

How impact investing firms use reference frameworks to manage their impact performance: An industry-level study

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Abstract

Using meaning-oriented content analysis, we show how impact investing firms use various reference frameworks (e.g., IFC Performance Standards, Impact Management Project framework, UN Sustainable Development Goals) to manage their impact performance throughout the investment lifecycle. Our study provides an industry-level picture of the various roles that different reference frameworks play to help impact investors attain their impact goals. We also discuss the potential industry effects on management accounting practice – that is, how reference frameworks used in performance management in the impact investing industry differ from those used in some other industries.

Keywords: Impact investing; Impact performance management; Reference framework; Management accounting practice; Industry effect.

1. Introduction

Impact investing has great potential to contribute to achieving United Nations Sustainable Development Goals (SDGs) by tackling global challenges such as extreme poverty, climate change, and global hunger, to name a few (International Finance Corporation, 2019; OECD, 2019). Impact investing refers to investments made into companies, funds, and/or projects with the intention to generate measurable and positive social/environmental impact alongside generating financial returns (Islam, 2022a; Hockerts *et al.*, 2022). Recent estimates show that the size of the impact investing market has grown to around US\$1.164 trillion (Hand *et al.*, 2022). The impact investing market has attracted various individual and institutional investors (e.g., development finance institutions, private foundations, individual investors, and religious institutions) (Mudaliar *et al.*, 2019; Islam and Rahman, 2023). Impact investors create impact by funding the growth of impact-driven organizations (e.g., social enterprises) whose products and/or operational practices tackle specific social/environmental problems (Brest *et al.*, 2018; Bannick *et al.*, 2017). Some impact investors expect market-rate returns, while others are happy with below-market returns to achieve desired social impact (Mudaliar *et al.*, 2019).

Prior impact investing literature has addressed several issues such as individual- and organizational-level criteria used in evaluating impact investment projects (e.g., Block *et al.*, 2021), impact risk management issues (Islam, 2022b), roles of impact evaluation in impact investing (e.g., Lall, 2019), linkages between impact investment deal flow and SDGs (Islam and Rahman, 2023), factors affecting the behavior of impact investors (e.g., Lee *et al.*, 2020), and issues around the growth of the impact investing market in normal times and COVID-19 times (e.g., Islam and Scott, 2022; Tekula and Andersen, 2019; Islam and Habib, 2022). Prior impact investing literature also sheds light on several activities that impact investors undertake as part of managing their impact performance (e.g., establishing impact strategy and objective, conducting screening and due diligence, and evaluating impact performance) (e.g., Block *et*

al., 2021; Ormiston *et al.*, 2015; Lall, 2019). One area that has received relatively much less scholarly attention is the use of reference frameworks to manage impact performance. Only a few studies (see Emerson, 2003; Chen and Harrison, 2020) exist in this area. However, these studies have mainly provided a brief discussion about the advantages and/or disadvantages of a few reference frameworks instead of examining the use of reference frameworks in relation to the activities undertaken by impact investors as mentioned above.

Our study addresses this issue by providing a comprehensive account of using reference frameworks to manage investments' impact performance. This research is important for several reasons. It could advance the prior literature by providing important insights into whether and how impact investors draw on reference frameworks while designing and implementing various impact performance management activities. Furthermore, given that a major success criterion of impact investments is to achieve the desired impact performance (International Finance Corporation, 2019; Islam, 2022a), a greater understanding of reference frameworks to manage impact performance could provide investors with valuable insights. Also, the current research could reveal which reference frameworks are specifically suitable for which impact performance management activities, thus enabling impact investors to better achieve their impact goals.

Generally, reference frameworks are guides, tools, and standards that reflect shared learning and best practices in a specific domain (Geerts, 2016; Iden and Eikebrokk, 2014). They provide an abstract understanding of the relationship among various elements underlying a phenomenon in a consistent way toward achieving a common goal (Iden *et al.*, 2020; Bagheri *et al.*, 2019). For example, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework provides organizations with key principles and a common language to manage organizational risks (e.g., Arena *et al.*, 2010). The current study aims to investigate reference frameworks in the impact investing context. Specifically, it addresses the

following research questions: What reference frameworks do impact investing organizations draw on while carrying out various impact performance management activities to attain their impact goals? How do impact investing organizations use these reference frameworks in relation to various impact performance management activities?

We have adopted a qualitative exploratory research approach (Miles *et al.*, 2014; de Villiers *et al.*, 2019). In line with our research objective, we conducted meaning-oriented content analysis (e.g., Dunne *et al.*, 2021; Andon and Clune, 2021) of disclosure statements of 91 leading impact investing organizations. This data analysis approach allows a richer investigation by focusing on the latent meaning behind the surface of texts (e.g., Dunne *et al.*, 2021; Andon and Clune, 2021). Our sample disclosure statement contained information about, for example, focal investing organizations' impact strategies and objectives, their project screening, due diligence, and impact evaluation processes, and their use of various reference frameworks.

This study makes three contributions to the literature. First, it contributes to the growing literature on impact performance management in impact investing. Prior literature (see Emerson, 2003; Chen and Harrison, 2020) has paid only a partial focus on reference frameworks in impact investing, and provided a brief discussion on the advantages and/or disadvantages of a few reference frameworks. In contrast to prior research, the current study has a major focus on using reference frameworks to manage impact performance in impact investing. It offers a more comprehensive picture of *what* reference frameworks are used to manage impact performance in impact investing, and most importantly, *how* they are used. In particular, our comprehensive account helps depict a process perspective of using reference frameworks in managing impact performance throughout the investment lifecycle, including impact strategy and objective development, initial project screening, impact due diligence, impact measurement, and accountability for impact performance.

Second, this study contributes to the management accounting literature on performance management. Prior literature highlights the major reference frameworks (e.g., the Balanced Scorecard, the strategy map) used in performance management activities in *traditional settings* (e.g., manufacturing, utilities, and retail organizations) (e.g., Speckbacher *et al.*, 2003; Wiersma, 2009; Kaplan and Norton, 2006; Islam, 2019). For example, Islam (2019) studies strategy map evolution from a value creation perspective and shows how corporate performance management activities within an energy company shape and are shaped by the strategy map. We contribute to this literature by highlighting the major reference frameworks (e.g., IFC Performance Standards, SDGs) used as well as how they are used to inform impact performance management activities in a *non-traditional setting* such as impact investing. In doing so, this paper responds to the call for enhancing our understanding of management accounting practices in “diverse settings or application areas” going beyond traditional settings (Van der Stede, 2015, p. 175).

Third, there have been calls for studying management accounting practices at an industry level to enhance our understanding of specific management accounting practices in a specific industry and the potential industry effects on management accounting practices (Messner, 2016). Our study responds to this call. Drawing on 91 major impact investing firms, we provide a comprehensive picture of using reference frameworks to manage impact performance in the impact investing industry as a whole. As such, our study contributes to the prior literature by providing an industry-level picture of specific management accounting practices (e.g., using reference frameworks to manage impact performance) in the impact investing industry. Later, in the Discussion section, we elaborate on the potential industry effects on management accounting practices in the impact investing industry vis-à-vis other industries.

The rest of the paper is structured as follows. The next section provides the literature review. Section three details the research methods, followed by presenting the findings in section four.

Section five discusses these findings. The final section concludes the paper and provides some future research directions.

2. Performance management, reference frameworks, and impact investing

Our focus is on understanding the use of reference frameworks in managing impact performance in impact investing. To this end, we have adopted a domain theoretical approach (see Lukka and Vinnari, 2014) for a detailed discussion on domain theories and method theories). A domain theory refers to “a particular set of knowledge on a substantive topic area situated in a field or domain such as management accounting” (Lukka and Vinnari, 2014, p. 1309). Although method theories (e.g., theories borrowed from sociology, economics, and psychology, such as the actor-network theory, the agency theory, and the structuration theory) are popular in accounting research, researchers are encouraged to adopt a domain theoretical approach when method theories do not offer a meaningful lens to investigate the focal phenomenon (Lukka *et al.*, 2022; Lukka and Vinnari, 2014). Several prior accounting studies have adopted a domain theoretical approach (e.g., Islam *et al.*, 2018; Ax and Bjørnenak, 2005; Sandelin, 2008). The current study draws on and extends two knowledge domains – management accounting and impact investing.

In this section, drawing on management accounting literature, we first discuss the notion of performance management and highlight the importance of reference frameworks in managing organizational performance. Then, drawing on impact investing literature, we discuss various major activities that impact investors undertake to manage their impact performance.

2.1 Performance management

Performance management is a broader concept. Management accounting literature offers valuable insights to break down the concept of performance management into more specific

elements. This literature highlights some major activities that organizational actors undertake as part of managing organizational performance.

One of the first activities involved in performance management is identifying organizational strategy and strategic objectives (Ferreira and Otley, 2009). Organizations often have multiple objectives, including financial (e.g., revenue growth) and nonfinancial (e.g., improved customer satisfaction) objectives. These objectives set the basis for evaluating actual performance at a later stage.

Another common activity underlying performance management is identifying appropriate performance metrics (Otley, 1999). Organizations generally select performance metrics in alignment with their strategy and strategic objectives to ensure that strategy and strategic objectives can be delivered in the most desired way (Kaplan and Norton, 2007). While identifying appropriate performance metrics is important, it is equally important to set the expected level of performance that an organization needs to achieve for each of its key performance metrics, which is commonly known as target setting (Ferreira and Otley, 2009). Performance metrics and targets help establish accountability in organizations, thus potentially improving organizational performance (Broadbent and Laughlin, 2009).

Performance evaluation constitutes another major element of organizational performance management. It involves evaluating the actual performance against the expected performance that was established ex-ante via metrics and targets (Merchant and Van der Stede, 2012). Organizations may attach financial (e.g., bonuses) and/or nonfinancial (e.g., recognition by top management) rewards to performance achievement (Adler, 2011), which can produce both positive and negative outcomes (Ittner and Larcker, 2003).

2.2 Reference frameworks and performance management

Performance management literature highlights the vital roles of reference frameworks in organizational performance management. For example, Chenhall *et al.* (2013) show how a non-profit organization implemented the Quality Framework and how the framework helped its performance management activities by providing its employees with a shared vision of success and enabling them to determine whether they were successful or not. Indeed, the Quality Framework provided an arena for employees to discuss and debate different modes of performance evaluation at the case company (Chenhall *et al.*, 2013).

In another study, Chenhall *et al.* (2017) show how the LEAP framework (an acronym representing ‘Learning, Evaluation, Assessment for Partners’) facilitated the monitoring and evaluation of a mental health project by providing volunteers and employees with non-technical and jargon-free performance indicators that are directly related to the mental health program. Indeed, the LEAP framework allowed volunteers and staff members to highlight their achievements, express their values and beliefs, and display disappointment and failures (Chenhall *et al.*, 2017).

Furthermore, the Balanced Scorecard (BSC) framework allows organizational users to develop a robust performance measurement system by ensuring a causal linkage between financial and nonfinancial performance measures (Kaplan and Norton, 2006; Speckbacher *et al.*, 2003). The BSC framework also assists in performance management activities by offering organizations a mechanism for effective resource allocation, reward and compensation, coordination and monitoring, and strategic control and learning (e.g., Wiersma, 2009; Kaplan and Norton, 2006).

Similarly, the strategy map framework helps organizations in their performance management activities by providing managers with a tool to advance their decision-making ability in a strategic context, better comprehend complex phenomena, filter out irrelevant information, and

support financial and nonfinancial value creation and value protection initiatives (e.g., Kaplan and Norton, 2004; Islam, 2019, 2018; Humphreys and Trotman, 2011).

Based on the above studies, we expect that impact investing organizations would use various reference frameworks to inform their different impact performance management activities. However, our knowledge is very limited in this regard. Only a few studies have provided a partial focus on using reference frameworks in impact investing, and they mainly offer a brief account of the advantages and/or disadvantages of those reference frameworks (see Emerson, 2003; Chen and Harrison, 2020). We address this issue and examine how impact investing organizations use reference frameworks to facilitate their impact performance management activities.

2.3 Impact investing and impact performance management

It is quite common for sophisticated investors to engage in various performance management activities such as project screening, due diligence, and performance measurement throughout the investment lifecycle (White and Dumay, 2020; Nama and Lowe, 2014). Failure to conduct these activities appropriately could be costly to these investors in the form of lower post-investment profitability and a higher probability of acquisition-related goodwill impairments (Wangerin, 2019; Smith and Cordina, 2014). However, as traditional investing focuses on financial returns alone, performance management activities undertaken by traditional investors are primarily centered around enhancing financial performance (Nama and Lowe, 2014; Bedford and Ditillo, 2022). In contrast, because impact investing focuses on both financial return and social impact (Islam and Habib, 2022), performance management activities undertaken by impact investors are pivoted on improving not only financial performance but also impact performance (Block *et al.*, 2021; Islam, 2022b). As the current study focuses on impact performance management in impact investing, it mainly discusses relevant *impact* performance management activities undertaken by impact investors, as detailed below.

Impact investors engage in several activities to manage their impact performance throughout the investment lifecycle. One of the first activities is to develop impact strategies and objectives, which are considered key elements of impact performance management in impact investing organizations (Castellas *et al.*, 2018). When done well, impact strategies and objectives not only describe what impact will be created but also articulate how the impact will be created (i.e., articulating the investing organization's theory of change) (Geobey *et al.*, 2012).

As part of managing impact performance, impact investors also undertake screening and due diligence activities. Here, investors evaluate potential investment projects considering both individual-level criteria (e.g., social entrepreneurs' passion, networks, and professionalism) and organizational-level criteria (e.g., investee companies' mission/vision, their geographic location, the authenticity of their top management teams, and their financial track record) (Islam, 2022a). Screening and due diligence activities are important to manage impact performance since they help select suitable investment projects to maximize the chance of creating a positive impact and minimize the risk of creating a negative impact (Ormiston *et al.*, 2015; Block *et al.*, 2021). Pre-investment due diligence also helps investors conduct an ex-ante impact assessment of an investment project and develop appropriate action plans to monitor and manage the impact performance of the project in the post-investment period (Wood *et al.*, 2013).

Another major part of impact performance management is impact measurement. Impact measurement plays various roles in the impact investing space. For example, impact measurement serves as an accountability device where investors hold investee companies accountable for achieving the expected impact (Ebrahim and Rangan, 2014). Impact measurement also plays a legitimacy-building role in that it helps investors legitimize their investment decisions to various stakeholders, including peers, government authorities, and

industry networks (Lall, 2019). Recent research shows that impact evaluation plays several other roles in impact investing, including accounting, strategy, marketing, organizational learning, and operations (Ormiston, 2019).

Building on prior studies, we aim to investigate how impact investors use reference frameworks to manage their impact performance.

3. Research methods

We have adopted a qualitative exploratory research approach. As in the case of the current study, such a research approach is appropriate when i) limited prior research exists on the focal phenomenon (Creswell and Poth, 2018; Denzin and Lincoln, 2000), ii) the research objective is to understand the nuances and complexities related to how specific tools/techniques are implemented in organizations (de Villiers et al., 2019; Ahrens, 2022), and iii) the researchers focus on exploring the way new/existing constructs are mobilized by organizational actors (instead of focusing on frequencies of occurrence and probabilities in a larger population) (Parker and Northcott, 2016; Gioia et al., 2013).

3.1 Data collection

The current study uses archival data from the Operating Principles for Impact Management (OPIM) Signatory Platform¹. In 2019, IFC, along with several impact investors, intermediaries, and relevant industry networks, created this platform to bring transparency and discipline around impact investing and learn best practices in managing impact investments from one another (International Finance Corporation, 2019). Impact investing organizations can become a signatory to this platform, who then need to publicly demonstrate their effort and activities to manage investments' impact via publishing an annual Disclosure Statement on the Signatory Platform. We located and downloaded 91 disclosure statements (around 1,035 pages)

¹ See <https://www.impactprinciples.org>

representing 91 leading impact investing organizations (Table 1 lists them; see Appendix 1 for a sample Disclosure Statement). We also visited the official website of these impact investing organizations to better understand their mission, vision, and operations.

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3.2 Data analysis

In line with our research objective, we have adopted a meaning-oriented content analysis approach (e.g., Andon and Clune, 2021; Dunne *et al.*, 2021). Data coding and categorization were done manually with the help of the qualitative data analysis software package NVivo 12. The use of NVivo software enabled researchers to engage in a highly reliable data analysis process, since it allows researchers not only to code raw texts in a structured fashion but also to search and retrieve coded text chunks in a transparent way. One researcher conducted the initial analysis, while the second researcher later reviewed it. Both researchers discussed and reconciled disagreements.

Our data analysis is also informed by our adoption of a domain theoretical approach (Lukka and Vinnari, 2014). This essentially means analyzing data i) following an open-coding system where new themes/constructs emerge from data (instead of analyzing data to conform to pre-determined themes/constructs), and ii) drawing on literature from specific domains where the study is positioned (e.g., performance management literature in the management accounting domain and impact performance literature in the impact investing domain) (Islam *et al.*, 2018; Ax and Bjørnenak, 2005; Sandelin, 2008).

In the first stage of our analysis, we attempted to identify reference frameworks used by impact investors. As little knowledge exists on what reference frameworks impact investors actually use, we manually screened each disclosure statement to locate different reference frameworks such as United Nations SDGs, IFC Performance Standards on Environmental and Social

Sustainability, Impact Management Project framework, IFC Exclusion List, and Impact Reporting and Investment Standards (IRIS+), to name a few.

Next, for each disclosure statement, we coded relevant paragraphs containing different reference frameworks to identify specific impact performance management activities for which impact investors use reference frameworks. This step revealed five major impact performance management activities: i) impact strategy and objective development, ii) initial project screening, iii) impact due diligence, iv) impact measurement, and v) accountability for impact performance.

In the third stage, data under each impact performance management activity were recoded to identify specific roles that reference frameworks play regarding specific impact performance management activities. The analysis was iterative instead of linear (Gioia *et al.*, 2013; Ahrens, 2022), which also involved consultation with relevant impact investing and performance management literature (e.g., Block *et al.*, 2021; Ormiston *et al.*, 2015; Chenhall *et al.*, 2017, 2013; Islam, 2022a) to make sense of emerging roles of reference frameworks in impact performance management (e.g., developing meaningful impact strategies and objectives, facilitating negative screening). In this stage, we also focused on understanding how reference frameworks fulfill their roles in relation to a specific impact performance management activity.

Finally, we synthesized the above analysis to obtain a broader picture of various roles that reference frameworks play in informing different impact performance management activities in impact investing organizations.

4. Findings

We present our findings according to the impact performance management activities for which investors use reference frameworks. Throughout this section, we provide short quotes to ensure a greater flow of discussion, while we provide long exemplary quotes in Table 2.

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4.1 Impact strategy and objective development

Reference frameworks play vital roles regarding impact strategies and objectives in impact investing organizations. Here the major reference framework that impact investors use is SDGs. Broadly, SDGs are a collection of 17 interconnected global goals (e.g., no poverty, zero hunger, gender equality) that offer a blueprint to achieve a more sustainable, prosperous, and peaceful world.²

Impact investors have “only limited resources to deploy”. As a result, it is important that they have appropriate impact strategies and objectives to use their limited resources to achieve the best possible impact return. SDGs as a reference framework play a vital role here in that they help investors develop meaningful impact strategies and objectives to achieve more “needle-moving” impact. Specifically, impact investors use SDGs as “an overarching guide to test the credibility, relevance, scale of impact and contributions” of their investments to the sustainable development needs of people and the planet. SDGs enable impact investors to identify the most impactful areas (e.g., extreme poverty) and regions (e.g., Sub-Saharan Africa) for their investments to focus on. For example, Partners Group developed “a dedicated investment strategy that aims to address global social and environmental challenges by investing exclusively” in line with the SDGs, especially “SDGs relating to education, healthcare, energy access, clean energy, and social inclusion”. Similarly, AXA Investment Managers use “the SDGs to identify global needs and regions” where their “capital and other inputs are needed to deliver meaningful impact”. Thus, SDGs as a reference framework play a crucial strategy-building role in impact investing organizations.

² See <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

In addition to their strategy-building role, SDGs also play an ex-post validation of the meaningfulness of their original impact strategies and objectives. For example, the European Bank for Reconstruction and Development (EBRD) invests in emerging economies to foster “[a] transition towards open market-oriented economies and to promote private and entrepreneurial initiative”. EBRD operationalizes its overall impact goal in terms of making emerging economies “(i) competitive, (ii) resilient, (iii) well-governed, (iv) inclusive, (v) integrated, and (vi) green”. While these six focused areas constitute EBRD’s broader impact objectives, EBRD “aligns them with the UN SDGs” in order to validate their meaningfulness as impact objectives. In the same vein, several other impact investing organizations map their impact objectives “against SDG targets”. Thus, SDGs offer a valuable framework for investors to verify that their impact objectives and strategies are well-aligned with key international development targets.

4.2 Initial project screening

During initial project screening, impact investors conduct a preliminary assessment to decide whether a potential investment project could deliver the expected impact performance. Reference frameworks play key roles in this process. First, impact investors use reference frameworks for negative screening where they screen out investment projects “that are at risk of creating significant negative impact”. IFC Exclusion List³ and Harmonized EDFI Exclusion List⁴ are two major reference frameworks used in this regard. Both reference frameworks provide investors with a tangible list of activities associated with specific industries (e.g., tobacco, gambling, pornography and prostitution, and weapons and munitions) to screen out potential investment projects. Specifically, these reference frameworks enable impact investors to identify and avoid investment projects that could seriously harm society and/or the

³ See https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/company-resources/ifcexclusionlist

⁴ See <https://www.ifu.dk/wp-content/uploads/2021/09/EDFI-exclusion-list.pdf>

environment. For example, Symbiotics “screens each potential investee’s portfolio” against IFC Exclusion List “before making an investment, and does not invest in an institution if it finances any activities on the exclusion list”. Thus, reference frameworks such as IFC Exclusion List are considered a handy tool “to mitigate the risk of causing negative social or environmental impacts”.

While negative screening is important, impact investors also recognize the significance of positive screening in impact investing. They acknowledge the need to intentionally identify investment projects with high impact potential via positive screening, going beyond just “negative impact avoidance” via negative screening. For the positive screening purpose, a major reference framework impact investors use is SDGs. SDGs enable investors to proactively identify and select commercially viable investment projects that “provide positive contributions with specific impact intents”. Here, impact investors build their positive screening criteria around SDGs. For example, one of the positive screening criteria of Kohlberg Kravis Roberts & Co. (KKR) is to identify “a company whose business model contributes a solution to a challenge (or challenges) identified by the SDGs and relevant in its market, either directly through the core product or service, or indirectly through the way the company differentiates its core product or service”. KKR’s another positive screening criterion is to identify “a company whose positive contributions towards the SDGs are measurable and reportable using credible third-party metrics”. This example shows how SDGs as a reference framework offer a valuable tool to impact investors to identify and select investment projects with significant and measurable positive impact potential.

4.3 Impact due diligence

Investment projects that pass the initial screening are selected for due diligence. The results of due diligence help investors decide whether to invest in a specific project or not. During the due diligence stage, first, reference frameworks enable investors to conduct a holistic and

rigorous ex-ante impact assessment by identifying the critical dimensions of impact to be assessed regarding an investment project and providing guidance on how to assess these impact dimensions. Here, a major reference framework is the Impact Management Project (IMP)⁵ framework which recommends and guides investors to assess the potential impact of an investment project from five important dimensions: what, who, how much, contribution, and risk. The first dimension is *what* that defines what the intended impact is. The *who* dimension identifies “the stakeholders who benefit from the positive outcome”. The third dimension is *how much* that determines “the magnitude of the impact outcomes” in terms of scale, depth, and duration. The *contribution* dimension assesses “whether the company’s efforts lead to better outcomes than what would have happened otherwise”. The final dimension is *risk* which mainly looks at how “the asset managers assess the likelihood of delivering the expected impact outcome”. Overall, the IMP framework provides investors with a practical tool for assessing the expected impact of investment projects holistically and rigorously, thus enabling them to better understand whether potential investment projects could meet their impact goals.

Second, during the due diligence stage, reference frameworks are also used to undertake a dedicated ex-ante impact risk assessment, especially assessing the risk of creating a negative impact. Here, major reference frameworks are IFC Performance Standards on Environmental and Social Sustainability (IFC Performance Standards)⁶, IFC Environmental and Social Categorization (IFC E&S Risk Categorization)⁷, and World Bank Group Environmental, Health, and Safety (EHS) Guidelines⁸. These reference frameworks provide investors with a solid structure and guidance to comprehensively identify, assess, and categorize the social and

⁵ See <https://impactmanagementproject.com/impact-management/impact-management-norms/>

⁶ See https://www.ifc.org/wps/wcm/connect/c02c2e86-e6cd-4b55-95a2-b3395d204279/IFC_Performance_Standards.pdf?MOD=AJPERES&CVID=kTjHBzk

⁷ See https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/es-categorization

⁸ See <https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=nPtguVM>

environmental risks that may arise from investee companies' operations. They cover a wide range of areas, including the negative impact of investee companies' operations on i) their own employees, ii) physical, natural, and cultural environment, and iii) community health, safety, and security. The ex-ante impact risk assessment facilitated by these reference frameworks enables investors to make a more informed decision about proceeding with a specific investment project and monitoring and managing the potential impact risk in the post-investment period. For example, drawing on "IFC's approach to E&S risk categorization" and "IFC Performance Standards", FMO – a Dutch impact investing firm – categorizes its investment projects in different levels. This enables FMO not only to uncover "the main ESG risks" that a potential investee company is exposed to but also to assess "the quality of its risk management and mitigation measures".

4.4 Impact measurement

Reference frameworks are also used to measure and monitor impact performance. Here, major reference frameworks used are Impact Reporting and Investment Standards (IRIS+)⁹ and Harmonized Indicators for Private Sector Operations (HIPSO)¹⁰. These reference frameworks help impact investors identify an appropriate set of standard metrics aligned with their strategic impact objectives and provide guidelines for implementing them. As a result, IRIS+ and HIPSO enable investors to design and implement a consistent and comparable impact measurement system to deliver their impact strategies. Indeed, impact measurement systems built on IRIS+ and HIPSO frameworks enable investors not only to track impact performance at the investee level and portfolio level consistently but also to compare impact performance across portfolio companies over time. For example, SEAF uses the IRIS+ framework to quantify "the baseline level of impact and goals" for each investment project. This allows SEAF to measure its

⁹ See <https://iris.thegiin.org/>

¹⁰ See <https://indicators.ifipartnership.org/>

investments' impact through “comparable and credible data best practices” across several impact themes (e.g., job creation). In the same vein, the IRIS+ framework enables TriLinc to measure both “portfolio-wide and borrower-company specific” impact objectives in a consistent way.

However, IRIS+ and HIPSO as reference frameworks have limitations in that they do not always offer standard metrics to capture all impact objectives. In that case, impact investors develop additional customized metrics, which are used alongside standard metrics drawn from IRIS+ and HIPSO frameworks. For example, Denham International Power creates “bespoke internal metrics” where its impact objectives are not covered by IRIS+ and HIPSO frameworks.

4.5 Accountability for impact performance

Reference frameworks also play important roles regarding accountability for impact performance in impact investing organizations. Specifically, they provide investors with a practical tool to hold investee companies accountable for achieving the expected impact performance. In this regard, major reference frameworks are IFC Performance Standards, UN Guiding Principles on Business and Human Rights¹¹, and UN Global Compact Principles¹². These reference frameworks enable investors to “establish the specific client requirements” in the post-investment period, which are also “widely accepted standards in the international finance community”. That is, they provide investors with tangible and widely accepted activities as the basis for holding investee companies accountable for impact performance. For example, BNP Paribas Asset Management holds its investee companies accountable “to meet their fundamental obligations” in the areas of human and labor rights and environmental protection in line with the UN Global Compact Principles. Indeed, these reference frameworks are often used as a guide to prepare the investment contracts/agreements, thus offering

¹¹ See https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf

¹² See <https://www.unglobalcompact.org/what-is-gc/mission/principles>

investors a solid basis for (formally) establishing investee accountability for potential impact shortfall and taking corrective actions. For example, FullCycle draws on IFC Performance Standards to develop investment contracts to ensure that investee companies are adequately complying with appropriate social and environmental performance standards.

In addition to establishing investee accountability for impact performance, reference frameworks also provide an effective tool to discharge investors' accountability for impact performance to wider stakeholders. Here, major reference frameworks are IRIS+ and HIPSO. They offer a valid and widely accepted structure to evaluate and report investors' own actions. Indeed, impact investors adopt reference frameworks such as IRIS+ and HIPSO that are "generally accepted measurement tools" in impact investing in order to evaluate and report their actions based on these frameworks, thereby holding themselves "accountable on market leading measurement standards". Such a practice is considered helpful to effectively discharge investors' accountability to stakeholders, since it not only brings "transparency and accountability" in their "financing and investments" but also "allows stakeholders to assess" whether investors are "fulfilling" their "development mandate". For example, Proparco draws on IRIS+ and HIPSO frameworks to "evaluate and report on the impact" of its own action in order to "improve accountability". In the same vein, for STOA Infra & Energy, IRIS+ and HIPSO offer "a pragmatic framework" to measure and report on "its own performance in ways that reinforce trust" and expand STOA's "license to operate".

5. Discussion

5.1 A process perspective of using reference frameworks in impact investing

This study offers a process perspective of using reference frameworks to manage impact performance in impact investing organizations. In particular, we show how impact investors

use various reference frameworks to inform their impact performance management activities throughout the investment lifecycle (see Table 3).

--- Insert Table 3 around here ---

In impact investing organizations, the first activity of impact performance management starts with developing impact strategies and objectives. Here, investors use SDGs as a major reference framework, playing two interrelated yet different roles. First, SDGs play a strategy-building role. They help investors develop meaningful impact strategies and objectives by identifying the most impactful areas and regions for their investments to focus on. Second, as a reference framework, SDGs also play an ex-post strategy validation role. Here, investors do not necessarily use SDGs to develop their original impact strategies and objectives. Instead, they use SDGs to ex-post validate the meaningfulness of their original impact strategies and objectives by demonstrating the ex-post alignment between impact strategies/objectives and SDGs via various tools (e.g., mapping exercises).

Next, impact investors use reference frameworks during initial project screening, where reference frameworks play two major roles – facilitating negative screening to avoid negative impact risk and enabling positive screening to enhance positive impact potential. For negative screening, major reference frameworks are IFC Exclusion List and Harmonized EDFI Exclusion List. They help investors identify and avoid investment projects that are at risk of creating a significant negative impact, thus avoiding/mitigating negative impact risk. However, for positive screening, SDGs are a major reference framework that enables investors to identify and select investment projects that can generate significant and measurable positive impact, thus enhancing the chance of attaining higher impact performance.

Following the initial project screening, impact investors use reference frameworks in the impact due diligence process. Here, reference frameworks enable investors to undertake a

holistic and rigorous ex-ante impact assessment by identifying the critical dimensions of impact to be assessed and providing guidance on how to assess them. In this regard, a major reference framework is the IMP framework that guides investors to assess the potential impact of an investment project considering five dimensions. During the impact due diligence process, reference frameworks also help investors conduct a comprehensive ex-ante impact risk assessment by identifying, assessing, and categorizing the social and environmental risks that may arise from investee companies' operations. In this regard, major reference frameworks are IFC Performance Standards, IFC E&S Risk Categorization, and World Bank Group EHS Guidelines.

Next, during the impact measurement and monitoring phase, major reference frameworks are the IRIS+ and HPSO frameworks. They enable investors to design and implement consistent and comparable impact measurement systems to deliver impact strategies by identifying a set of standard metrics in alignment with strategic impact objectives and providing guidelines on their implementation.

Finally, reference frameworks are used to ensure accountability for impact performance in the impact investing space. They play two major roles. First, reference frameworks such as IFC Performance Standards and UN Guiding Principles on Business and Human Rights help establish investee accountability for impact performance by providing investors with tangible and widely accepted activities as the basis for holding investee companies accountable for impact shortfall and taking corrective actions. Second, reference frameworks such as IRIS+ and HPSO help discharge investor accountability for impact performance to wider stakeholders by offering a valid and widely accepted structure to evaluate and report whether investors are fulfilling their development mandate.

The above discussion contributes to the impact investing literature. Although the literature on impact performance management in impact investing is growing (e.g., Lall, 2019; Ormiston, 2019), only a few studies have provided some discussion on using reference frameworks to manage investments' impact performance (see Emerson, 2003; Chen and Harrison, 2020). However, these studies' discussions are mainly limited to briefly explaining the advantages and/or disadvantages of a few reference frameworks. We contribute by providing a detailed account of using reference frameworks to manage investments' impact performance. Indeed, ours is the first comprehensive study that depicts how impact investing firms use different reference frameworks to manage impact performance throughout the investment lifecycle. In this way, we also respond to calls for advancing our understanding of the tools and standards that impact investors can and/or do use to better manage their impact performance (Islam, 2022a; OECD, 2019).

Furthermore, although prior impact investing literature documents the popularity of the Social Return on Investment (SROI) framework to measure impact performance in the impact investing space (see Emerson, 2003; Geobey *et al.*, 2012), none of the studied impact investing organizations have mentioned using this framework. This observation is in line with Chen and Harrison (2020, p. 4) who found that, in the impact investing space:

most of the impact measurement tools mentioned in the academic literature - such as the Economic Rate of Return (ERR), the theory of change, and regression discontinuity design - are not used much by practitioners. In contrast, the known tools from the international organizations are more popular, like the United Nations Sustainable Development Goals ...

This suggests that, as a reference framework to inform impact measurement and monitoring process, the SROI framework may have lost its popularity or relevance to emerging and more advanced frameworks such as IRIS+ and HIPS0. A potential reason for this could be the influence of industry networks (e.g., Global Impact Investing Network) and global bodies (e.g., IFC) to promote new impact measurement frameworks such as the IRIS+ framework in the

impact investing space (see Global Impact Investing Network, 2019; International Finance Corporation, 2019). Having said that, these reference frameworks have limitations in that they do not always offer a standard set of metrics to cover all strategic impact objectives. This suggests that investors contemplating using reference frameworks such as IRIS+ and HIPSO need to be aware that they may need to develop customized metrics to better capture their unique impact objectives that available standard metrics may not adequately cover.

5.2 Management accounting practices and potential industry effects

Management accounting literature on performance management (e.g., (Speckbacher *et al.*, 2003; Wiersma, 2009; Kaplan and Norton, 2006) shows that some of the major reference frameworks used to inform organizational performance management activities in traditional settings (e.g., manufacturing, retail, not-for-profits) are the BSC, the strategy map, and the performance prism. However, in a non-traditional setting like impact investing, we observed that some of the major reference frameworks used by impact investors to inform different impact performance management activities are SDGs, IFC Performance Standards, IMP framework, IFC Exclusion List, and IRIS+. This suggests that reference frameworks that are suitable to inform performance management activities in a traditional setting are not suitable in a non-traditional setting such as impact investing.

Regarding the potential industry effect on management accounting practice, Messner (2016, p. 103) raises the question “whether industry matters for management accounting practice”. Noting the little explicit discussion available in the literature in this regard, Messner (2016, p. 108) encourages researchers to examine management accounting practices in “industries with rather distinctive sets of practices” to uncover potential new insights. Our study is a step in that direction. It appears that impact investing industry specifics have led to distinct management accounting practices such as the use of specific reference frameworks to inform impact performance management activities in impact investing organizations.

For example, the impact investing industry has specific operational procedures such as initial project screening, impact due diligence, and monitoring impact performance at the investee company level, which are missing in traditional settings like manufacturing firms. Furthermore, international bodies such as United Nations and IFC have some influence on the operations of impact investments (International Finance Corporation, 2019) – a phenomenon that is generally missing in traditional settings like retail firms. For example, as a reputed international organization, IFC has put forward the IFC Exclusion List, which has become a common practice for many impact investing firms to adopt during initial project screening. Overall, we suggest that the types of reference frameworks used to inform performance management activities in the impact investing setting are different from the traditional settings mainly because of the specific operational procedures, norms, and practices associated with the impact investing setting. This demonstrates the potential industry effects on management accounting practice.

Furthermore, the industry effect on management accounting practice can be seen within the investment industry itself. For example, in the *impact investing industry*, achieving desired impact performance is a major success criterion (Islam, 2022a). Hence, we have observed several impact-oriented reference frameworks (e.g., IFC Performance Standards, IFC Exclusion List, SDGs) that are used throughout the investment lifecycle to manage investments' impact performance. However, such reference frameworks are missing in the *traditional investing industry* (e.g., private equity industry), since financial returns are the only success criterion in that industry (see Nama and Lowe, 2014; Bedford and Ditillo, 2022; Metrick and Yasuda, 2011). As such, in the traditional investment industry, the common reference frameworks used are internal rate of returns and earnings multiples (Nama and Lowe, 2014; Bedford and Ditillo, 2022; Metrick and Yasuda, 2011). This further highlights how industry specifics in the impact investing industry and the traditional investing industry have

led to distinctive management accounting practices (i.e., specific reference frameworks in our setting).

6. Conclusion and future research

This paper examines how impact investing organizations use reference frameworks to manage their impact performance. We find that reference frameworks are ubiquitous in managing impact performance in impact investing organizations and play several major roles in informing different impact performance management activities. We highlight the major reference frameworks impact investors use to inform different impact performance management activities, their roles, and how they fulfill them.

The current study offers several interesting future research opportunities. For example, future research could examine the challenges an impact investing organization faces while using various reference frameworks to manage impact performance, and how it should and/or does address these challenges. Also, as the current study shows, reference frameworks are expected to have a positive effect on impact goal attainment in the impact investing space. However, at times, reference frameworks may also create a negative impact on impact performance management. This conjecture is in line with prior research documenting the unintended consequences of impact scaling strategies in the social impact space (Islam, 2022c, 2020). Therefore, future research could investigate whether and when reference frameworks might have unintended consequences on impact goal achievement in impact investing.

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Table 1. Data collection

#	Impact investing organization	Headquarter	Disclosure statement (Year)
1	Actis	UK	2020
2	Acumen Capital Partners	USA	2020
3	Adenia Partners	Mauritius	2021
4	Albright Capital Management	USA	2020
5	AlphaMundi Group	Switzerland	2020
6	Amundi	France	2020
7	AXA Investment Managers	France	2020
8	Belgian Investment Company	Belgium	2020
9	Big Society Capital	UK	2021
10	Blue like an Orange Sustainable Capital	USA	2020
11	BlueOrchard Finance	Switzerland	2020
12	BNP Paribas Asset Management	France	2020
13	CAF	Multilateral	2020
14	Calvert Impact Capital	USA	2020
15	Capria Ventures	USA	2020
16	Cardano Development	Netherlands	2020
17	CDP	Italy	2019
18	CDC Group	UK	2020
19	Christian Super	Australia	2020
20	Community Investment Management	USA	2020
21	COFIDES	Spain	2020
22	Cordiant Capital	Canada	2020
23	Credit Suisse	Switzerland	2020
24	DEG	Germany	2020
25	Denham International Power	USA	2020
26	Developing World Markets	USA	2020
27	Development Partners International	UK	2020
28	DWS Group	Germany	2020
29	Earth Capital	UK	2021
30	Egyptian-American Enterprise Fund	USA	2020
31	European Bank for Reconstruction and Development	Multilateral	2021
32	European Development Finance Institutions	Multilateral	2020
33	European Investment Bank	Multilateral	2020
34	Finance in Motion	Germany	2020
35	FinDev Canada	Canada	2020
36	Finnfund	Finland	2020
37	Flat World Partners	USA	2020
38	FMO - Dutch Development Bank	Netherlands	2021
39	Foundation Corporation Holdings	UAE	2021
40	FullCycle	USA	2020
41	I&P	France	2020
42	IDB Invest	Multilateral	2020
43	IFC Asset Management Company	Multilateral	2021
44	Impact Bridge	Spain	2021
45	Incofin Investment Management	Belgium	2020

46	INOKS Capital	Switzerland	2020
47	International Finance Corporation	Multilateral	2021
48	Investing for Development	Luxembourg	2020
49	Islamic Corporation for the Development of the Private	Saudi Arabia	2020
50	Japan International Cooperation Agency	Japan	2020
51	Kohlberg Kravis Roberts & Co.	USA	2020
52	LeapFrog Investments	Mauritius	2020
53	LGT Venture Philanthropy Foundation	Switzerland	2021
54	Lightrock (LGT Lightstone)	UK	2020
55	MicroVest Capital Management	USA	2021
56	MIGA	USA	2021
57	Mirova	France	2021
58	Mountain Nazca	Mexico	2021
59	Neuberger Berman	USA	2020
60	Norfund	Norway	2020
61	Nuveen, a TIAA company	USA	2021
62	Obviam	Switzerland	2021
63	OeEB	Austria	2021
64	Partners Group	Switzerland	2020
65	PG Impact Investments	Switzerland	2020
66	Phatisa Group	South Africa	2020
67	Proparco	France	2020
68	Prudential Financial	USA	2020
69	Quona Capital	USA	2021
70	responsAbility Investments	Switzerland	2020
71	RockCreek	USA	2020
72	Sarona Asset Management	Canada	2020
73	SEAF	USA	2021
74	SIFEM	Switzerland	2021
75	STOA Infra & Energy	France	2020
76	Swedfund	Sweden	2020
77	Symbiotics	Switzerland	2020
78	The Investment Fund for Developing Countries	Denmark	2020
79	The Osiris Group	Hong Kong	2020
80	The Private Infrastructure Development Group	UK	2020
81	The Rise Fund	USA	2020
82	TriLinc Global	USA	2021
83	Trill Impact	Sweden	2021
84	Triple Jump	Netherlands	2020
85	U.S. International Development Finance Corporation	USA	2020
86	UBS Group	Switzerland	2020
87	UOB Venture Management	Singapore	2020
88	VentureWave Capital	Ireland	2020
89	Water.org	USA	2020
90	WaterEquity	USA	2020
91	Zurich Insurance Group	Switzerland	2020

Table 2. Exemplary quotes regarding the use of reference frameworks in impact performance management activities

Impact performance management activities	Roles of reference frameworks	Exemplary quotes
Impact strategy and objective development	Developing meaningful impact strategies and objectives	We have adopted the UN Sustainable Development Goals (SDGs) as an overarching guide to test the credibility, relevance, scale of impact and contributions of our investments to the sustainable development needs of people and planet. We use the SDGs to identify global needs and regions where our capital and other inputs are needed to deliver meaningful impact. (AXA Investment Managers)
	Ex-post validating the meaningfulness of impact strategies and objectives	For each Nuveen impact fund, strategy, or portfolio we define a set of impact themes ... The themes and guidelines are based on in-house expertise and available third-party research ... All themes were defined based on broadly recognized social and environmental challenges prior to the release of the Sustainable Development Goals, but have since been aligned using logic models ... to specific SDG targets. (Nuveen)
Initial project screening	Facilitating negative screening to avoid negative impact risk	The ESG exclusion lists for each responsAbility investment product covers, at minimum, industries and activities listed in the IFC exclusion list ... Prior to any investment, all potential investee companies are screened against these exclusion lists. No investments will take place for any product if the potential borrower is engaged in excluded activity (e.g. named as terrorists or on any financial sanctions lists; involved in harmful or exploitative forms of forced labour or harmful child labour; production or trading of weapons and munitions; involved in money laundering and terrorism financing; not respecting human rights, etc.). (responsAbility Investments)
	Enabling positive screening to enhance positive impact potential	[We invest] in companies whose core products or services make measurable contributions to locally relevant SDGs. ... [Some of our] criteria for evaluating impact are [to select] ... a company [i] whose business model contributes a solution to a challenge (or challenges) identified by the SDGs and relevant in its market, either directly through the core product or service, or indirectly through the way the company differentiates its core product or service ... [and ii] whose positive contributions toward the SDGs are measurable and reportable using credible third-party metrics. (Kohlberg Kravis Roberts & Co.)
Impact due diligence	Undertaking a holistic and rigorous ex-ante impact assessment	In a next step [during due diligence], the impact assessment adopts the IMP framework, which considers five dimensions of impact – What, How much, Who, Contribution and Risk. In asking relevant questions for each of these dimensions, Partners Group evaluates whether an investment meets ... [its] impact goals. (Partners Group)
	Conducting a comprehensive ex-ante impact risk assessment	FMO undertakes E&S due diligence on all its investments, assessing the client's ability and commitment to achieve E&S outcomes consistent with the IFC Performance Standards over a reasonable period. ... FMO categorizes its investments in different levels of Environmental and Social (E&S) risk, similar to IFC's approach to E&S risk categorization ... For direct investments, risk categorization is based on the client's

		activity, IFC Performance Standards triggered transactions and prevailing country specific ESG challenges. With regard to financial institutions the risk categorization is made on the basis of the banks existing or proposed portfolio, IFC Performance Standards triggered transactions and prevailing country-specific sensitive issues. During due diligence FMO executes a thorough ESG assessment on its potential clients. This enables FMO to identify the main ESG risks and strengths that a client is exposed to and to assess the quality of its risk management and mitigation measures. (FMO)
Impact measurement	Designing and implementing a consistent and comparable impact measurement system to deliver impact strategy	SEAF quantifies the baseline level of impact and goals for each company using industry-standard IRIS+ metrics ... Industry-standard IRIS+ metrics allow SEAF to measure impact through comparable and credible data best practices. SEAF uses some common IRIS+ metrics across all investees to measure themes such as job creation and taxes paid, while selecting other IRIS+ metrics in partnership with investees to measure impact tailored to their specific industry, such as carbon emissions avoided/offset by a renewable energy company. (SEAF)
Accountability for Impact Performance	Establishing investee accountability for impact performance	FullCycle will utilize the IFC Performance Standards to monitor and identify potential ESG risks of platforms and projects. ... If a performance standard is triggered by the operation of the potential investment, FullCycle will engage in a review and site visit (as needed) with the potential investee to assess compliance. If the investee is in non-compliance, FullCycle will work with the prospective management to develop a corrective action plan and stipulate corrective action as a contractual requirement. (FullCycle)
	Discharging investor accountability for impact performance	To track whether the investments achieve the effects STOA expects to deliver, STOA measures progress against 65 metrics, selected from standard catalogues (HIPSO and IRIS). The set of metrics provides a pragmatic framework to give substance to the different levels of the Theory of Change. ... This helps STOA report on its own performance in ways that reinforce trust and expand STOA's "license to operate". (STOA Infra & Energy)

Table 3. Reference frameworks and impact performance management in the impact investing industry

Impact performance management activities	Major reference frameworks used	Roles of reference frameworks	How reference frameworks fulfill roles
Impact strategy and objective development	<ul style="list-style-type: none"> • UN Sustainable Development Goals (SDGs) 	<ul style="list-style-type: none"> • Developing meaningful impact strategies and objectives 	<ul style="list-style-type: none"> • By identifying the most impactful areas and regions for investments to focus on
		<ul style="list-style-type: none"> • Ex-post validating the meaningfulness of impact strategies and objectives 	<ul style="list-style-type: none"> • By demonstrating the ex-post alignment between the original impact strategies/objectives and reference frameworks (SDGs) via various tools (e.g., mapping exercises)
Initial project screening	<ul style="list-style-type: none"> • IFC Exclusion List • Harmonized EDFI Exclusion List 	<ul style="list-style-type: none"> • Facilitating negative screening to avoid negative impact risk 	<ul style="list-style-type: none"> • By identifying and avoiding investment projects that are at risk of creating significant negative impact
	<ul style="list-style-type: none"> • SDGs 	<ul style="list-style-type: none"> • Enabling positive screening to enhance positive impact potential 	<ul style="list-style-type: none"> • By identifying and selecting investment projects that have the potential to generate significant and measurable positive impact
Impact due diligence	<ul style="list-style-type: none"> • Impact Management Project (IMP) framework 	<ul style="list-style-type: none"> • Undertaking a holistic and rigorous ex-ante impact assessment 	<ul style="list-style-type: none"> • By identifying the critical dimensions of impact to be assessed and providing guidance on how to assess them
	<ul style="list-style-type: none"> • IFC Performance Standards on Environmental and Social Sustainability (IFC Performance Standards) • IFC Environmental and Social Categorization (IFC E&S Risk Categorization) • World Bank Group Environmental, Health, and Safety (EHS) Guidelines 	<ul style="list-style-type: none"> • Conducting a comprehensive ex-ante impact risk assessment 	<ul style="list-style-type: none"> • By identifying, assessing, and categorizing the social and environmental risks that may arise from investee companies' operations
Impact measurement	<ul style="list-style-type: none"> • Impact Reporting and Investment Standards (IRIS+) • Harmonized Indicators for Private Sector Operations (HIPS0) 	<ul style="list-style-type: none"> • Designing and implementing a consistent and comparable impact measurement system to deliver impact strategy 	<ul style="list-style-type: none"> • By identifying a set of standard metrics in alignment with strategic impact objectives and providing guidelines on their implementation

Impact performance management activities	Major reference frameworks used	Roles of reference frameworks	How reference frameworks fulfill roles
Accountability for impact performance	<ul style="list-style-type: none"> • IFC Performance Standards • UN Guiding Principles on Business and Human Rights • UN Global Compact Principles 	<ul style="list-style-type: none"> • Establishing investee accountability for impact performance 	<ul style="list-style-type: none"> • By providing tangible and widely accepted activities as the basis for holding investee companies accountable for impact shortfall and taking corrective actions
	<ul style="list-style-type: none"> • IRIS+ • HIPSO 	<ul style="list-style-type: none"> • Discharging investor accountability for impact performance 	<ul style="list-style-type: none"> • By offering a valid and widely accepted structure to evaluate and report whether investors are fulfilling their development mandate

Appendix 1. A sample Disclosure Statement

The full Disclosure Statement of Partners Group can be seen from the below link:

https://www.partnersgroup.com/fileadmin/user_upload/Files/ESG_and_Corporate_Responsibility_PDFs/Operating_Principles_for_Impact_Management_Partners_Group_Disclosure_Statement_2020.pdf

The below table provides an abridged version of the Partners Group's Disclosure Statement:

<p style="text-align: center;">Define strategic impact objective(s), consistent with the investment strategy</p> <ul style="list-style-type: none">Partners Group is committed to investing responsibly and was one of the first private markets investment firms to become a signatory of the United Nations Principles for Responsible Investment in 2008. Partners Group considers the integration of material environmental, social and governance (ESG) factors into the investment process as a core part of its duty to act in the best interests of its clients and their beneficiaries.In 2018, taking its approach to responsible investment one step further, Partners Group launched a dedicated investment strategy that aims to address global social and environmental challenges by investing exclusively in line with the United Nations Sustainable Development Goals (SDGs). In particular, the SDGs relating to education, healthcare, energy access, clean energy, and social inclusion are the focus of the investment strategy. <p style="text-align: center;">Manage strategic impact and financial returns at the portfolio level</p> <ul style="list-style-type: none">As part of the impact investment strategy, we have established the PG LIFE Impact Committee. The Impact Committee is the gate keeper of individual investments included in the strategy to ensure alignment with the impact mission, review impact assessments, and recommend inclusion or exclusion for each potential investment. In addition, the Impact Committee regularly reviews the quality and consistency of the strategy's impact measurement framework and methodology to ensure any necessary remedial measures are taken.Partners Group manages impact achievement through its impact screening and due diligence process as part of its impact investment strategy. Investments are required to meet minimum inclusion criteria at the screening stage. At the diligence stage, a standardized impact assessment is conducted for each investment. The Impact Committee then considers and discusses the impact assessment, drawing on ratings for each of the IMP's five dimensions of impact to inform its decision-making. <p style="text-align: center;">Establish the investor's contribution to the achievement of impact</p> <ul style="list-style-type: none">Through the impact investment strategy, Partners Group aims to bring scale to impact and signal that measurable impact matters, leveraging its governance rights to actively engage and imbue "mainstream" management teams with impact sensibilities and effective impact management capabilities; and using its resources to improve the quality of impact due diligence, measurement, and reporting.The strategy has a systematic process to assess and quantify its expected contribution to investments in the due diligence process. The assessment draws on a scoring rubric that characterizes contribution using the IMP's financial and non-financial channels of investor contribution, including signaling the importance of impact, engaging actively with varying degrees of governance rights, and growing undersupplied capital markets. <p style="text-align: center;">Assess the expected impact of each investment, based on a systematic approach</p> <ul style="list-style-type: none">If an investment opportunity aligns with the objectives of the strategy, Partners Group's impact due diligence starts with the development of a logic model for that investment, linking the investment to potential outputs, outcomes and, ultimately, SDG impacts. Logic models help set out how society experiences the impacts

generated by the activities of a company or asset, both positive and negative. Throughout the impact assessment of an investment opportunity, Partners Group works closely with an external consultant to take advantage of their industry and impact expertise.

- In a next step, the impact assessment adopts the IMP framework, which considers five dimensions of impact – What, How much, Who, Contribution and Risk. In asking relevant questions for each of these dimensions, Partners Group evaluates whether an investment meets PG LIFE's impact goals. Investments are rated on a 1-5 scale (from low to high) for each IMP dimension, with more in-depth rating scales developed for priority SDG targets. Partners Group and its external consultant evaluate a range of data – drawn from the assets themselves, from the local context and from academic research – to score investments against these rating scales.

Assess, address, monitor, and manage the potential negative effects of each investment

- The impact investment strategy is built on the strength of Partners Group's existing investment process that thoroughly integrates ESG considerations. With years of experience in working directly with management teams to conceive and execute defined value creation plans over a multi-year ownership period, Partners Group establishes ESG engagements with its portfolio companies to improve the management and measurement of ESG topics. For investments included within the strategy, through these value creation plans, it aims to either mitigate ESG risks that could detract from the achievement of SDG targets, or take advantage of opportunities to further increase the impact of an investment.
- Partners Group has also developed specific tools and processes to ensure thorough integration of ESG factors throughout the entire investment process. For example, during the screening stage, the firm's Responsible Investment Screening Framework provides investment professionals with a clear basis for assessing the potential ethical or reputational risks of a given investment. During the due diligence stage, Partners Group identifies ESG risks and opportunities through its proprietary ESG Due Diligence Assessment tool and through specialist consultants.

Monitor the progress of each investment in achieving impact against expectations and respond appropriately

- Within 100 days of an investment closing, as part of the impact investment strategy, we conduct an onboarding session with the asset's senior management to fully introduce the impact investment and management concept and its strategic impact intent. The impact assessment is shared and discussed with management to ensure alignment on the logic model, the core impact metrics, and the ways in which impact integration could add value to the business.
- The onboarding sessions also cover the methods that will be employed for data collection and monitoring, data sources, responsibilities for data collection, and the strategy's reporting requirements. Partners Group also works with a third party service provider to ensure standardized reporting for a number of core metrics.

Conduct exits considering the effect on sustained impact

- Partners Group has not conducted an exit with its impact investment strategy. It will, however, utilize exits as an opportunity to reflect on lessons learned over the period of ownership of the asset in terms of creating, optimising and sustaining positive impact. These learnings will be reflected in the selection of new assets, and the management of current assets. For noteworthy cases, Partners Group may produce impact exit reports, summarising the impact achieved for a specific asset as well as lessons learned. Partners Group will work with internal and external partners to potentially include exit considerations during impact due diligence.

Review, document, and improve decisions and processes based on the achievement of impact and lessons learned

- Partners Group ensures it is meeting its impact objectives through two oversight bodies. The Impact Committee is the gatekeeper of individual investments in the strategy. It ensures alignment with the strategy's impact mission, reviews impact assessments, and recommend inclusion or exclusion for each investment opportunity. In addition, and at least once annually, the Impact Committee will review the quality and consistency of the impact measurement framework and methodology and ensure any necessary remedial measures are taken.