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ORIGINAL PAPER

Arenas of Contestation: A Senian Social Justice Perspective on the Nature of Materiality in Impact Measurement

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Abstract
Although the importance of measuring and reporting the social and environmental impact of organisational action is increasingly well recognised by both organisations and society at large, existing approaches to impact measurement are still far from being universally accepted. In this context, the stakeholder dynamics within the nascent field of impact investing demonstrate the complexity of resolving potentially differing perspectives on key impact measurement issues such as materiality. This paper argues, from an organisational perspective, that such arenas of contestation can be conceptualised in terms of social justice. Specifically, we draw upon Sen's notions of 'arrangement and realisation' to explore the dynamics of contestation across a range of stakeholders concerning materiality judgements to suggest that such 'arrangements' may lead to suboptimal impact outcomes as 'realisations.' Our analysis of the nature of materiality contestations in impact measurement reveals the conflicts, tensions and paradoxes evident in this field of action. Empirically, we examine data drawn from 19 cases and 33 interviews. The analysis suggests three arenas of contestation around the materiality of impact measurement: the power dynamics between economically powerful investors and objectified investees; the conflicts between materiality norms and standards; and the interactions between all stakeholders with differing motivations towards radical or incremental materiality. Building upon this analysis, we then discuss how arenas of contested materiality may be mediated by drawing upon Sen's notions of transcending the individual interests of the invested parties for the greater good via processes of contextualisation and case-specificity.

Keywords Impact investing · Impact measurement · Materiality · Senian justice

Introduction

The nascent field of impact measurement (IM) aims both to account for the material non-financial value creation of organisations and to offer principles for the effective management of impact creation processes (Agrawal & Hockerts, 2019; GIIN, 2020; IMP, 2018). Whilst various accounting recommendations for impact models already exist (e.g. the Global Reporting Initiative, the Principles for Responsible Investment and the Sustainability Accounting Standards Board), the IM field has emerged as a specific response to the growing interest in impact investing globally, which now constitutes over $500 billion of assets under management (Brandstetter & Lehner, 2015; GIIN, 2019; Ormiston et al., 2015).

According to the literature the IM field is still under-institutionalised, in theory as well as practice (Höchstädter & Scheck, 2015). Competing methodologies and a lack of accounting regulations are symptoms of this (though see EU (2019) for a proposed regulated structure around ESG reporting and UNDP (2020) for a proposed set of measurement and reporting standards for the Sustainable Development Goals (SDGs)). As such, it remains unclear how effectively the impact investing market actually creates social and environmental value (Nicholls, 2009, p. 755).

Research on the practice of IM has demonstrated that it is difficult to agree on a common set of material (i.e.

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contextually relevant) metrics with which to measure and report the short-term, as well as long-term, impacts of impact investments. The contestation over materiality in IM can be seen as a product of the dynamics across the complex relationships between investors, investees and beneficiaries in the impact investing field (Lehner et al., 2019; Nicholls, 2018). This paper argues that such contestations may create systems of procedural and—as a result distributive—injustice between the relevant stakeholders over time.

From a Business Ethics perspective, we suggest that there is analytic value in new research on IM in impact investing that engages with Sen's theory of social justice (Sen, 2009) in an organisational context (Joyner & Payne, 2002; Lewis, 1985; Woiceshyn, 2011). In this paper we use this approach to provide new insights into the materiality of capital allocation that aims not only to create a financial return but also to create positive impact in terms of beneficiaries' lives, health, income and, even, the wider environment (Melé & Armengou, 2016). To this end, this paper aims to advance business ethics research by positioning effective IM within a social justice framework for the first time (Fia & Sacconi, 2018; Fortin, 2015; Sen, 1985, 2009), specifically in terms of a Senian, outcome-driven, social justice approach (Sen, 2009; Shrivastava et al., 2016). Moreover, this paper aims to extend existing normative theory concerning IM (Crane et al., 2016), which is typically based upon notions of the 'purpose' of capital and the social responsibility of organisations in our society (Brown & Forster, 2013; Mayer, 2019).

A social justice perspective also extends the current debates on the social accountability of the firm (Gilbert & Rasche, 2007; Laufer, 2003), consistent with Zadek's (1998) argument that such accountability helps 'integrate new patterns of civil accountability and governance with a business success model focussed on deepening stakeholder relationships around core non-financial as well as financial values and interests'. This paper also builds upon a range of more recent research on the contested nature of the nascent IM field (Burritt & Schaltegger, 2010; Höchstädter & Scheck, 2015; Lehner et al., 2019; Molecke & Pinkse, 2017; Nicholls, 2018; Rawhouser et al., 2019). Early insights from Lehner et al. (2019) and Nicholls (2018), for example, identified the lack of institutionalisation of the impact investing field as driving a discursive power struggle over its legitimacy between the key actors in the field, resulting in competing conceptualisations of materiality and good practice.

'Materiality' is a fundamental—and clearly delineated—financial accounting concept (Frishkoff, 1970) that signifies the relevance of information for influencing the decision-making process of key stakeholders, typically investors (Burrowes & Karayan, 2017; Green & Cheng, 2019; Messier et al., 2005). However, in IM, a variety of materiality definitions can be observed (Green & Cheng, 2019; Nicholls, 2018). Puroila and Mäkelä (2019), for example, proposed that the interpretations and implications of the concept of materiality in IM remain ambiguous and diverse. Building upon this previous research, we suggest that this ambiguity is not simply a consequence of the dynamics typical of a nascent field (Lehner et al., 2019; Nicholls, 2018), but, rather, reflects the diverse worldviews (Burrell & Morgan, 2019) of the key actors in the impact investing field.

This approach is also supported by Higgins et al. (2018), who also found patterns of discursive power and isomorphism around materiality in sustainability measurement and reporting. They noted that sustainability accounting, as a whole, is far from being an institutionalised practice and is, rather, still an issues-based field (Zietsma et al., 2017). What is more, compared to the focus on the retrospective impact 'outputs' on the environment and its stakeholders typical of sustainability accounting, in IM, combinations of cross-sectoral organisations (Cloutier & Langley, 2015) typically negotiate and construct materiality—reified in agreed methodologies and metrics—within both an anticipatory planning, and ongoing performance, management process focussed on 'outcomes ab initio'. This outcomes focus in IM also attempts to capture complex longer -term social impacts than is usual in sustainability accounting (Höchstädter & Scheck, 2015; Millar & Hall, 2013).

In summary, the nascent IM field has a number of distinctive features that are relevant for a Senian social justice analysis. First, IM processes typically engage with a variety of actors with clear differentials in power, experience and knowledge—this is particularly the case since many impact investments flow to social, rather than purely commercial, investees who, in turn, often work with highly marginalised populations of beneficiaries (Lehner et al., 2019; Nicholls & Ziegler, 2019). Second, issues of materiality remain contested as the IM field lacks regulated impact reporting structures or standards. In this context, the power dynamics across the stakeholders who are negotiating the meaning of materiality in a given investment context become highly significant (Puroila & Mäkelä, 2019; Taubken & Feld, 2018). This raises the question over who decides what constitutes 'good' impact (Nicholls, 2009). Given these issues, this paper proposes that the processes by which materiality is determined in IM are typically highly contextualised and necessarily complex across key stakeholders with different levels of power (Markman et al., 2019).

To explore these issues empirically, this paper provides a preliminary study that draws upon data from 19 cases and 33 interviews. The analysis, first, explores the contested nature of materiality and, second, considers the drivers for this contestation. Specifically, we analysed 157 documents from these cases to establish their approach to constructing materiality. After this, we discussed these preliminary findings with the interviewees in an iterative process of data triangulation. Using a Senian realisation, outcome-driven, perspective on social justice we suggest that Sen's (2009) 'functioning and capability' approach offers important insights into how materiality contestations may be framed to reveal the power dynamics across competing world views. As a novel contribution to the field, we further discuss how arenas of contested materiality can be mediated by drawing upon Sen's (2009) notions of 'transcending' the individual interests of the invested parties (Fia & Sacconi, 2018; Shrivastava et al., 2016) for the greater good via processes of open impartiality, contextualisation and case-specificity (Fortin et al., 2015). We propose that acknowledging these power dynamics may, ultimately, produce more effective IM systems capable of better optimising the impact of impact investments (Crane et al., 2016; Hahn et al., 2017; Nicholls, 2018). Following a Senian logic, this paper also demonstrates how dominant, partisan materiality judgements in IM may generate arrangements that lead to poor and unjust realisations of impact investments. This is in stark contrast to the stated intent of impact investing to create only positive social impact and social justice. As a consequence, we also suggest that developing more empowering processes for investees and beneficiaries—to allow equal influences—around determining materiality may increase the total impact of impact investing across all stakeholders (Nicholls, 2018).

The remainder of this paper is structured as follows. Next, we set out the context of impact investing, the emergence of IM, and conceptualisations of materiality. After this, we introduce the ideas of social justice framed in Senian thinking. We then set out the methodology used here with a detailed description of the sampling and the methods used and present our key findings. Finally, the paper discusses how these findings may be interpreted from a Senian social justice perspective leading to normative suggestions on how these research insights may enhance IM practice. We also acknowledge the limitations of our study and set out some lines of future research built upon our work.

The Dynamics of Measuring Impact and Materiality Considerations

Improving the effectiveness of measuring and reporting impact is recognised as being one of the key challenges in the field of impact investing (Ebrahim & Rangan, 2014; GIIN, 2020; Jackson, 2013). Impact investing can be defined as an investment approach in which capital is invested in ventures with the intention to generate positive—and measurable—social and/or environmental impact (i.e. value) alongside a financial return (Bugg-Levine & Goldstein, 2009; Cahill, 2010; Cheney et al., 2013). Thus, a central tenet of impact investing is effective measurement, reporting and management of intended, unintended, and achieved impacts (Brest & Born, 2013; Höchstädter & Scheck, 2015; Ormiston et al., 2015). However, when it comes to defining the nature of impact—and the attendant metrics and data points—research suggests that there remains significant diversity in terms of definitions and models of IM (Kroeger & Weber, 2014; Nicholls, 2018; Rawhouser et al., 2019). Despite this heterogeneity, it remains the case that measuring and reporting impact is clearly strategically important for all the actors in the impact investing field and—at the aggregate level—for society at large (Combs, 2014; Emerson, 2003; Hehenberger & Harling, 2015).

The range of actors in the field of impact investing has recently been the subject of significant research. For example, Brandstetter and Lehner (2015) noted that intermediaries and enablers (standard setters, funds, advisors, governmental institutions, NGOs) are especially important actors in the impact investing market bringing together the supply side (institutional investors, foundations, banks, funds, philanthropists) and demand side actors (social and environmental investees, charities, community development institutions). Following this, Lehner et al. (2019) further identified the dysfunctions of the impact investing market as a consequence of the differences in rhetoric and legitimisation strategies between investors and investees. It is, thus, perhaps inevitable that the perceptions of the optimal measurement and reporting conventions of IM will differ significantly between investors and investees in a field that is yet to be fully institutionalised (Cooper et al., 2016; Kroeger & Weber, 2014; Wood et al., 2013).

Despite important research on the field to date, IM still remains under-conceptualised (Molecke & Pinkse, 2017). For example, little agreement exists over the appropriate temporal dimensions (when and for how long impact should be measured and reported), the scope of analysis (who and what should be included or excluded), the role of externalities (positive and negative), the relevance of impact attribution, causality and attrition of social and environmental impact (how much can be claimed by the investment), and the inherent downside risks on each of these issues (Ebrahim et al., 2014; Molecke & Pinkse, 2017; Nicholls, 2009).

To date, various approaches to optimising IM have been proposed in theory as well as in practice (Rawhouser et al., 2019). These can be categorised in terms of: micro- or macro-levels of analysis (Nicholls, 2009); their specific target audience; the use of quantitative or qualitative data (Kroeger & Weber, 2017); and the level of generalisation (industry-wide or context-specific) (Costa & Pesci, 2016). In addition, it has also been suggested that IM needs to measure and report on the whole range of the impact value chain (capturing the so-called Theory of Change model), which comprises inputs, activities, outputs, outcomes and finally, long-term impact (Clark et al., 2004; Godeke & Pomares, 2009; Hornsby, 2012). It is also the case that the term 'impact' itself is used differently in various research contexts. Thus, while in sustainability accounting, impact can also be seen as negative influence, for example, on the environment, in impact investing, impact is typically seen as positive 'social value creation' (Höchstädter & Scheck, 2015).

Nevertheless, as noted above, in contrast to financial accounting, there are currently no regulatory structures in place for IM and the existing frameworks typically conform to an investor worldview rather than focus on more participatory measurement and reporting systems that engage a wide range of stakeholders including frontline beneficiaries (Molecke & Pinkse, 2017; Nicholls, 2018; Rawhouser et al., 2019). For example, Lisi (2018) considered IM in terms of three fundamental drivers of corporate social strategy: business motivations, perceived stakeholder pressures, and the social commitment of management. From this perspective, IM combines the positivist metrics and the cognitive preferences of financial accounting despite a focus on social and environmental goals.

More recent research has suggested, first, that IM is typified by a specific set of assumptions on the rationality and capability of the investees and, second, that different actors have differing expectations of impact with respect to the existing institutional status-quo in society (Lehner et al., 2019). Thus, while many impact investors (such as banks, funds or institutional investors) do not focus on the materiality of IM in terms of disruptive changes in society, impact investees, as 'changemakers', may have a more radical view (Antadze & Westley, 2012; Drayton, 2006; Zahra et al., 2009).

In summary, the complex and competing IM perspectives on materiality and their underlying worldviews remain under-researched. This is, perhaps, surprising given that materiality represents a key factor in terms of understanding the justification, consolidation and standardisation of differing models of IM going forward (Akehurst et al., 2011; Bates & Jenkins, 2007; Jennings et al., 2005). Following Agrawal and Hockerts (2019), this paper suggests that understanding the power and social justice dynamics of the contested logics and legitimacies typical of under-institutionalised arenas provides a useful lens with which to explore the evolution of IM.

As mentioned above, this arena of contestation is particularly reified in debates about materiality, specifically: what type of impact 'matters', what is good or bad, and who decides. Materiality is of central significance to all financial accounting practices and can be seen as a fundamental concept in this sphere (Burrowes & Karayan, 2017; Green & Cheng, 2019). Broadly speaking, materiality refers to the relevance of information concerning the decision-making of a specific target audience—usually investors—for a specific investment (Messier et al., 2005). Materiality in financial accounting and audit holds that all this information needs to be measured and reported in the annual financial statements as a measure of a firm's performance. Financial metrics and data are said to be of material relevance for investors and are regulated as such (Frishkoff, 1970). Sometimes non-financial data are also reported for other stakeholders as material but this is voluntary (Green & Cheng, 2019). The International Accounting Standards Board (IASB) defines materiality as:

> "Information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general-purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity" (Tysiac, 2018).

To date, a number of overlapping, yet distinct materiality definitions exist in the sphere of sustainability accounting, most from the perspective of a single organisation and its key stakeholders (Baumüller & Schaffhauser-Linzatti, 2018; Green & Cheng, 2019; Taubken & Feld, 2018). The Sustainability Accounting Standards Board (SASB) echoes the above definition of the IASB and defines materiality as:

> "Information that could be viewed by the reasonable investor as having significantly altered the total mix of information made available" (SASB, 2014).

While the SASB's definition of materiality focuses on the investors as the target audience, the focus of the Global Reporting Initiative's (GRI) definition is on all stakeholders:

> Information that could substantively influence the assessments and decisions of stakeholders (GRI, 2016).

The International Integrated Reporting Council (IIRC) expands the boundaries of materiality and brings in notions of value creation beyond the purely financial. Here materiality is:

> Information that could substantively affect an organisation's ability to create value (IIRC, 2013).

Despite these definitions, the IM field currently lacks an agreed definition of *impact* materiality. Research has suggested that the defining features of impact materiality should include a recognition of the uncertainty and partiality of impact data and the relevance of multiple stakeholder perceptions in terms of addressing this (Nicholls, 2018). Given the current lack of consensus on impact materiality, we argue that a social justice perspective might offer a different and promising approach to discuss the nature of materiality in IM from a normative perspective. Such an approach suggests that effective IM needs to enact materiality systems that are attentive both to the complexity and contextuality of social and environmental data and that acknowledge the diversity of stakeholders for whom impact data is relevant (Edgley et al., 2015; Lai et al., 2017; Meyers, 2019). However, in practice—as our data analysis below suggests—this multi-dimensionality of perspective creates an arena of contestation over what is material in a specific impact investment (Puroila & Mäkelä, 2019). Moreover, because the impact metrics are subject to interpretation according to idiosyncratic worldviews and a range of discourses of performance (Nicholls, 2018), the institutional-power dynamics between the key stakeholders may well create conflicts, tensions and paradoxes over the dominant materiality logics and models in the IM field. In turn this may lead to procedural injustice as we discuss next.

A Senian Social Justice Perspective

Sen's work, as whole, provides a distinctive economic perspective on social issues (Batterbury & Fernando, 2004). In addition to his important earlier work on the economic causes of famine, Sen's (2009) research within development economics has also had considerable influence—for example in the formulation of the United Nations Sustainable Development Goals. Sen was awarded the Nobel price for economics in 1998 for his work on determining the most important and fundamental resources in a community—and how these should be divided. A fundamental focus of his research is how individuals' values can be considered in a collective decision-making and how welfare and poverty can be aptly measured—a timely fit to the pressing questions in this article.

In this paper, we suggest that the arenas of contested materiality in IM can be conceptualised in terms of Sen's (2009) notions of transcending the individual interests of the invested parties (Fia & Sacconi, 2018; Shrivastava et al., 2016) for the greater good via processes of contextualisation and case-specificity (Fortin et al., 2015). Specifically, bringing Sen's (2009) conception of social justice into an analysis of the organisational setting of IM (Shrivastava et al., 2016), provides some useful new insights. This is because this theory synthesises the dimensions of distributive and procedural justice (Celestine et al., 2018; Colquitt, 2001) into a notion of a comprehensive justice that focuses on realisations, as lived experiences, and actual outcomes. Sen (1999, p. 13) believed that individuals tackling social problems use 'evaluative systems', which are rooted in contrasting social justice theories representing a 'plurality of unbiased principles' that may have 'have quite distinct manifestations.' In his book 'The Idea of Justice' (2009), Sen argued that traditional thinking in political philosophy, which aims to identify a set of 'just' principles that can then be used to design 'perfectly just' institutions for governing society, discloses very little about how we can actually identify and subsequently reduce injustices in the existing institutions.

Justice, in the traditional Rawlsian tradition, is usually framed either in terms of distributive (i.e. fair outcomes) or procedural justice (i.e. fair allocation procedures). The latter has also been characterised as 'interactional' justice (Greenberg, 1990; Wang et al., 2017) focussed on interpersonal and informational aspects. Sen (2009) rejected Rawls (1985) idea of 'impartiality' between the actors (meaning the absence of vested interests in those involved in setting up the principles). Instead, Sen (2009) proposed that it would be a delusion to think that only one perfect set of principles could define universal justice since competing rationales of justice may have equally compelling claims of being impartial. As an alternative, Sen (2009) proposed a focus on realised outcomes that recognises the potential injustices from a process perspective, rather than striving for an agreement on a unitary notion of justice 'ab initio'. That is not to say that in this view a workable, just, solution cannot be achieved. On the contrary, Sen (2009) argues that a rational society can be expected to reach just solutions through reasoning, transparency and accountability, with the deliberate inclusion of multiple arguments from multiple perspectives in what he calls 'open impartiality'. Senian thinking provides an alternative to Rawls 'veil of ignorance' by including the voices of outsiders as 'impartial spectators' who make judgement from a neutral position of 'open impartiality' (Sen, 2009).

Building on this theory of reasoning (in the sense of a meaningful comparison of alternatives of materiality considerations) and following Shrivastava et al. (2016), this paper suggests that Sen's (2009) concept of 'functioning', as a state in which people are free to be or do whatever it is they value (Sen, 1985) may be particularly relevant in exploring the optimal judgement processes on materiality in IM leading. Functionings are closely linked to Sen's central notion of the individual capabilities of a person (for example, of the beneficiaries of impact investing projects) that are defined as a set of options from which a person can choose in terms of their own life chances (Sen, 1985, 1999). Following Sen (2009), as Shrivastava et al., (2016, p. 103) put it: "The freedom to choose the kind of lives we may wish to live—irrespective of the choice we actually end up making—is critical to our sense of well-being, which is in itself a functioning." This approach creates effective transparency to allow relevant stakeholders to make a meaningful comparison and ranking of the competing materiality alternatives based on the capabilities and functionings for all involved stakeholders.

Sen (2009) also emphasised the importance of free will in making life choices based on individual 'functionings' as a pre-requisite for accountability and set out four contingencies that may impede an individual's functionings and ability to flourish in terms of: personal heterogeneities; diversities in the physical environment; variations in social climate; and differences in relational perspectives. This framing of accountability supports the analytic approach of our research on materiality in IM since it examines the competing worldviews, contexts and power-differences across the key stakeholders.

In summary, by bringing in a Senian social justice perspective for the first time in this research field, this paper provides new insights into the processes of contestation within IM, particularly in terms of framing materiality. Next we move on to our methodology and empirical contributions.

Methodology

Sampling and Data Collection

The research design followed in this paper used a two-step comparative case-study approach with parallel and subsequent interviews for triangulation and a thematic coding for interpretation (Denzin & Lincoln, 2011). With this abductive research design we do not want to 'generalise' findings in a statistical sense but promote 'analytical generalisation' (Parker & Northcott, 2016; Yin, 2018). However, an abductive strategy fits well here as the maturity of the IM literature does not allow for purely deductive approaches (Edmondson & McManus, 2007). In an abductive approach, research starts with looking at surprising facts, puzzles or paradoxes and the research process itself is then devoted to finding an explanation (Thagard & Shelley, 1997). Following Tsang (2014), we look to explain relationships and build categories from cases to inform future research and derive normative suggestions (Crane et al., 2016).

First, we sampled a total of 19 organisations representing impact investors, investees, beneficiaries and intermediaries were purposefully sampled (Morse, 2007). This provided a baseline snapshot of the dynamics of the IM field. The sample organisations were selected according to their representation in Forbes Magazine—from 2016 to 2018—as 'impact investing' (www.forbes.com). They were ranked by the number of explicit references to impact measurement and reporting in the texts. Forbes Magazine was chosen as a focal publication in terms of its coverage of the global impact investing field. In summary, the case selection was based upon the purposefully informed criteria of salience (via the ranking) and being exemplary (impact focussed business models) (Riff et al., 2019) for IM.

The resulting sample covered a variety of impact investing organisations, including banks, venture philanthropists, investment funds, Non-Governmental Organisations and (social) investees. The sample investors were predominantly from the US and Europe, since these are the most developed impact investing markets currently, but the investment projects of these investors were distributed globally. Based on these 19 cases, we collected 157 documents in the form of reports, investment agreements, publicly available interviews and brochures on approaches to IM. This data was augmented by email-based communications with some founders and CEOs to clarify our assumptions. Table 1 provides an overview of the cases with web-links, the numbers of relevant documents on IM from each and the number of meaningful units for analysis (meaning topic relevant complete statements) from them (Braun & Clarke, 2006).

As a second step, for triangulation and further thematic development, we invited experts on impact investing from industry and relevant scholars in a purposeful sampling process to discuss IM and comment on our initial case analysis in terms of IM, generally, and materiality, specifically. In total, we conducted 33 semi-structured interviews with 25 respondents over the 3 years (2017 to 2019) some in-person and some via Skype. Two interviews were sometimes conducted with one interviewee to gain additional insights on the themes that emerged while working with the case data. Each interview lasted between 45 min and 2 h and was recorded and then transcribed. Table 2 provides an overview of the interviewees and their organisations.

Table 1 Case organisations

Acumen Fund (11 docs/61 units) https://acumen.org	Triple Jump (9 docs/32 units) https://triplejump.eu	Triodos Bank (8 docs/35 units) https://www.triodos.com
Bill and Melinda Gates Foundation (10 docs/63 units) https://www.gatesfoundation.org	BNP Paribas (9 docs/24 units) https://www.wealthmanagement.bnpparibas/en.html	Big Society Capital (9 docs/30 units) https://www.bigsocietycapital.com
Bridges Fund Management (7 docs/37 units) https://www.bridgesfundmanagement.com	JP Morgan (8 docs/23 units) https://www.jpmorganchase.com/	Global Impact Investing Network (6 docs/20 units)https://thegiin.org
Rockefeller foundation (11 docs/55 units) https://www.rockefellerfoundation.org	Sonen Capital (10 docs/42 units) https://www.sonencapital.com	Social Finance (5 docs/29 units) https://www.socialfinance.org.uk
Uncharted (8 docs/28 units) https://uncharted.org	Babington Group (5 docs/28 units) https://babington.co.uk	Toniic (12 docs/35 units) https://www.toniic.com
Capital Good Fund (7 docs/43 units) https://capitalgoodfund.org	Indian School Finance (6 docs/22 units) https://isfc.in	Peterborough Prison Bond (9 docs/38 units) https://www.socialfinance.org.uk/what-we-do/social-impact-bonds
Jibu (7 docs/26 units) https://jibuco.com		

Table 2 Interviewees in the purposeful sample

Position	Organisation	Year	Interviews
Deputy chief investment officer	CDC Group, previously Omidar	2018	2
CEO	Impact management project	2019	1
Director of data science	S&P global market intelligence	2018/2019	2
Founder	Manarine LLC	2017/2019	2
Chairman and CEO	Impact fund, Said business school, Oxford University, American Capital	2017/2018	2
Chief responsible investment officer	PRI	2019	1
Consultant	Impact investing measurement	2018	2
Associate	Goldman sachs	2019	1
Consultant	Strategic advisor to impact investors	2017/2018	2
Managing partner	Bridge point capital	2019	1
Director and chairman	Peoples bancopr	2018	1
Advisory council member	World CSR	2018	1
Relationship manager	Santander UK	2017/2018	2
Founder	Serial social entrepreneur	2018	1
Director of sustainability	Nuveen	2019	1
CEO	Carbon tracker initiative	2017	1
Senior manager	McKinsey	2018	1
Head IRIS intermediary working group	IRIS/GIIN	2019	1
Project lead impact investing	OECD	2018	1
Deputy director	EVPA	2018	1
Director	Ashoka Europe, Dafne Donors and Foundations Network	2017/2019	2
Head	South Africa Task force for Impact Investing	2018	1
Associate director	Big Society Capital UK	2017	1
Founder and CEO	Village Invest, former World Bank	2018	1
Partner	Bridges Ventures	2018	1

Data Evaluation

Following Puroila and Mäkelä (2019), our first step in the evaluation of the data was based on a close reading of the documents to conduct a qualitative content analysis (Denzin & Lincoln, 2011), in which the materiality considerations were analysed through several rounds of reading. Following our research focus described above, we specifically looked for data on materiality practices and their relevance for investors, the role of investees and stakeholders as meaningful participants in negotiating materiality, and potential areas of contestation. Based on the 19 cases and interviews, a total of 671 meaningful units of analysis were extracted for further analysis from the 157 documents and 33 interview transcriptions using ATLAS.TI. software.

In terms of wider epistemology, we followed Braun and Clarke's (2006) holistic approach to thematic analysis. Seeing language as constitutive of social meaning, this approach identifies patterns of data as stories or meaningful 'units'. In other words, rather than comparing individual reports, our analysis focussed on looking for similarities/dissimilarities and resulting patterns across the whole data set. The intention was to facilitate a deep analysis of materiality constructs and their various (contested) contexts.

It is important to point out at this stage that Braun and Clarke (2006) additionally cautioned that such research may be strongly influenced by the researchers' own judgements. To prevent this, we used several measures to enhance the qualitative validity of this study and included various checks and balances (Bluhm et al., 2011). For example, we used protocolled inter-coder reliability measures. For this, all authors read and coded the data and, in cases of substantial disagreement, the coding manual was revisited together and revised for overall consistency. Any disputed topic was then discussed again until a coding convergence was reached.

During the first rounds of reading, memos were written based on emerging questions about potential patterns and drivers of materiality contestations (Puroila & Mäkelä, 2019). These memos were then used in the open interviews with the interviewees to come to a deeper understanding of the identified patterns and to confirm the early coding. This method of data analysis involved comparing and contrasting a variety of expressions and manifestations of materiality, which allowed us to, recursively, develop a richer and more comprehensive picture of the materiality in the sample set.

In total 2382 units of analysis were coded into first order concepts, which were then combined into larger second and third order concepts as we gradually developed a more holistic understanding of the first order concepts.

We then clustered and aggregated the concepts (Parker & Northcott, 2016) in order to structure the data around three major themes as emergent 'arenas of contestation': power dynamics; materiality norms and standards; and radical or incremental views of materiality.

Findings

This paper aims to offer new research insights into the nascent field of IM based link to Senian theories of social justice. Specifically, we focus on arenas of contestation in terms of the materiality of impact data from differing stakeholder perspectives. As noted above, the literature suggests that the distinctive features of IM, when compared to financial accounting, include a diversity of relevant units of analysis and a wide range of stakeholders for whom these data matter. We have also suggested that power is not equally shared across these stakeholders with investors—as the owners of capital—typically being more powerful than investees or beneficiaries. Given this, we propose bringing in a novel theoretical perspective to the analysis of materiality in IM based upon notions of Senian social justice. When we analysed our empirical data, we found evidence supporting these assumptions, specifically that materiality is indeed a contested concept in IM. In the next three sections, we present our data analysis and findings in terms of the three arenas of contestation: power dynamics; materiality norms and standards; and radical or incremental views of materiality. Each section describes the details of the relevant sub-fields and how we derived each composite theme based on the aggregation of second and third order concepts.

Power Dynamics

Table 3 illustrates how we aggregated and derived this thematic cluster based on the meaningful units and the sources of contestation. These sources will now be looked at in detail and atomic excerpts from the documents will help link the aggregated findings to the data.

The first arena of contestation identified from the data was around differentials of power across stakeholders. As noted above, in Senian terms this represents a potential process of procedural injustice. This was particularly evident in terms of the different types of impact data categorised as material by investors—as powerful actors with extensive resources and administrative capabilities—compared with typically less well-resourced, small-sized, investee organisations. The data revealed the dominance of investors in these contestations in terms of prioritising a focus on financial performance from their investees, for example:

Table 3 Thematic aggregation of meaningful units: power dynamics

Arena of contestation: power dynamics	
Aggregated sources of contestation	Identified mechanisms in the meaningful units
Differentials of power across stakeholders	Overburdening of investees in terms of reporting requirements
	Indifference to firm size and capabilities
Potential mission drift	Divergent focus on financial versus impact data
	Misalignment between social and environmental mission and fundamental business success
	Missing linkage of revenues to the social and environmental activities of the investee
Trust	Lack of robustness of data
	No audit or assurance
	Poor levels of Transparency
Risk distribution	Risk transfer lacking proper measurement or aggregation methods
	Unfair distribution based on bounded rationality and opportunism
Vulnerability of investees	Problems with the enactment of accountability mechanisms
	Disenfranchisement of beneficiary voice
	Objectifications of impact investees as 'portfolio assets'
Information requirements and data mismatch	Restriction of effective communication
	Additional information demands from investors for idiosyncratic portfolio building
	Efficiency rather than effectiveness as guiding principle
	Lack of administrative capacity to produce decision-relevant impact data because of investor focus

> An investor will want to see how your products, services and interventions are linked to your ability to generate revenue from the social activities that you deliver. Your impact plan not only has to show how your activities respond to the beneficiary needs identified but how this links into your fundamental business success and growth. However, you need to make sure that these activities are congruent with your mission as a social purpose organisation (Babington Group, Doc Nr. 128, Unit Nr. 539).

A second issue that emerged was the importance of trust in the negotiation of materiality and performance information. From a trust perspective defining IM materiality prioritises the identification of data that are relevant to all key stakeholders rather than emphasising data robustness, audit or assurance. In the absence of audit or assurance mechanisms in IM—as is typical of all nascent markets—the need for transparency was stressed too in lieu of trust. There was also an underlying distrust concerning the potential for mission drift across stakeholders. Investors feared a mission drift away from social or environmental goals based on a primary focus on profit maximisation, whilst investees were concerned that they may be forced to reduce their social activities in order to drive up financial returns for investors.:

> Given that the Social Impact Bond contract transfers all or part of the implementation risk to investors, who are only paid when expected outcomes are achieved, all stakeholders need to trust that the outcome metrics can be measured effectively and objectively (Social Finance, Doc Nr. 103, Unit Nr. 450).
> Transparency is crucial […], as fuller disclosure helps win more trust from the investor. Reliable information represents less risk to investors, which translates into a lower cost of capital and thus higher valuations (Big Society Capital, Doc. Nr. 90, Unit Nr. 396).

In addition, there was an overarching suspicion that impact risks were not equally distributed across stakeholders. Without proper measurement and attribution of social and environmental risks, such disputes over the materiality of risk measures were hard to resolve. Given the power dominance of investors, even when mechanisms of trust were in place, the evidence also revealed a sense of vulnerability in investees:

> You've got to be someone who is willing to share every part of your business, the soft underbelly, the vulnerable side, the weaknesses with your business. To building that trust with an investor is the number one thing that matters in building a relationship […] (Uncharted, Doc Nr. 123, Unit Nr. 514).

The enactment of accountability mechanisms also highlighted these power differentials, leading to a potential disenfranchisement of beneficiary voice in materiality contestations:

> The flaws in the traditional approach to impact measurement have led to an accountability gap. Social entrepreneurs have fallen into the habit of conducting evaluations that meet the needs of upward accountability. They collect data to meet the requirements of their investors. And investors, in turn, often set those requirements in response to the reporting expectations of their limited partners. What is often missing is a commitment to downward accountability – to making sure that social enterprises are using data to improve the lives of their intended beneficiaries (Acumen Fund, Doc Nr. 6, Unit Nr. 43).

A related issue of contestation that emerged from the data was the objectification of impact investees as 'portfolio assets' rather than as actors who identify, create and exploit social and environmental opportunities to participate actively in defining materiality:

> And classifying assets as either impact or non-impact must be considered in the context of an investor's intentions (Sonen Capital, Doc Nr. 70, Unit Nr. 308).

This objectification restricted effective communication and was reflected in demands for additional information on the side of investors to facilitate their portfolio building without an explicit impact focus. Central to these problematic—and asymmetric—framings of the materiality of impact data was a misaligned focus on process efficiency rather than outcome effectiveness between investors and investees:

> For a portfolio of enterprises, a complete impact report or impact statement includes data about an enterprise's total impacts […]. Since this may often result in too much data for an investor to review, especially in cases where investment products have hundreds of underlying assets, the intermediary managing the portfolio of enterprises may choose to create a consolidated impact statement that highlights the impacts that are relevant to the investor's goals […] (Global Impact Investing Network, Doc Nr. 98, Unit Nr. 422).

Moreover, this set of issues revealed an interesting paradox. Namely, investees typically recognised the benefit of having sufficient capacity and resources to produce robust and material impact data as a management tool for their own decision-making, but were often constrained in terms of their administrative capacity by the conflicting impact information demands of their investors. Consequently, effective decision-making on the ground could be diminished because the resources deployed to provide impact data that were deemed material to investors restricted the options for investee material (management) data also to be collected and acted upon. This misaligned incentive could, therefore, lead to sub-optimal impact outcomes—something that, ironically, investors in the field are unlikely to want:

> The level and detail of reporting should reflect the size and complexity of your organisation and a good investor should not burden you with reporting requirements that detract from your core purpose and mission (Babington Group, Doc Nr. 128 Unit Nr. 541).

In summary, these data demonstrate the power dynamics within the contestations of materiality between impact investors and investees, with the former having dominance in the discourse of data relevance, largely due to their economic power. Such dynamics may undermine social justice, in process terms, between the stakeholders. In this context, a Senian analysis argues for the introduction of a more open (public) impartiality—as is discussed below. These disequilibria of power could potentially also be mitigated by trust mechanisms. But our data suggest that they also lead to misaligned and paradoxical outcomes where claims on materiality were not focused on optimising impact or engaging beneficiary voice.

Materiality Norms and Standards

In terms of the second theme, Table 4 illustrates how this arena of contestation emerged from our data. It focusses on the norms and standards of materiality.

The second arena of contestation that emerged from our data focussed on the social construction of the term 'materiality' itself. In financial accounting, materiality is typically defined in terms of its relevance based upon a positivist logic, what one interviewee called a 'techno-rationality' (though note the critique of this positivist logic assumption from Edgley (2014)). As a result, it is conceptualised as a mechanism for objective judgement by professional accountants and auditors.

However, our data—notably from the intermediaries—demonstrates that materiality in IM was framed as best based upon normative, rather than techno-rationalist, judgements. This view suggests that materiality cannot easily be objectively measured and reported but is, instead, a function of various judgements, across a range of stakeholders, based on a more subjective morality, for example:

> To understand which effects are material, we look at whether they relate to important positive or negative outcomes for people or the planet, how significant they are and whether they occur for groups of people and/or the planet who are in need of the outcome. We then consider whether the expected effect – even if it is material and positive – represents an improvement on what would have happened anyway (Bridges Fund Management, Doc Nr. 22, Unit Nr. 133).

However, such normative approaches, whilst potentially providing richer and more 'accurate' impact data also

Table 4 Thematic aggregation of meaningful units: materiality norms and standards

Arena of contestation: materiality norms and standards	
Aggregated sources of contestation	**Identified mechanisms in the meaningful units**
Social construction of the term materiality	Positivist logics and techno-rationality clash with normative statements and judgments
	Epistemological problems based on a subjective morality
Uncertainty in the IM process	Sometimes diametral opposite perspectives on positive and negative impacts between social and environmental impacts
	Indirect outcomes and long-term impact notoriously difficult to demonstrate
Lack of consistency of data and measurement	Data availability and quality problems
	Data often absent, incomplete or simply wrong
	Methods and analysis of impact not mutually accepted, for example between long- and short-term perspectives
Power dynamics in the institutionalisation of IM	Locus of power lies with the intermediary actors
	Intermediaries are framing the IM in terms of emerging standards and codes of practise
	Competing discourses of legitimisation and de-legitimisation of others
	Competition between standard setters based on internal logics
	Vested interests of rating and ranking organisations with proprietary IM standards as source of income
Lack of an agreed-upon audit function	Rationalisation based only on idiosyncratic assumptions
	Failure to admitting multiple voices and interpretation of what is good or bad Multiple relevant time-horizons

introduce limitations and uncertainty into the IM process, for example concerning the optimal time frame for measurement or over the consistency of data:

> Since this impact is inherently indirect and occurs through the investments we make […], we are dependent on the information available about these entities and their potential effects, whether positive or negative (BNP Paribas, Doc Nr. 51, Unit Nr. 253).
> But data availability and quality are still less than satisfactory, one of the biggest issues being a lack of consistency. Scope, definition, data depth and information are often absent, incomplete or simply wrong. All of which makes analysis an imperfect science to the point where calculating impact can sometimes become superficial (BNP Paribas, Doc Nr. 51, Unit Nr. 254).

With respect to resolving these contesting epistemologies of IM materiality, our data also demonstrates another set of power dynamics beyond those noted above—between investors and investees. In this case, the locus of power lies with the intermediary actors who are framing the IM field in terms of emergent standards and codes of practice. The data highlighted the influential role being played by standard-setting organisations with regard to the institutionalisation of IM practices, processes and reporting frameworks (for example, see the Impact Management Project: IMP (2018)). These data also suggested that there were competing claims of self-reinforcing legitimacy across the contested models, for example:

> This easy-to-use tool allows an investor to classify every underlying investment by its intended impact, as well as other variables that investors take into consideration when designing their portfolios – such as liquidity, expected returns, geography, management structures, and more. The outputs of the tool are visual representations of the individual portfolios, as well as investment data (Toniic, Doc Nr. 110, Unit Nr. 479).
> Our Outcomes Matrix has 21,000 unique users […] (Big Society Capital, Doc Nr. 91, Unit Nr. 398).

Furthermore, the contestations over who controls the standardisation of materiality norms also reveal the processes by which specific actors aim to establish a dominant position in the field of IM that will, typically, serve their own internal logics of performance. For example—as one interviewee pointed out—coalitions of actors may attempt to influence standard setters such as the European Union to prioritise (and, perhaps, regulate) one form of IM in favour of others. If successful, such processes reify (and, as a consequence, potentially commercialise) idiosyncratic definitions of materiality as a norm to the benefit of some actors over others. Moreover, by definition, once institutional norms become established, they exclude the legitimacy claims of alternative systems. In this case, one dominant IM set of standards would necessarily exclude more complex, dynamic and contextual conceptualizations of what constitutes material data—for example, that admits multiple voices and interpretation of what is 'good' or 'bad' impact as well as multiple time-horizons for effective data collection or analysis (such as a focus on longer-term 'impacts' rather than short-term 'outputs').

What is more, following the trajectory of financial accounting, the introduction of a regulated set of IM and materiality measurement and reporting standards may well also require an audit function. This would likely institutionalise one dominant materiality perspective further by the addition of a process of a professional rationalisation. In turn, this would challenge alternative models of materiality that were more complex, shifting and interpretive and, at times, subjective to different actors. Such processes of assurance and audit were viewed with concern by many investees as well as philanthropic investors.

Another important driver towards IM standards and audit was found to be purely commercial as a potential new source of income for rating agencies, auditors and other intermediary professional services firms, for example:

> In addition to or in lieu of company-specific impact metrics, the parties may agree to assess social and environmental performance against standards set by a third party organization such as GIIRS (Global Impact Investing Rating Service), a ratings tool that assesses overall social and environmental performance (Toniic, Doc Nr. 104, Unit Nr. 453).
> Entrepreneurs and investors may agree that a company's overall social and environmental performance be assessed and certified according to a recognized third-party standard. Companies with a B Corp certification, for example, must measure their performance against a set of standards […] (Toniic, Doc Nr. 104, Unit Nr. 454).

In summary, this second arena of contestation within out data revealed the institutional dynamics around the current processes of standardisation around IM. The data particularly highlighted the conflicting and contested epistemologies and framings of what constitutes 'good' or relevant data for different stakeholders. While standardisation may be closely linked to what Sen sees as 'public negotiation', the inherent institutional-power dynamics within the field of impact investing involving a third-party 'impartial spectator' may be problematic, as we will discuss further below.

Radical or Incremental Materiality

The third arena of contestation that emerged from our data focussed on identifying the differing worldviews of the key actors who are negotiating the defining features and boundaries of materiality in IM. Central to our data analysis here was the contestation between conceptualizations of the materiality of 'impact' as either a process of radical or more incremental change—in essence either working against or within the existing institutional structures. Table 5. shows an overview with examples of how the meaningful units were linked to the aggregated sources of contestation.

This set of data revealed an arena of contestation around how best to mobilise impact investment to optimise impact without being captured by the existing status-quo of financial markets. This theme was salient in several discussions with investors and investees. From a materiality perspective, this contestation opposes the stakeholder relevance of short-term outputs versus longer-term impacts, with the former typically being measured internally within the logics of an existing system and the latter externally challenging the institutional status-quo. This bifurcation also maps onto the power analyses set out above, given that the material relevance of IM performance to the powerful actors who own and invest capital—and who have likely benefitted from the existing institutional status-quo—is likely to be very different from the investees or beneficiaries for whom the status-quo may well be sub-optimal and a structural driver of social issues.

The argument brought up by many investees for a greater beneficiary participation in setting IM norms and standards—creating a more powerful 'voice' over determining the boundaries of materiality—is based upon a recognition of this institutional-power critique. At its most radical, this view also suggests that the beneficiary voice is the most important determinant of effective materiality to optimise the impact of impact investment (Nicholls, 2018). Moreover, the failure to manage this tension lead to criticisms of potential social- and/or green-washing from other IM actors who aim at a more radical approach to impact by rejecting the market status-quo:

> Our vision is of a world where financial markets serve all members of society and where finance plays a central role in solving the social and environmental challenges facing the global community. In this future, investors integrate impact considerations into all decisions, building strong communities, a healthy environment, and a sustainable future for all people (Global Impact Investing Network, Doc Nr. 93, Unit Nr. 403).

However, the data also suggest—in a Kuhnian sense—that we can also observe that the 'paradigmatic wars' over materiality in the IM field may be approaching an end (Kuhn, 1970). This appears to reflect a pragmatic turn in the contestation over materiality driven by a broadening acceptance that embracing the status-quo of financial markets and their attendant logics may, ultimately, optimise the flows of impact investing capital by widening the investor base to include more traditional finance institutions such as investment banks (see IMP (2018)).The argument here is that this approach will create more net impact over time than attempting to reform or dismantle the existing financial system. This was particularly evidenced in an acceptance that impact data needed to conform to the normative (and positivist) expectations of impact investors as economic actors, for example:

Table 5 Thematic aggregation of meaningful units: radical or incremental materiality

Arena of contestation: radical or incremental materiality	
Aggregated sources of contestation	Identified mechanisms in the meaningful units
Differing worldviews	Radical or incremental perspective on impact as social change
	Differing views of existing institutional structures
Difficulties to establish systematic impact	Impact investing being captured by the financial markets
	Conflicting stakeholder perspectives
	Problems to find balance between internal measures of short-term outcomes and external views on long-term impact
Power dynamics in terms of standard setting and norms	Too little beneficiary participation in setting IM norms and standards
	Definition of boundaries of materiality are based on powerful systemic actors
Social and greenwashing	Investors following financial market logics Seeing IM as a form of corporate reputation management
	Blurry investor IM definitions open to multiple interpretation
Limitations of traditional financial markets and investors	Traditional institutional investors do not focus on impact that is directed at challenging the financial system
	Impact data does not conform to normative expectations of traditional financial investors
	Difficulties in risk management concerning impact causality and attribution

> You should set realistic targets and indicators that help you to track progress over time and improve. This usually means that you gather a range of both qualitative and quantitative indicators […] (Babington Group, Doc Nr. 128, Unit Nr. 540).
> The lack of compelling case studies and data (both quantitative and qualitative) have been cited as primary reasons impact investors and traditional investors stay on the side-lines (Toniic, Doc Nr. 106, Unit Nr. 458).

A second set of issues emerged concerning impact risk, specifically around causality and attribution, for example:

> Is your product and/or service actually having a meaningful impact on your customers' lives? (Acumen Fund, Doc Nr. 3, Unit Nr. 10).
> Then the final dimension is about assessing the likelihood that the impact will be materially different from our expectation. For instance, there might be a lack of evidence to support the strategy, or there might be a risk around execution, or there might be other external factors at work […] (Bridges Fund Management, Doc. Nr. 22, Unit Nr. 133).

The material relevance of the externalities or negative impacts of impact investing was also highlighted as an important issue, revealing a potential tension between purely financial and IM assessments of performance:

> But we highlight the need to collect and learn from this information continuously – since the experience of people and planet may not reflect our intentions and goals, either because they don't experience the intended impact, or end up worse off (Bridges Fund Management, Doc Nr. 22, Unit Nr. 133).

This third arena of contestation based on the data analysis has suggested a range of differing conceptualizations of materiality based upon the differing institutional positionings and worldviews of key actors. Specifically, we have highlighted the contestation between radical and incremental conceptualizations of materiality, either internal or external to the institutional (market) status-quo.

Next, we return to our Senian social justice framework to discuss our findings.

Discussion

Mediating Materiality Contestations

As we have noted above, currently, the field of IM remains highly contested specifically around issues of materiality. Whilst there are several initiatives moving towards a standardisation of IM processes (e.g. IMP (2018), GIIN (2020)) and some others toward regulation (e.g. EU (2019)), the IM field remains nascent and under-institutionalised (Burritt & Schaltegger, 2010; Molecke & Pinkse, 2017; Rawhouser et al., 2019). Research has also identified the power dynamics within the institutionalisation processes of IM as a part of the wider of emergence of the impact investing market (Agrawal & Hockerts, 2019; Lehner et al., 2019; Nicholls, 2018), with investors, investees and beneficiaries differentiated by their levels of power. This paper has presented an empirical study of the key actors in the emergent IM field to make new contributions in terms of our understanding of the power dynamics, trust, standards and norms, and emergent versus radical perspectives on materiality.

Next, we return to our earlier discussion of a Senian social justice perspective in an organisational context to reflect upon the key findings from our data (Fia & Sacconi, 2018; James, 2005; Shrivastava et al., 2016). In particular, we look at how Sen's perspectives on social justice may mediate some of the arenas of contestations revealed in our data and how a capabilities approach to establishing impact materiality may lead to a more just—an ultimately more effective—system in terms of impact. This leads us, in this section, to make a series of normative suggestions on the future development of IM and materiality within it, exploring possible resolutions to some of the arenas of contestation of materiality noted above (Crane et al., 2016; Hahn et al., 2017), which will hopefully lead to favourable, 'just' arrangements in terms of the intended beneficiaries.

Senian Justice and Power

This paper has demonstrated that conceptualisations of materiality in IM are contested and structured by the power relationships between impact investors, intermediaries—such as standard setters or auditors—and investees. We also noted that such dynamics typically marginalise beneficiary voice and, as such, can lead to sub-optimal or even, negative impact outcomes. From our data analysis, we identified three arenas of contestation over materiality: power dynamics, trust, and misaligned incentives between economically powerful investors and objectified investees; conflicting views over materiality norms and standards; and the interactions between stakeholders with differing motivations towards radical or incremental materiality.

These findings support Nicholls (2018), who suggested that a clearer conceptualisation of IM—combined with the type of novel empirical research offered in this paper—is needed if the impact investing market is both to increase the flows of capital into the market and optimise its impact. Our data also identified processes by which investees became objectified as 'assets' separated from decision-making over materiality by investors. This served to negate any negotiation over the meanings of, and discourses around, materiality across stakeholders.

As we have suggested, an alternative perspective on these relationships can be taken from Sen's (2009) theories of social justice. This approach reframes key IM stakeholders as partners, rather than antagonists, linked holistically within a form of temporary organisation for a given project and as 'equals' in constructing and negotiating impact materiality. Moreover, such a perspective reframes materiality judgements away from short-term outputs towards long-term outcomes and would likely prioritise beneficiary voice and participation in a more radical view of the relevance of impact data. Additionally, Sen's (2009) theories also reveal the potential injustices inherent in any move towards a standardised and static model of IM materiality. From this point of view, truly effective IM can be seen as necessarily dynamic with the construction of materiality in a constant state of re-negotiation across stakeholder groups, each of equal power and voice, shaped by evidence of impact outcomes over time.

Moreover, Sen (2009) argued that a 'rational' society would be expected to reach just solutions through reasoning, transparency, accountability and the deliberate inclusion of multiple arguments from multiple perspectives (Shrivastava et al., 2016). In contrast to the Rawlsian view, in which citizens justify their decisions to each other (Rawls, 1985), Senian thinking prioritises the voices of outsiders as 'impartial spectators': to assess competing sentiments from a distant and neutral position to reach an 'open impartiality' (Sen, 2009). In terms of IM, third-party intermediaries could play such a role in moderating and framing materiality (re-)negotiations. This could be actioned, for example, in participatory processes of setting and revising standards of best practice. Third-party intermediaries in impact investing (Lehner et al., 2019) can act as 'translators' between the conflicting rhetorics of investors and investees since they know and understand both sides. Such intermediaries could, therefore, play an important role in settling a consensus on contested claims of materiality by mediating the demands and models across two parties. Such a consensus would also build trust and further mitigate the potential for conflict between investors and investees. What is more, impact investing intermediaries are often motivated by a primary focus on beneficiaries—making them impartial spectators of any conflicts between investors and investees.

Moreover, at the investee level, Sen's (2009) logic of public reasoning would suggest the need for performance transparency via material reporting of actions and impact. Doing so would also develop interactional justice in the IM field and enhance what Sen (2009) calls 'comprehensive justice', which includes aspects of both distributional as well as procedural justice. We consider this next.

Comprehensive Justice and Participation

Sen (2009) work on comprehensive justice focusses primarily on lived experiences or actual realisations. He suggested that, "A full characterization of realizations should have room to include the exact processes through which the eventual states of affairs emerge" (p. 9). This brings in the perspectives of procedural—and with it interactional—justice based on public reasoning and open impartiality that were outlined in the previous section.

Sen's (2009) model of a neutral and just agreement on the processes of realisation is also relevant to our findings concerning the contestations between positivist and more interpretive approaches to impact materiality (Lisi, 2018; Nicholls, 2018). The interpretive approach is contingent upon re-embedding an a priori normative and idiosyncratic construction of materiality as an actor-specific concept based on subjective moralities and value judgements within IM. However, *contra* this, the IM field today is moving towards a positivist approach with more formalised, and narrow, materiality prescriptions (e.g., IMP, 2018). Such a trajectory is in opposition to Sen's (2009) notion of comprehensive justice and open impartiality. This is consistent with Puroila and Mäkelä (2019), who suggested that: "the technic-rational approach to the materiality assessment, reinforced with the use of the [materiality] matrix is a value-laden judgement of what matters in corporate sustainability and narrows down rather than opens up the complexity of the assessment of material sustainability issues, stakeholder engagement and the societal pursuit of sustainable development" (p. 1043).

Consequently, following Sen (2009), we advocate that in order to construct materiality to optimise impact in IM, a priori standardisation is inherently problematic, as it would favour only some actor-specific moralities (see above) and discourage/discount others (Fortin et al., 2015). We also suggest that it would be more effective to model IM materiality in terms of agreements based on a common morality (Fortin et al., 2015) across key stakeholders for a specific intended impact outcome. In practice, this would mean bringing in the voices of beneficiaries to take account of their needs and converge towards a common value proposition as a guiding principle between investors and investees. At its most granular, this process of consensus would be achieved at the individual investment level but, given the potential transaction costs, it is likely best to occur at the fund or portfolio level assuming a common set of beneficiary groups.

As we have already noted in other contexts above, a Senian process approach to negotiating materiality is most effective if it is field-driven (participatory) in its moral assumptions and includes all stakeholders' voices and their value judgements (Carnegie, 2019; Deegan, 2019; Lehner et al., 2019). From a pragmatic perspective, such processes could also be audited as a proxy-measure of good IM practice through evidence of meaningful beneficiary participation (Maroun, 2018; Nicholls, 2018).

In addition, from a Senian point of view, effective IM would avoid being rigid and dogmatic and, instead, reflect the necessary elements of procedural justice concerning materiality. This, in turn, has the additional benefit of enacting processes that lead to the independence of the investee in the creation of impact—with the further consequence that they are empowered in terms of their own potential functionings and capabilities (Sen, 1985). The concept of functioning represents a state in which people are free to be or do whatever it is that they value. In terms of IM, this means empowering the investee to define materiality in terms of their own actions and beneficiary voice—to ensure equality of power in defining materiality.

Taking these insights from Sen (2009) back to our data analysis above, we suggest that to optimise the effectiveness of impact investing in terms of its beneficiaries, materiality is best left under-specified to allow a maximum of functionings based on free will (Sen, 1985; Shrivastava et al., 2016) for investees and beneficiaries. This would empower both groups in terms of their capability to flourish. However, from a critical justice perspective, even under-specified constructions of materiality would still need a process of negotiation across key stakeholders. Again, such action would cast third-party intermediaries as 'impartial spectators' in the IM process (Sen, 2009). A pre-prescribed and negotiated IM materiality—managed by an intermediary and based on a previously agreed set of impact goals—may also reduce the possibility of subsequent mission drift. To some degree the principles-based approach of the Impact Management Project reflects these perspectives.

Our findings also identified contestations between positivist and interpretivist positions on, and emergent versus radical framings of, impact materiality. Conflicting objective and subjective views on data gathering may be reconciled by finding and focusing on the overarching communality of desired impacts—for example, by codifying them in contractual terms (Bebbington et al., 2017). However, the contestations between emergent and radical materiality in IM are more problematic and may sometimes be beyond reconciliation since these are based on fundamentally contradicting worldviews. As a consequence, in such cases, the divergent logics for action may well prevent effective investor-investee relationships, lead to social- or green-washing (Agrawal & Hockerts, 2019; Lehner et al., 2019) and, potentially, damage the reputation and legitimacy of the actors involved with further negative consequences for the wider field of impact investing (Suddaby et al., 2017; Tost, 2011). Moreover, these conflicts could also introduce significant investment risk for both investor and investee and could increase financing costs. This resonates with Sen's (2009) criticism of Rawls transcendental institutionalism (Fia & Sacconi, 2018; James, 2005):

> "When people across the world agitate to get more global justice […] they are not clamoring for some kind of 'minimal humanitarianism'. Nor are they agitating for a 'perfectly just' world society, but merely for the elimination of some outrageously unjust arrangements to enhance global justice" (p. 16).

Here, Sen confirmed his interest in the marginal improvements that are achievable from the 'bottom' of inherently unjust situations, rather than from the 'top', to create perfectly just institutional arrangements. Sen argued that whilst access to basic goods and equal opportunities would constitute a sensible pre-condition for any sort of justice, the same set of goods would not have the same implications for individuals across different 'cultural, political, and socioeconomic systems.' This is because such contextual differences affect individual functionings and capabilities. Senian thinking reduces the conflict between actors of different worldviews by offering a pragmatic process of building consensus from the bottom up. In practice, however, it might be more pragmatic to build deals between investor and investees that share a common worldview in terms of emergent or radical materiality.

In summary, by framing our findings with respect to materiality in IM with a Senian focus on social justice, individual functioning and capabilities, we suggest that three arenas of contestation we identified can be recast as opportunities to negotiate materiality dynamically across areas of mutual interest in terms of the optimising overall impact. Sen's (2009) insistence on the importance of free will in such negotiations brings with it an obligation for transparency and accountability across all stakeholders leading to structures of open impartiality and comprehensive justice. In pragmatic terms, this requires both investors and investees to be especially open and self-reflexive about their a priori materiality judgements, rationales and logics. As Sen (2009) put it, "If it turns out, for example, that in order to safeguard the liberties of all, we have to cultivate tolerance of each other in our respective values, then that is a public reasoning justification for cultivating tolerance" (p. 111).

Conclusion

As an abductive study within a novel theoretical framework based on Senian social justice in an organisational setting, this paper acknowledges several limitations. First, as a qualitative study, this paper inevitably has some limitations based upon its research design. Although our analysis encompasses 671 data points from 157 documents, 19 purposefully selected cases, and 33 interviews, this still represents only a small sample of what is going on in the field of impact investing. As such, this work should be seen as a preliminary analysis that provides insights and proposes ways forward but does not test theory per se. Second, the coding process relied upon the subjective evaluations, reading and subsequent interpretation of the authors. To counteract any potential bias and misinterpretations, several measures, such as inter-coder reliability and a critical reflection on the evaluation by constantly moving forwards and backwards in the documents and the interviews were employed to enhance the qualitative validity of this research. However, such subjectivity must still remain present and is acknowledged in the data and findings. Third, given the increasing pace of institutionalisation of the field of impact investing and, with it, IM, our study will necessarily be temporally contingent.

Nevertheless, despite these limitations, we believe our paper has been consistent with our initial stated aims to provide new data, propositions and framings of materiality in IM to evaluate and generate normative recommendations based on a Senian social justice perspective that can then be subject to further research and testing within the community of business ethics scholars. Specifically, from our data analysis, we have identified three distinctive arenas of contestation over impact materiality in IM. We have also suggested the significance of each arena of contestation in terms of negative implications for the effectiveness of the impact investment market, including; reducing the overall impact efficiency of an impact investment; undermining trust between key stakeholders leading to misaligned objectives; making dysfunctional demands on investees in terms of IM systems and data leading to sub-optimal impact management processes; opening up the possibilities for impact- or greenwashing. However, we have also suggested how Senian theory can offer models by which such negative effects could be mediated.

This paper offers new contributions to our knowledge of IM that are relevant both to extend our understanding of a central issue in the impact investing field, and also to add to the body of research in business ethics on social justice in an organisational setting. We suggest that the contested constructions of materiality evident in our data need not necessarily be seen as problematic for the future development of the impact investing market. Rather—*contra* the increasing arguments for a standardisation of IM—they offer opportunities for meaningful stakeholder engagement to build comprehensive justice between investors, investees and their beneficiaries that is based on actual realisations. We would argue that such processes not only have a moral imperative but also a pragmatic one, since they will optimise the impact of impact investing over time for all stakeholders.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest and it is solely the work of the above-mentionedauthors.

Ethical approval Ethical approval was waived by the Ethics Committee of the Hanken School of Economics, Helsinki in view ofthe retrospective nature of the study. We have followed best practises for data protection and have receivedinformed consent from all interviewees.

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