. Company's Best Responses (Perturbed)

Same as before:

- IE \rightarrow NA (N), IA (O)
- PE \rightarrow NA or PA (tie)
- NE \rightarrow NA or IA (tie)

5. Investor's Pay-off Comparison (Perturbed)

Action	Expected pay-off
IE	-0.8
PE	0.2
NE	0.2
W	-3.8

IE and W remain dominated; PE and NE tie.

6. Company's First-Move Decision (Perturbed)

Company payoff = +0.8 regardless of type under PE/NE *indifference persists*.

7. Other Corner Perturbations $(\epsilon, \delta) \in \{\pm 0.2\}^2$

Ordinal ranking preserved:

- Company's best responses unchanged
- Investor's ranking: $PE \simeq NE > IE > W$

Therefore equilibrium set remains the same.

8. Interpretation

Robustness conclusion. For uniform perturbations of up to ± 0.2 , the Investor avoids harsh enforcement, prefers PE or NE, and the Company does not adopt immediately. Type choice is irrelevant. Small refinements would uniquely select PE.

C

Appendix C

C.1. Supporting Quotes from the Investor on Investor Engagement Themes

Quote	Interview	Theme
“We have standard annual monitoring, but for the Company, specifically regarding the living wage, we also conduct advisory meetings on a biannual basis. During these meetings, we review the development of their living wage policy and create a roadmap outlining how and when they plan to achieve the target. This not only allows us to monitor their progress but also helps us understand the challenges they face, which is crucial for the annual reporting cycle.”	Impact officer	Informal dialogue
“We review how they are handling the ESAP items and receive periodic updates [...]. Last year, we reviewed that policy together in a face-to-face meeting.”	ESG officer	Informal dialogue
“It was not just a discussion point or an optional item—it was a formal requirement that the client must achieve. I clearly defined what was meant by a living wage and what the client needed to do, and I made it a hard requirement with consequences for non-compliance.”	Impact officer	Formal requirements
“Legally, yes. Our loan agreements typically state that failure to comply with environmental, social, and governance criteria can trigger an event of default. While clients generally dislike this clause, as it puts us in a position of discretion, it legally allows us to require that issues be remedied within a set period (usually 30 days), or the loan may be called in. In practice, however, we tend to work with clients to find a mutually acceptable resolution rather than immediately pursuing legal remedies, as that could lead to extended disputes and damaged relationships.”	Investment manager	Formal requirements
“Legally, the default clause is there; using it is often counter-productive.”	ESG officer	Formal requirements
“However, we are not allowed to offer lower rates as an incentive because that would be anti-competitive. Extra reimbursement is not viable because the amounts are fixed.”	ESG officer	Formal requirements
“I did explore the idea of linking a concessionary interest rate to the achievement of the living wage. However, we determined that we couldn’t do this because such conditions must be incorporated at the product level rather than on a deal-by-deal basis.”	Impact officer	Formal requirements
“No, that was not discussed here. In my previous experiences at [...], there was sometimes a possibility of a minor interest rate reduction when certain criteria in the ESAP were met. However, at the Investor, such discussions have never been introduced as a formal product feature.”	Investment manager	Formal requirements

Table C.1: Investor reflections on informal dialogue and formal requirements around living wage implementation

C.2. Supporting Quotes from the Investor on Stakeholder Salience Factors

Quote	Interview	Theme
“Living wage is a key component of our impact framework. It is one of the three key impact pillars of our Company. In our case, it falls under SDG 8, which speaks to economic development and job creation by emphasising the creation of decent jobs. In our approach, living wage acts almost as a proxy for job decency.”	Impact officer	Legitimacy
“I firmly believe in fair remuneration. If wages are in line with market conditions and still ensure a decent standard of living, that is important.”	Investment manager	Legitimacy
“But still, ideally, we want a flagship success story—a client who not only implements it but is willing to share how they did it. That’s the kind of example others can learn from.”	ESG officer	Legitimacy
“Our bottom line is that the living wage must be met by the end of the investment period—although, of course, earlier achievement is preferable since it generates a positive impact sooner.”	Impact officer	Urgency
“The understanding is that the earlier they implement it, the better.”	Impact officer	Urgency
“They are not enthusiastic about being dictated to; they prefer a collaborative approach.”	Investment manager	Power
“I expected a positive reception since there was no counterproposal to suggest otherwise [...]. This created a challenging situation for everyone involved, including the Company. We normally do not impose such conditions on our own terms and prefer that the client fully understands what they are signing.”	Impact officer	Power
“In practice, we assumed that since it was embedded in the Loan Agreement and the ESAP document, it had to be carried out as such. This directive approach worked with some clients, but not with the Company.”	ESG officer	Power
“The issue is whether we want to position ourselves in a certain way when discussing and imposing agreed-upon living wage conditions with clients. This is a constantly evolving situation and never set in stone.”	ESG officer	Power

Table C.2: Investor reflections on legitimacy, power, and urgency in living wage engagement

C.3. Company Reflections on Legitimacy, Power, and Urgency

Quote	Interview	Theme
“The Investor wasn’t the only option, but for us it was very attractive given our previous experience with [...]. One advantage is that part of the process can be conducted in [language], which, with the credibility of an investor, adds legitimacy since we all follow the same laws. In [country], it might have been the only option, but ultimately, there are alternatives. In [invested country], we could even have gone our own way, though that path carries more uncertainty.”	Company	Legitimacy
“Internally, feelings were mixed. Some colleagues thought, ‘What a hassle—we’ll address it eventually,’ while others noted that in our lower-paid group, the base wage is about 10% above the minimum, plus extras through Fair-trade or other initiatives, such as periodic bonuses, gifts, food discounts, or free transport. For these extras, much depends on how they’re calculated.”	Company	Legitimacy
“We believe we pay good wages — after all, we’re Fairtrade certified and pay well above the minimum —”	Company	Legitimacy
“Another factor is the IFC —the International Finance Corporation of the World Bank— which, since this year, represents a larger investment than the Investor. They don’t focus on the living wage at all. In fact, we agreed with the Investor to follow the IFC’s ESG reporting procedures, meaning the Living Wage might sometimes take a back seat.”	Company	Legitimacy
“I often wonder what might have happened if we had fully understood the implications of the Living Wage from the start. We do want to pay good wages, but it isn’t the central pillar of our policy.”	Company	Legitimacy
“There was no sense of urgency. Most of the pressure occurred at the beginning—three or four years ago—when the deal was still pending finalisation and the lawyer was reviewing it.”	Company	Urgency
“In fact, we agreed with the Investor to follow the [...] ESG reporting procedures, meaning the living wage might sometimes take a back seat.”	Company	Urgency
“I also note that within the Investor, the ESG team places more importance on the matter than the Finance department.”	Company	Urgency
“The Investor wasn’t the only option, but for us it was very attractive given our previous experience with [...].”	Company	Power
“Legally, the Investor is not obliged to enforce the living wage clause, even if it appears in the contract—there’s always sufficient ambiguity about its precise meaning. For instance, even the law book offers no definition of ‘a living wage.’”	Company	Power
“I did feel there was room for flexibility.”	Company	Power
“In hindsight, I would have been interested in simply removing the Living Wage from the contract to avoid being locked into it, or seeing if a firm refusal from the Investor would have led to a different outcome.”	Company	Power

Table C.3: Company reflections on legitimacy, power, and urgency in living wage engagement

C.4. Full Thematic Comparison of Living Wage Perspectives

Theme	Investor Perspective	Company Perspective
Definition and scope	"I cannot recall if there was ever a session in which it was clearly explained what exactly falls under the Living Wage concept."	"Difficult to say, as the definition itself hasn't been conclusively determined." "How do you calculate that living wage? What do you include and what don't you include? And that's where it starts getting more complex."
Calculation approach	"The living wage threshold is defined by figures provided by our data provider, the Wage Indicator Foundation, and the Company is aware of these figures."	"We rely on both our own figures and those provided by the Investor. This raises the immediate question of how to calculate a Living Wage—what should be included or excluded?"
Interpretation mismatch	"The Living Wage concept, as we have defined it, does not fully align with the policy as applied by the client." "They include elements such as meal allowances and other CSR-related aspects that do not correspond to our definition of a wage. Thus, it appears as though they are paying a living wage, but according to our definition, they are not."	"While it's common knowledge that we pay above the minimum wage, it isn't entirely clear how those extras factor into their calculations." "Some argue that employees should already net a Living Wage and that bonuses are merely extra. Viewed that way, the policy doesn't quite add up—because then a tomato picker could end up earning more than a police officer or teacher"
Validity of data	"Another point concerns our data provider. We rely on their figures to define the living wage threshold." "The company sometimes argues that our proposal is unrealistically high, which forces us to take such opinions with a grain of salt. Still, it would be beneficial to secure better reliability from our data source."	"Another complication involves the data from Anker. When I reviewed the figures with my colleagues, they questioned the numbers, saying things like, "This makes no sense, especially for housing costs" "He then had to explain that the calculations from Anker simply don't add up, as the Investor remarked that nothing could be done about the numbers."
Principles and fairness	"For a living wage, it is important to calculate what someone minimally needs to live a normal life—for instance, to send their children to school and to have proper health insurance."	"Some argue that employees should already net a Living Wage and that bonuses are merely extra. Viewed that way, the policy doesn't quite add up—because then a tomato picker could end up earning more than a police officer or teacher, which, although well-intentioned, creates a puzzling situation."
Treatment of secondary benefits	"Secondary benefits, such as an occasional meal or a party, do not fall under this calculation." "My stance is clear. The core idea of a living wage is to remunerate workers in cash for the services they provide. Any in-kind benefits or secondary benefits, such as free lunch or bonuses, should be supplemental and not substitute for the cash component."	"Nevertheless, we also offer valuable benefits, such as a daycare, warm lunches, team days, outings, company parties, etc. It wouldn't make sense to lose these just to meet a Living Wage threshold." "Putting secondary benefits to achieve the Living Wage might undermine the overall attractiveness of the employment package."

Table C.4: Full thematic comparison of Living Wage perspectives from Investor and Company

C.5. Full Thematic Comparison of Governance and Implementation Uncertainty

Theme	Investor Perspective	Company Perspective
Lead ownership & role clarity	"In this project, I took over the lead because I wasn't involved at the time ... a missed opportunity that I would like to note now."	"That aspect was already more or less decided, and ... Essentially, I joined the deal midway."
ESAP scope & obligations	"Yes, certainly. Both the Loan Agreement and the ESAP document set out the requirements ... yet it does not specify exactly how it should be implemented."	"The Environment Social Action Plan (ESAP) outlines the agreements we must follow once the loan is in place and the conditions attached to it."
Decision rights & approvals	"In reality, it is a decision made by both parties—it is established as a co-creation ... However, to date, no formal reporting moment has taken place."	"I did feel there was room for flexibility."
Timeline & monitoring	"We are currently in the monitoring phase ... the formal monitoring moment was agreed upon, halfway through the year."	"The current approach is simply to report what percentage of our employees receive a Living Wage. However, many uncertainties remain."
Enforcement & escalation	"Since it is not a hard requirement but rather a process covenant, you can push the limit ... I believe they have assessed that well before the next disbursement."	"Legally, the Investor is not obliged to enforce the Living Wage ... even the criminal code offers no definition of 'Living Wage.'"

Table C.5: Full thematic comparison of governance and implementation uncertainty from Investor and Company perspectives

C.6. Full Thematic Comparison of Power and Trust Dynamics

Theme	Investor Perspective	Company Perspective
Negotiation leverage & alternatives	"We, as investors, aren't necessarily a big player. But they are the ones actually on the ground and can see how things are shaping up."	"The Investor wasn't the only option, but for us it was the most logical one ... We could have gone our own way, though that path carries more uncertainty."
Flexibility vs. rigidity	"We deliberately avoided including granular annual requirements ... instead of making it a hard checklist, we left them with an incentive to work towards it in a flexible manner."	"I did feel there was room for flexibility."
Window of influence & timing	"The real room for negotiation is at the very beginning ... The window for influence closes once you start committing."	"In hindsight, I would have been interested in simply removing the Living-Wage clause and renegotiating later."
Good-faith bargaining & trust erosion	"You also negotiate in good faith, trusting that what the client says is what they'll do. They ended up putting a completely different spin on things."	"The Investor wasn't the only option ... Company frames the choice of financier as a trust test: a cheaper route existed, but staying signalled willingness to collaborate."

Table C.6: Full thematic comparison of power and trust dynamics from Investor and Company perspectives

C.7. Internal Misalignment between Investment Manager and ESG & Impact Officer

Theme	Investment Manager	ESG & Impact Officer
Topic familiarity & onboarding	"It was new to me. When we transitioned to the Investor, ... a shift in our approach to ensuring fair employment practices."	"Our position was: 'This is the policy we advocate and communicate.' We didn't present it as a rigid requirement."
Enforcement approach	"The ESAP document requires that the company pay living wages. ... As long as the client makes positive steps toward compliance, our ESG team is satisfied."	"Since it is not a hard requirement but rather a process covenant, the client can fully exploit it and push it to the limit."
Methodology & benchmarks	"Whether the living-wage methodology adopted by the Investor is the best one, I leave to the experts—other DFIs use different benchmarks."	"I think, as we all understand it now, if a living wage isn't paid, it's not interpreted here as an event of default."
Balancing relationships vs. policy purity	"I feel that our ESG team sometimes puts the bar so high that it strains the relationship. I'd prefer an advisory stance that sustains the partnership."	"According to the current agreements, failure to pay a living wage isn't an event of default, so no direct penalties can be imposed."
Strategic-priority tension	–	"The reality is that within our organisation, the financial side often gets more weight—ultimately it's about getting back our invested capital plus profit."
Operational bandwidth & workload	–	"It depends on whether front-office colleagues feel it's relevant. If they're flooded with term-sheet changes, they switch off; we risk losing traction."

Table C.7: Internal misalignment between Investment Manager and ESG & Impact Officer