



Master

2022

Open Access

This version of the publication is provided by the author(s) and made available in accordance with the copyright holder(s).

What are the main challenges in the processes of designing a monitoring tool for sustainable finance in international organizations?

Celander, Malou Sophie

How to cite

CELANDER, Malou Sophie. What are the main challenges in the processes of designing a monitoring tool for sustainable finance in international organizations? Master, 2022.

This publication URL: <https://archive-ouverte.unige.ch/unige:162544>

Internship Report

What are the main challenges in the processes of designing a monitoring tool for sustainable finance in international organizations?

Malou Sophie Celandier

Student number: 21-343-751

Academic Supervisor: Matteo Tarantino

Internship Supervisor: Joseph Clements

MSc in Innovation, Human Development, and Sustainability

University of Geneva

Report Submission date: 20 June 2022

Defense date: 11 July 2022

Number of words: 9,757

Pages: 46 (incl. appendices, title page, etc.)

Reference system: APA

ACKNOWLEDGEMENTS

I would first like to thank my academic advisor, Matteo Tarantino, for his valuable advice and input throughout the entire writing and research process and for always being available to give feedback when I was in a trouble spot. Without Matteo's help with the Python code, we would have had to spend countless hours manually inputting data; we are all grateful for this.

I would also like to thank Joseph Clements and Yongfu Ouyang for the great opportunity of interning at the United Nations Conference on Trade and Development. This was a profound learning opportunity and I appreciate your willingness to teach us about the organization and sustainable finance.

And lastly, a profound thanks to Samuel Ugo Ringier for agreeing to be interviewed for the report and being an excellent co-intern and amazing friend. Sam's positive attitude and humor was appreciated throughout the entire internship.

Author

Malou Sophie Celander

Abstract

In this report, I will examine the main challenges international organization face when designing a monitoring tool for sustainable. I apply one case from an internship at the United Nations Conference on Trade and Development. The research employs literature regarding sustainable finance, international organizations & institutions, data quality & transparency, and monitoring performance in sustainable finance. The research method is an auto-ethnographic identifying the main challenges through a chronologically written narrative in five stages from conception to reporting. The major findings reveal the challenges in designing a monitoring tool are twofold – the institutional framework and the sustainable finance academic field. The United Nations Conference on Trade and Development is subject to the United Nations institutional framework where compartmentalization of skills, maintaining outdated practices, and lack of resources causes challenges. The process of designing monitor tools for sustainable finance faces challenges from the academic field that lacks objective, flexible measures and quantifying qualitative data is a source of difficulty. To solve this, I suggest modernizing and dedicating more time and resources to further research within monitoring sustainable finance. Further research regarding modernizing the United Nation's institutional framework and accurate, objective, and flexible sustainable finance indicators is essential to overcoming these obstacles.

Table of Contents

<i>Acknowledgements</i>	2
<i>Abstract</i>	3
<i>1.0 Introduction</i>	5
<i>2.0 Internship</i>	5
<i>2.1 United Nations Conference on Trade and Development</i>	6
<i>2.2 Tasks, Deliverables, & Challenges</i>	6
<i>2.3 Relation to Sustainable Development Goals</i>	7
<i>3.0 Literature Review</i>	8
<i>3.1 Sustainable Finance</i>	8
<i>3.2 International Organizations & Institutions</i>	9
<i>3.3 Data Quality & Transparency</i>	10
<i>3.4 Monitoring Performance in Sustainable Finance</i>	11
<i>4.0 Research Method & Design</i>	12
<i>4.1 Research Method</i>	12
<i>4.2 Research Design</i>	15
<i>4.3 Evaluating Research Quality</i>	16
<i>5.0 Analysis</i>	18
<i>6.0 Discussion</i>	25
<i>7.0 Conclusion</i>	28
<i>8.0 References</i>	29
<i>9.0 Appendix</i>	32
<i>9.1 Appendix A: Questions 1-25</i>	32
<i>9.2 Appendix B: Matrix Questions & Answer Examples</i>	34
<i>9.3 Appendix C: ESG Integration in PPFs and SWFs Heatmap</i>	36
<i>9.4 Appendix D: Python Code for Data Visualization</i>	37
<i>9.5 Appendix E: Transcript of Semi-Structured Interview with Co-intern</i>	40

1.0 Introduction

The finance sector is a key player in advancing sustainable development. If international sustainability goals must be met and financed, accurate and efficient monitoring tools must be in place to track and trace performance. International organizations (IO) within sustainability have a responsibility to monitor this concept. The process for creating a tool to monitor sustainable finance is intricate and involves careful considerations throughout the entire process. The organization's choice of indicators has significance regarding the data's comparison ability, transparency, and quality. Choice of measurements and data aggregation have a large impact on how sustainable finance and sustainable development advancements are conceptualized and monitored. This process of properly monitoring sustainable finance presents an array of challenges specifically in designing this monitoring framework.

Through an internship at the United Nations Conference on Trade and Development (UNCTAD), I seek to uncover the *main challenges in the processes of designing a monitoring tool for sustainable finance in international organizations*. This comprises how to conceptualize and compare performance and which indicators and measurements are applied to track and trace performance. This allows the report to resolve how to improve comparability and monitoring of performance in a sustainable way from conceptualization to reporting. This involves examining how IOs conceptualize and compare sustainable finance performance over time, as well as which indicators and measurements are applied to track and trace performance. First, I present the specifications of my internship including an introduction of the host organization and tasks, deliverables, and challenges as well as the internship's relation to the sustainable development goals (SDG). Then, I conceptualize a literature review consisting of sustainable finance, IOs & institutions, data quality & transparency, and monitoring performance in sustainable finance. After this, the research method and design are introduced with criteria to evaluate research quality. The report concludes with an analysis, discussion, and a conclusion which highlights limitations, implications, and areas for further research.

2.0 Internship

In this section, I present the internship organization and the context of the internship. Then, I describe the tasks and deliverables as well as a reflect on how the internship provided value to both myself and organization and any challenges faced. Finally, the section concludes with the internship's relation to the SDGs.

2.1 United Nations Conference on Trade and Development

UNCTAD is the United Nations' (UN) trade and development body with headquarters in Geneva, Switzerland, and consists of 195 member states and is part of the UN Secretariat reporting to the UN General Assembly and Economic and Social Council (UNCTAD, n.d.). However, the organization has its individual members, leadership, and budget (UNCTAD, n.d.). In 1964, the UN held the first conference on trade and development, this was later institutionalized and became UNCTAD. The main purpose of UNCTAD is to assist developing countries to “participate more equitably in the global economy” and support “efforts to use trade, investment, finance, and technology as vehicles for inclusive and sustainable development” (UNCTAD, n.d., p. 2).

2.2 Tasks, Deliverables, & Challenges

The internship was carried out in the spring semester from January 2022 to June 2022 as an ECTS credit-giving component of the Innovation, Human Development, and Sustainability Master's degree program at University of Geneva. At UNCTAD I interned in the Institutional Investment Facilitation Section, Division on Investment and Enterprise. I was given the position of Sustainable Finance Research Fellow with the main task of drafting the 2022 version of UNCTAD's report titled *How Public Pension and Sovereign Wealth Funds Mainstream Sustainability: Practices of the Frontrunners and a Proposed Integration Framework*. This consisted of mapping sustainability and Environmental, Social, and Governance (ESG) integration of leading public pension funds¹ (PPF) and sovereign wealth funds² (SWF) through research, data collection, analysis, and writing the final report. Other tasks consisted of providing input to UN's 2022 World Investment Report (UNCTAD, 2022). These inputs were adapted from research done on the former report. Other assignments consist of establishing a Sustainable Finance University Network. The network will bring together universities with programs focusing on sustainable finance and promote collaboration in projects and knowledge-sharing within sustainable finance. This will require networking with universities with a focus on sustainable finance and organizational establishment.

¹ Public pension fund (PPF) is a “retirement savings funds for public servants - people employed by state and central government departments, or working in the public sector” (Gordon, 2022)

² Sovereign wealth fund (SWF) is a “state-owned investment fund comprised of money generated by the government, often derived from a country's surplus reserves. SWFs provide a benefit for a country's economy and its citizens” (Estevez, 2020)

The main deliverable is UNCTAD's 2022 report on *How Public Pension and Sovereign Wealth Funds Mainstream Sustainability: Practices of the Frontrunners and a Proposed Integration Framework* so this will be the focus of the report. The questions used for data collection is displayed in Appendix A and an example of the matrix created for each PPF and SWF is given in Appendix B. From this matrix, the aggregated data is visualized in a heatmap shown in Appendix C created from a Python code shown in Appendix D. The internship provided value to both myself and my host organization, UNCTAD. The internship provided me with insights into the UN network and UN processes. The internship also provided value for me through the academic knowledge I have gained from doing research about sustainable finance and ESG-integration as well as investment strategies to integrate sustainability. For UNCTAD, the internship provided value by receiving low-cost work and assistance in the processes of producing the deliverables.

Few challenges arose during the internship. Due to Covid-19 restrictions, remote work was mandatory for most interns. This was a challenge since this meant the primary communication method was through email and online meetings, later we were able to engage in more in-person meetings at the UN headquarter offices in Geneva. The initial research work and process was also very tedious with a sum of approximately 1,250 data points collected from qualitative information. Lastly, it was necessary to make the matrix questions and structure understandable for myself and my co-intern. We had to collaborate to make it efficient and make sense for cooperation between me and my co-intern. This meant a lot of communication was necessary and debriefing on our perceptions of the questions beforehand and during data collection. The main challenges appeared in the processes of creating a monitoring tool for sustainable finance, which is what I go in-depth with in this report.

2.3 Relation to Sustainable Development Goals

Since the internship is carried out at a UN entity, the internship is arguably associated with all SDGs. The sustainable finance area also touches upon all SDGs since the subject is concerned with how to finance the goals. However, to narrow the scope of the relationship to the SDGs, I choose to focus on one goal I consider most significant to the UNCTAD report: SDG 16 Peace, Justice, and Strong Institutions. PPFs and SWFs are institutions with a unique ability to further sustainable development through finance and must have strong ESG reporting and integration. Therefore, it is essential to monitor PPFs and SWFs as key institutions in the financing sustainability. PPFs and SWFs have a significant responsibility to implement

exclusionary strategy and be front-runners in sustainability integration. Since most funds have a long-term investment horizon of 70 years, they have a unique position to also invest in solutions to mitigate the negative consequence of climate change. Strong PPFs and SWFs are essential to solving some of the world's most pressing issues in sustainable development.

3.0 Literature Review

In this section, I will discuss literature concerning sustainable finance, IOs & institutions, data quality & transparency, and monitoring performance in sustainable finance creating the conceptual framework of the report. This research study addresses a major research gap in literature of the processes of monitoring performance in sustainable finance and its respective monitoring tools.

3.1 Sustainable Finance

Sustainable finance has manifested a crucial position midst finance and the SDGs (Kumar et al., 2022). Financing sustainability has also emanated as vital to mitigating the negative effects of climate change and social issues meanwhile allowing for participating in creation of “new technologies and innovative products to cover longlasting needs” (Schäfer, 2012, p. 9). Literature on sustainable finance is vast but according to Kumar et al. (2022), no review has successfully analyzed the full corpus of sustainable finance “without making excessive concessions, wherein overly stringent criteria are imposed to trim the corpus for review to a manageable size for review” (p. 2).

Finance is “well positioned to assist in making strategic decisions on the trade-offs between sustainability goals” and has the unique ability to be a lead player in the low-carbon transition and accelerate the transformation (Schoenmaker, 2018, p. 19). Investors do this by influencing the corporate board with their powerful position and ability to control and direct their portfolio companies' agendas (Schoenmaker, 2018). In many cases, sustainable finance starts by investors excluding companies with negative effects like “companies that sell tobacco, anti-personnel mines and cluster bombs or that exploit child labour” (Schoenmaker, 2018, p. 22). This has recently segued to a stronger focus on reducing carbon emissions by excluding fossil fuel investments (Schoenmaker, 2018). However, even with a sustainability agenda, companies' main purpose is still “to reduce costs and business risks, to improve reputation and attractiveness for new or existing human talent, to respond to new customer demands and segments, and thereby to increase profits, market positions, competitiveness and shareholder

value in the short term” (Schoenmaker, 2018, p. 22). Kumar et al. (2022) establishes a systematic literature review of the subject and remains the most comprehensive review to date.

Cunha et al. (2021) review the area of sustainable finance but remains limited. Cunha et al.’s (2021) review concludes that under-theorization, finance’s short-term nature, and lack of evidence on social and environment aspects are the main challenges. Schäfer (2012) also conveys a review of research within sustainable finance with a focus on finance’s role in advancing sustainability. Schoenmaker (2018) communicates various challenges to adopting and incentivizing sustainable finance. Schoenmaker (2018) outlines these challenges as “insufficient collective effort, a bias towards the short term and aversion to change” (p. 30). Sustainable finance is often used as an umbrella term and interchangeably with concepts like Environment, Social, and Governance (ESG), sustainable investing, green investing, socially responsible investing, and impact investing (Schäfer, 2012). These terms are also used interchangeably in this report. Investors typically use ESG to categorize their investments that aid in sustainable development. The subject has seen a growing number of publications after the Paris Agreement and SDG introduction and will likely continue to grow in the future and introduce more innovative instruments like carbon and climate financing (Kumar et al., 2022).

3.2 International Organizations & Institutions

When referring to ‘international organizations’ (IO) and ‘international institutions’ I adopt Duffield’s (2007) and Simmons & Martin (2002) definitions and conceptualization. According to Duffield (2007), international institutions are defined as “relatively stable sets of related constitutive, regulative, and procedural norms and rules that pertain to the international system, the actors in the system (including states as well as nonstate entities) and their activities” (p. 7-8). Simmons & Martin (2002) adopt John Measheimer’s definition of institutions as “sets of rules that stipulate the ways in which states should cooperate and compete with each other” (Martin & Simmons, 2002, p. 328). They make a distinction between international institutions and IOs and define IOs as “associations of actors, typically states” that “have membership criteria, and membership may entail privileges” these also rely on “constitute ‘corporate actors’ that take positions in the name of their membership” (Martin & Simmons, 2002, p. 329). IOs like the UN typically entail various institutions conveyed as rules (Martin & Simmons, 2002). These definitions complement each other allowing for a comprehensive understanding of IOs and institutions.

3.3 Data Quality & Transparency

Organizations must consider both an individual's subjective perceptions and the objective measurements in data (Pipino et al., 2002). Pipino et al. (2002) define subjective and objective assessments present in data quality and introduce three functional forms to integrate objectivity in data quality metrics. These three functional forms are simple ratio, min or max operation, and weighted average³ and assist in developing data quality metrics in practice (Pipino et al., 2002). Pipino et al. (2002) use information and data interchangeably, which will also be applied in this report. If benchmarks and aggregate performance measures are applied long-term, they can become established across industries like ESG and has become in sustainable finance (Pipino et al., 2002). Pipino et al. (2002) conclude that experience shows “one-size-fits-all” metrics is not a viable solution, rather “assessing data quality is an on-going effort that requires awareness of the fundamental principles underlying the development of subjective and objective data quality metrics” (p. 218).

In Mason & Gupta's (2014) book *Transparency in Global Environmental Governance*, they provide a critical assessment of transparency's role in global environmental governance. This book plays a key role in addressing whether transparency is transforming the field as a solution to the world's environmental problems or if transparency plays a limited role. The succeeding sources in this section 3.3 are co-authors that have written chapters in Mason & Gupta's book *Transparency in Global Environmental Governance*. In the context of their book and my report, transparency is defined as “openness, secured through greater availability of information” (Mason & Gupta, 2014). Biermann & Young (2014) state that “institutions, organizations, and mechanisms by which humans govern their relationship with the natural environment and global biogeochemical systems are utterly insufficient—and poorly understood” (p. vii). In a case study regarding genetically modified organisms (GMO), Gupta (2014) notes that transparency is concocted as a tool for empowerment for recipients since they now bear “powerful to account and/or by facilitating informed choices or effective participation in governance processes” (p. 133). This results in the debate of transparency driving democratization or marketization (Gupta, 2014).

Ehresman & Stevis (2014) discuss whether increased transparency is an effective strategy to reach equitable environmental governance specifically in international finance institutions.

³ See Pipino et al. (2002) for an in-depth description and definition of functional forms.

Ehresman & Stevis (2014) apply the International Finance Corporation (IFC), sister-organization of the World Bank, as a case to examine the effects of the organization's disclosure practices on social liberal environmental justice. Ehresman & Stevis (2014) note that transparency has become "hailed as an important regulatory tool in seeking to forestall and prevent significant environmental harm" (p. 298). After strong public pressure and scrutiny, the IFC has embraced transparency and institutionalized its transparency policies through a Sustainability Framework⁴ and now occupies "a central position in global environmental and social practices with respect to foreign direct investment in the South" (Ehresman & Stevis, 2014, p. 304). Ehresman & Stevis (2014) conclude that "transparency at the IFC does materially advance a social liberal form of international environmental justice" (Ehresman & Stevis, 2014, p. 312-313). The IFC is dedicated to building their monitoring programs, but Ehresman and Stevis (2014) note that there is "no substitute for daily contact between the clients and affected persons and groups" (p. 316).

3.4 Monitoring Performance in Sustainable Finance

There is seemingly no comprehensive literature review regarding how IOs monitor sustainable finance and no defined standard procedure for IOs regarding how IOs should monitor sustainable finance or which tools to utilize. ESG and sustainable development goals are the main methods for investors to monitor their own sustainable investments; this could potentially be adapted to IOs. This modest literature review includes a benchmarking on how IOs monitor sustainable finance practices externally. Due to the scope of the paper, this will be limited to institutions with sustainable finance agendas and comparable to UNCTAD. So far, this small benchmark only includes publications from the IFC and Global SWF. The International Monetary Fund and International Trade Centre were also researched for similar publications, but none were found in the benchmarking exercise. The benchmark is based on the information found from searching their websites and examining their publications, data, and research. The World Bank's open knowledge of publications and research was also investigated to find relevant research to benchmark.

The IFC is the "largest global development institution focused on the private sector in developing countries" and member of the World Bank group (IFC, n.d.). In 2007 report,

⁴ More information about IFC's Sustainability Framework and disclosure policies in Mason & Gupta's (2014) book *Transparency in Global Environmental Governance* chapter 13 by Ehresman & Stevis (2014).

Banking on Sustainability, the IFC reports on trends and argues for the business case of sustainable finance in the banking sector (IFC, 2007a). The report focuses on regional trends and factors driving sustainable banking with the scope of financial intermediaries in emerging markets. The report uses data from a “2005 survey came from 120 financial institutions that had participated in the Competitive Business Advantage workshops between October 2002 and September 2005, covering 43 countries” (IFC, 2007a, p. 8). This report was only published in 2007 and solely relies on survey results. The IFC segmented the methodology into two stages and survey results can be accessed in IFC (2007b). The IFC also published a *Sustainable Finance Practices in South African Retirement Funds* in 2020, which is comparable to the UNCTAD report but only includes South African retirement funds. This report also solely relies on survey answers “with the response from over 150 retirement funds, including almost 100 that provided insights on their green finance allocations” (IFC, 2020, p. iii).

Global SWF are “industry experts that have worked with [PPFs and SWF] investors on the ground for many years, amassing unique knowledge and relationships” with a mission “to promote a better understanding of and connectivity into SWFs and PPF” (Global SWF, 2021). The Global SWF ranks Governance, Sustainability & Resilience of State-Owned Investors including PPFs and SWFs. The organization ranks the funds from 25 question - 10 related to Governance, Transparency and Accountability; 10 concerning Sustainability and Responsible Investing; and five on Resilience and Legitimacy (Global SWF, 2021). The questions are answered through a binary of only ‘Yes’ or ‘No’ and given equal weight. The organization uses a sample of top 100 funds depending on AuM generating 2,500 data points (Global SWF, 2021). The organization does not mention how it collects data.

4.0 Research Method & Design

In this section, I will describe the research method and design applied in the report and evaluate the quality of the research.

4.1 Research Method

Ethnography and participant observation are applied to answer the research question. These research methods are highly related as the “participant observer/ethnographer immerses him- or herself in a group for an extended period of time, observing behaviour, listening to what is said in conversations both between others and with the fieldworker, and asking questions” (Bryman, 2016, p. 432). LeCompte & Schensul (2010) define ethnography as a “systematic

approach to learning about the social and cultural life of communities, institutions [...]” (p. 15). This entails the position that “human behavior and the ways in which people construct and make meaning of their worlds and their lives are highly variable and locally specific” (LeCompte & Schensul, 2010, p. 16). Furthermore, ethnography “assumes that researchers must first discover what people actually do and the reasons they give for doing it before trying to interpret their actions through filters from their own personal experience or theories derived from professional or academic disciplines” (LeCompte & Schensul, 2010, p. 16). The research is *applied ethnographic research* as opposed to *basic ethnographic research* (LeCompte & Schensul, 2010). LeCompte & Schensul (2010) make the distinction that *applied ethnographic research* “focuses on problems that are identified as important by both the researcher and key people in the setting where the research is to take place” (p. 22); whereas *basic ethnographic research* is executed with no plan to solve the addressed problem. *Applied ethnographic research* is also intended to be useful for the organization and other IOs to solve challenges.

Due to the nature of the internship, the research method is considered micro-ethnography, since full-scale ethnography entails a longer period in the field which is not possible with the internship (Bryman, 2016). This allows the research to have a narrow scope and focus on a specified aspect of the research but requires further research in the future. Through micro-ethnography, I was able to observe and contribute to the processes in UNCTAD from start of conception and data collection to publication and reporting. In relation to the social setting and its members, my role was specified as a participating observer, meaning my position as a research fellow allowed me to participate “in group’s core activities but not as a full member” and as a researcher who is “a regular in the vicinity and is involved fully in the principal activities” (Bryman, 2016, p. 442). The research method is also characterized as self-ethnography or auto-ethnography, since I am “using personal experience and reflexivity to examine cultural experiences” (Adams et al., 2017, p. 2). There is no other way to investigate the research question other than participant observation and auto-ethnography since other research methods frame the challenges in a biased manner and do not capture moments of everyday experience and challenges (Adams et al., 2017).

Auto-ethnography possesses a set of advantages and limitations. These are conveyed in a comprehensive literature review by Méndez (2014). The researcher’s personal feelings and beliefs risk the quality of the research if the researcher is not honest and willing to self-disclose (Méndez, 2014). Méndez (2014) indicates that this results in various ethical questions making

auto-ethnography an ethical practice. The research method has also received criticism from various scholars. The method's strong emphasis on self has led to the assessment that it is "self-indulgent, narcissistic, introspective and individualised" (Atkinson, 1997; Coffey, 1999; Méndez, 2014, p. 283). Walford's (2004) criticism is concerned with whether research results from the method accurately present the real events or if it is merely the author's invention. These limitations can lead to inaccurate research result and bias but can be avoided. To eliminate the biases in auto-ethnography, I interview my co-intern as seen in Appendix E. Biases are conveyed in-depth in the succeeding section titled 4.3 Evaluating Research Quality where these criticisms are countered. To circumvent the method's reputation as 'individualized' and 'introspective' I deliberately include insights from my co-intern as well as triangulate data to ensure the highest quality research and guarantee the necessary ethical considerations when applying the method.

According to LeCompte & Schensul (2010) the "most important characteristic of ethnography is that it is rooted in the concept of culture" (p. 22). In this research, the culture and social setting I am researching is IOs, specially UNCTAD. The end product of the research is therefore an interpretation of the social setting and culture and best possible reconstruction of reality under the circumstances (LeCompte & Schensul, 2010). In this social setting, it is crucial to identify my situatedness and positionality and that of the research participants i.e., my colleagues (LeCompte & Schensul, 2010). As a research fellow, I was in one of the lowest positions in the hierarchical structure of the UN along with my co-intern, Samuel Ugo Ringier. My other colleagues at UNCTAD include Joseph Clements, Economic Affairs Officer in Sustainable Investment, and Yongfu Ouyang, Chief of the Institutional Investment Facilitation Section.

One of the main challenges in ethnographic studies is gaining access to the organization or social setting where the research will take place (Bryman, 2016). I gained access to the organization by applying for an internship through the Geneva-Tsinghua Initiative, interviewing for the position, and finally receiving the position. The research is done overtly since it was clear to the host organization that I will be writing an internship report alongside the internship. Since the research question was chosen late in the internship process, reactivity did not pose as an issue to potential changes in participants' behavior. Another issue in ethnography raised by Bryman (2016) is the extent of active or passive participation. In this research, I was a very active participant since my feedback and contributions were sought after

and adopted when relevant and I was working on the report and monitoring tool used to compare the performance and analyze the sustainability practices. Alongside my colleague I was a primary data collector and co-author of the report making participation necessary. I was able to observe and contribute to the entire process from conceptualization, data aggregation, visualization, analysis, reporting, and reception of output. This narrowed the scope of the study from the beginning to a natural end with the report publication.

Throughout the ethnographic study, data has been collected and will be used to answer the research question; in ethnography data is primarily collected from the researcher's eyes and ears (LeCompte & Schensul, 2010). For this study, the data consists of discussions during meetings on Microsoft Teams and at the Palais Des Nations in Geneva, Switzerland, debating how to best tackle the process and deliberations throughout the entirety of the process. The data also comprises email exchanges with reflections on the process as well as my personal recollection. An interview with my co-intern is also provided as a data source. Multiple data sources ensure data triangulation strengthening the research and guaranteeing accurate research conclusions.

4.2 Research Design

The research design in this report takes a realist approach. The purpose of the research is to observe the making of a process and its respective challenges. LeCompte & Schensul (2010) note that “much like naturalists, ethnographic researchers learn through systematic observation in the ‘field’ by interviewing and carefully recording what they see, hear, and observe people doing while also learning the meanings that people attribute to what they do and the things they make” (p. 16). The applied research method, ethnography, is typically unstructured and absent of a hypothesis (Bryman, 2016). The research question is exploratory since it is concerned with identifying and specifying the challenges IOs face as well as explanatory since I seek to clarify why IOs experience these challenges. The research question is answered through inductive reasoning which is typical in ethnographic research studies (LeCompte & Schensul, 2010). In contrast to realism, constructivism is concerned with how reality is interpreted, this is not relevant for the research since I do not examine meaning; I am concerned about describing a process, which is possible through a realist approach.

The term *ethnography* refers to both the research method and writing method in this report. The adopted writing strategy takes a realist approach that requires an “authoritative,

dispassionate account that represents an external, objective reality” since ethnographic text “must not simply present a set of findings: it must provide an ‘authoritative’ account of the group or culture in question” (Bryman, 2016, p. 462-463). When applying Van Maanen’s (1988) ethnographic genres, the writing is done as a combination of realist and confessional tales, these are described as “apparently definitive, confident, and dispassionate third-person accounts of a culture and of the behaviour of members of that culture” and “personalized accounts in which the ethnographer is fully implicated in the data-gathering and writing-up processes” (Bryman, 2016, p. 463). Adler & Adler (2008) provide a categorization of ethnographic writing building on Van Maanen’s (1988) categorization; thus, this study takes a classical and mainstream ethnographic approach to writing since it provides an accessible and persuasive account of the social setting oriented to a wider audience (Bryman, 2016). Due to the nature of the paper, there are various constraints like limited time and access to only one IO. If these constraints were nonexistent, I would increase the sample size of case studies, analyze additional data, and provide more detailed recommendations.

4.3 Evaluating Research Quality

LeCompte & Schensul (2010) and Schwartz & Schwartz (1955) outline how to address and manage potential biases and how to ensure ethnographic data is gathered carefully so it has replicability and of exemplary quality. In ethnographic research and when conducting participant observation, Schwartz & Schwartz (1955) note that “together the observer and the observed constitute a context which would be different if either participant were different or were eliminated” (p. 346). This criticism is insubstantial to the research since the research question was chosen late in the process. My acknowledged biases are threefold. First, I must consider the issue of exclusion since I am observing an institution where I have a stake – my position does not let me speak as openly. However, I regard this issue as insubstantial since I did not encounter any issues during the internship nor any contexts that I decide to consciously exclude. Secondly, there is a subconscious bias of self-serving behavior to minimize my errors and maximize my contribution to the report and organization. This is also insubstantial since I am highly willing to self-disclose and admit any errors. Lastly, I acknowledge that my cultural background and class serves as a source of bias. This background informs how I look at the challenges, issues, and solutions to the problems faced and the necessity of creating a tool to strengthen transparency. To minimize bias, I conduct a semi-structured interview⁵ with my co-

⁵ See Adams (2015) and Wilson (2014) chapter 2 for detailed description of semi-structured interviews.

intern, Samuel Ugo Ringier. Sam and I had the same work assignments and equally present throughout the internship. UNCTAD supervisors were not interviewed since this may have resulted in a conflict of interest. The semi-structured interview is done with the following list of attention foci and themes: data collection method and protocol, resources, criteria, main challenges, and reception. The full interview is available in Appendix E.

To further evaluate the quality of my research, I apply various criteria to ensure the quality of the research. Reliability, replication, and validity are not applied since they are “geared mainly to quantitative rather than to qualitative research” (Bryman, 2016, p. 48). Rather, Guba & Lincoln’s alternative criteria are applied to assess the quality of the research since they adapt reliability and validity criteria for qualitative research; these are trustworthiness, and authenticity (Bryman, 2016). Trustworthiness entails credibility, transferability, dependability, and confirmability; authenticity comprises fairness, ontological authenticity, educative authenticity, catalytic authenticity, and tactical authenticity (Bryman, 2016).

Credibility ensures that the research is carried out in good practice and receiving confirmation from the social world that the researcher accurately comprehends the researched social world (Bryman, 2016). The latter is known as respondent validation and will be accomplished in this research study by discussing the findings with the organization after the finalization of the report. Guba & Lincoln also recommend data triangulation to increase credibility, which is also utilized in this report. Since qualitative research is typically done in smaller sample sizes than quantitative research, transferability ensures that the findings also manifest themselves in other contexts (Bryman, 2016). Geertz (1973) suggests using thick descriptions to accomplish this criterion; these are detailed description of the culture and allows the reader to judge if the findings can be transferred to other milieux. Thick descriptions are provided throughout the paper in sections 2.0 Internship, 4.1 Research Method, and 5.0 Analysis. The research should apply to the whole organization when handling monitoring tools in sustainable finance as well as other IOs to be helpful in facing the challenges during the process. Dependability questions whether the researcher has adopted an ‘auditing’ approach and proves the research’s merit (Bryman, 2016). This is provided in Section 2.0 Internship, 4.1 Research Method, 5.0 Analysis and interview in Appendix E; the entire research process is available to the reader by meticulously explaining the research process and externalities present throughout.

Confirmability demonstrates whether the researcher has acted in good faith (Bryman, 2016). Guba & Lincoln suggest using an auditor, but since this is out of the paper's scope, the auditing approach applied throughout the paper and my willingness to self-disclose accomplishes this criterion (Bryman, 2016).

The authenticity criteria raise a “wider set of issues concerning the wider political impact of research” (p. 393) with affinity to action research according to Bryman (2016). Fairness determines if the research “fairly represent different viewpoints among members of the social setting” (Bryman, 2016, p. 393). This is achieved by thoroughly reiterating the process and describing the viewpoints of the members in the study. Ontological authenticity conveys if the research assists the members of the social setting to better understand their social milieu (Bryman, 2016). The purpose of the research is to provide an understanding of the challenges and suggestions for how to tackle the difficulties. Educative authenticity indicates if the research “help members to appreciate better the perspectives of other members of their social setting” (Bryman, 2016, p. 393). From section 5.0 Analysis, the members of the social setting should receive a greater appreciation of their peers and other members of the social setting. Catalytic and tactical authenticity demonstrates if the research has acted as an impetus and empowered the members of the social setting to change their circumstances and engage in action (Bryman, 2016). The research is also done with the goal of “solving problems or helping to bring about positive change in institutions or communities” so these criteria are crucial to the research by highlighting challenges and providing recommendations and solutions (LeCompte & Schensul, 2010, p. 21).

5.0 Analysis

To analyze the collected data, the data will be presented in a chronological narrative with various stages. The process is outlined in five stages: 1) Conception; 2) Sampling Criteria; 3) Data Aggregation; 4) Visualization; and 5) Reporting.

Conception

The conception stage is based on the prior version of the UNCTAD report published in 2020 titled *How public pension and sovereign wealth funds mainstream sustainability*. This report monitors how the top PPFs and SWFs report on ESG-integration and sustainability. The 2020 report sampled 50 largest PPFs and 30 largest SWFs where only 16 PPFs and 4 SWFs published an ESG report (UNCTAD, 2020). Like Sam also notes in the interview, this year's report saw

a significant jump in the increase of ESG reports. The idea of the report is to monitor how PPFs and SWFs integrate ESG and sustainability in their investment decisions and strategies and collect case studies and best practice examples of the front-runners. We track their performance from what they report in their ESG reports and compare their performance across regions, funds, and indicators. The ongoing publication of this report is also meant to be used for comparison throughout years. The next stages outlines how the organization, myself, and my colleagues made various decisions throughout the process of designing a monitoring tool for monitoring sustainable finance. After this, I will discuss the main challenges in section 6.0 Discussion.

Sampling Criteria

After conceptualizing the research study, the sampling criteria were agreed on. The sampling process is visualized in Figure 1 and explained below. This process was similar to the 2020 report sampling. This year's report saw a very large increase in sample size.

Figure 1: Visualizing Sample Process



The process of retaining the final sample of 47 funds started with all pension funds and sovereign wealth funds. After acquiring all pension funds and sovereign wealth funds, this then led to narrowing the sample to only including *public* pension funds and SWFs. Then, the top 100 based on asset under management (AuM) based on a list from a Global SWF list ranking the top funds by AuM (Global SWF, 2021). Only sampling 100 funds was based on the time and labor available. After finding the top 100 funds based on AuM, each fund was examined to discern if they published an ESG report or not, if they had a substantial amount of ESG information in their annual report, or if their website included mentions of ESG. In the interview, Sam noted that the minimum threshold was in many cases what we would consider the ‘bare minimum’. That is, if the funds have guidelines on not to invest in, for example, weaponry, modern slavery, child trafficking, or child labor. Most funds included in the sample

had an ESG report that they either titled ‘stewardship’, ‘sustainability’, ‘ESG’, or a close synonym to sustainable investing.

Originally, the sample was only meant to be funds with an ESG report, but few times there was negotiation about including a fund, since we also sampled based on website information and annual report. If the fund had a lot of information in their annual report or their website consisted of a significant amount of information comparable to publishing an ESG report, they were also included in the sample. This was primarily a judgment call since we did not have any other guidelines than if we believed it was ‘substantial enough’. We encountered few times that funds had a ‘governance’ report, which we decided to not include, since the funds must have a significant amount of information regarding all aspects of ESG or sustainability. Not all the funds had reports from 2021, so funds that also published a report in later years was still included. This also had a threshold, since a report from 2015 would be considered too old, but 2016 would still be considered to join the final sample.

Data Aggregation

Data aggregation happened in a shared Microsoft Excel spreadsheet that we titled ‘Matrix’ seen in Appendix B and with the funds discussed in the previous stage. The first issue raised in this stage was the difficulty of quantifying qualitative data because we wanted to track the qualitative data from the funds’ ESG reports. Since the data was based on text rather than numbers, this meant we had to create a series of questions that would allow for an objective answer as seen in Appendix A. Another option when writing the report could also be to dig into the specific quantitative measures, for example, how much money the funds invest in green or sustainable companies, or the amount of money spent on green bonds. But the qualitative aspect would be necessary to give an accurate account of the funds’ sustainability integration. The questions we applied in the end were adapted from the previous report’s questions. With those in mind, the adapted and finalized questions for this report’s matrix were established.

We had to consider what the indicators are to measure the funds’ development within sustainability. The issue of measurement in qualitative research made the choice of indicators difficult. Since more funds report on ESG compared to the prior year, we added more questions and new indicators rose. For example, while researching the ESG reports to create the final sample, we came across some funds that also published climate-risk reports. This was added

as a question in the matrix. It was important from the start that the matrix be flexible in this way, since the sample had such distinguishable differences based on a minimal time difference.

We adapted the questions together and made sure that we all understood what was being asked from each question. We had a lengthy meeting concerning the questions and the organization adapted them based on our feedback. We also added and deleted questions in the matrix if we deemed this was necessary. Since the report for UNCTAD is based specifically on how the funds report on ESG integration, it was important to state the questions as objectively as possible regarding what the funds report on. Any mentions of the funds' 'intent' was reformulated to increase objectiveness, since the perception of the funds' intentions would evidently lead to different answers, and we could never know the fund's intentions. The matrix structure and questions allowed us to answer 'yes', 'no', or 'not sure/no information' to the various questions. In the interview, Sam shared the importance of objectiveness in creating the matrix questions and picking the measurements was a vital part of the research since this is what evidently shapes the conclusion and staying objective was difficult.

To collect the data for the matrix, we read through each ESG report with the matrix questions in mind and answering them as we go along. This process got very tedious with some funds having ESG reports with over 150 pages. Even with objective questions, the answers sometimes felt like a judgement-call. Since the qualitative data was being put into a quantitative form, it became difficult when the answer to the question was only to a certain degree. The matrix did not weigh the overall questions so funds that did very little but still did the bare minimum still got a 'yes'. Thus, there was a threshold of the minimum degree of compliance present so the question would be answered 'yes'. The difference between 'no' and 'not sure' also had to be discussed since sometimes there would be no information for us to answer a specific question and this would either mean that the fund did not do the specific act asked for in the question or they just did not report on doing it and this distinction caused difficulty. So, we were unsure whether to assume 'no' if the fund would not mention it.

Reading the reports and collecting the data took a lot longer than originally planned. Due to the long process, we had discussions regarding how to automate the process and if this was even a possibility. We discussed artificial intelligence (AI) as an option to collect the data and answer the matrix questions. However, a lack of skills did not allow us to implement an AI tool. Discussion with the IT department within the UN informed us that this would also take a

long time to administer machine learning of a potential AI tool. Thus, time was also a factor that disallowed the automatization of this stage. Because the process took so long, we also had to get one of our colleagues at UNCTAD to help with collecting data for some of the reports.

In the interview, Sam notes a situation where him and our colleague accidentally read the same ESG report and answered the respective questions. After this, they found that they had answered some questions differently. They then discussed the report and why they answered the questions in that specific manner and then came to a final agreed upon conclusion. Sam notes the possibility of reading the reports twice by separate people. This would be a significant step to decreasing the subjectiveness of the data aggregation stage, but this would require an enormous amount of labor hours if done manually and an AI machine learning tool has not been created. In the interview, Sam also points out that he felt a slight difference in reading the reports at the beginning and at the end. Reading the reports at the beginning, it was a bit easier to get swayed by the funds' fruitful language when communicating their ESG activities. This reminded us to not get carried away by what may turn out to be greenwashing. Also, not to give funds the 'benefit of the doubt' in cases where they did not report on a specific issue, but their report was well written and seemed strong in ESG activities. Sam also conveys the importance of collecting data with a purpose. Figuring out the aim of the report was important for gathering the accurate data.

Visualization

After aggregating the data in the shared Microsoft Excel spreadsheet, we had to find a way to visualize and utilize it. First, we discussed manually inputting the almost 1250 data points in a Microsoft Excel or Microsoft Word chart like what was done in the prior year's report. However, last year's report only included 20 funds, whereas this year's report included approximately 50 funds and more questions, so the amount of data had significantly increased. We quickly received help to create a tool that would automate this visualization process. Since the process of doing this manually would be too labor intensive and time consuming. We needed a tool that would quickly and accurately visualize the aggregated data. Most importantly, we needed someone with the skills to create the program, which no one from the team at UNCTAD possessed. From this need, a tool was developed in Python to visualize the data in a heatmap as seen in Figure 2. As mentioned by Sam in the interview, a bit of persuasion was necessary to convey that the heatmap code would be created in a timely manner and would

categories. Since the data aggregation was not initially made to be understood by a Python code, it was a bit more difficult to maneuver the code. We experienced issues in the coding when the Microsoft Excel spreadsheet was not homogenous throughout. For example, small things like if someone used an apostrophe in the AuM, the code would not understand and fail to run. Here we needed Matteo to help solve these issues since no one in the team at UNCTAD had the programming skills to neither solve nor understood the error. The appearance of the visualization is also important since, like Sam has noted in the interview, the heatmap is the core piece of the UNCTAD report. The aesthetic design was discussed a bit and went back and forth with feedback from the organization on how it should look. The color is easily adjusted, and we could also easily include all the fund countries by adding it in the funds' matrix names. After the organization saw the ease of utilizing the code, they were very satisfied with the result.

The categorization of most to least compliant also indirectly created a ranking which was discussed during meetings in the data aggregation stage. To create a potential ranking, we discussed how confident Sam and I were in the accuracy of the data. This is also something Sam notes in the interview – both in terms of the measurement indicators and the issue of subjectiveness when reading the reports. By using the measurement method as a binary, it becomes difficult to visualize the extent of the answer compared to other funds or compared to other questions. This is reflected in the data aggregation stage where we only used 'yes', 'no', and 'not sure' as measurements to ESG integration. Adding more measurements and indicators to the visualization would risk the data aggregation part being too complex and intricate to comprehend for an external reader. More questions would also lead to more labor-hours but would ease the distinction within each question and sub-question and may decrease the subjectiveness.

Reporting

Writing the report was the last stage of the process in monitoring the performance. The report was modeled from last year's report and UNCTAD also wanted to include a section specific to climate change this year, since de-risking portfolio investments to consider climate change has become a sought-after and popular topic within. We took the aggregated data and heatmap and put into words for the publication. A benefit that rose from the Python code to visualize the data was that it simultaneously created a binary of all the 'yes', 'no', or 'not sure' answers in a Microsoft Excel spreadsheet. This made the writing process very smooth since we could easily sum all the fund answers to each question and figure out how many funds have reported on a

specific question and calculate averages. If we did not have this tool, we would have to count how many funds have which respective answer to each question. This would have been very labor intensive and tedious. Throughout the reporting, we also primarily focused on the ESG reporting funds and later found out that data on non-reporting funds also was a very interesting area. We then gathered more information on non-reporting funds concerning why they do not report such as domestic regulation or AuM.

The heatmap only displays answers to the questions entirely and is difficult to discern sub-questions. This was for example an issue in question 20. *Does the fund actively exercise its voting rights in its portfolio companies? Does it use a proxy or not?* Since there are two questions in one question it is not possible to tell the answer to the sub-question. This issue caused some questions in the data aggregation stage to be divided into two, but this also raised the issue of the question list becoming too exhaustive. To report on this question, we had to distinguish the sub-question by going back to the matrix and read the comments in our shared Microsoft Excel spreadsheet to the question to analyze if the fund uses a proxy or not. But too many questions may lead the visualization to be too intricate and complex, resulting in the visualization not being useful. During the reporting stage we also worked on a separate presentation where the findings of our data would be presented at a large finance conference. When investigating the data we collected, it became evident that there is an abundance of analysis that can be examined which we did not have the resources to extract. This data was also used for UN's World Investment Report for 2022. Creating separate visuals for each question was primarily done in Microsoft Excel to put into the final UNCTAD report and World Investment Report.

6.0 Discussion

This section presents a coherent synthesis of findings and a set of practical recommendations for UNCTAD and other IOs. From the analysis, it appears that the challenges faced by UNCTAD are twofold. Issues when designing a monitoring tool for sustainable finance are both present within the institutional framework of the UN and depicted in the sustainable finance field.

Institutional Framework of the UN

The UN operates with a specific institutional framework that is partially causing its challenges. UN's silo structure that compartmentalizes programming skills to the IT department made the

Python programming more difficult. A program to automatize the process through AI machine learning could have been an enormous player in solving the issue of subjectiveness. However, the resources to create such a program also posed as a challenge in the process; this is where labor hours could have aided. We did not have enough time to read the reports twice, which would have been favorable to minimize subjectiveness and bias. The many labor hours could have been avoided by issuing surveys like the IFC as described in the literature review. However, this may not produce as accurate and authentic answers as directly tracking performance through reporting.

The UN's compartmentalization is also evident in the 2022 World Investment Report chapter on sustainable finance. For this chapter our work was adapted and the work from the same department regarding regulations and guidelines within sustainable finance was also adapted for this chapter. But the chapter lacks a flow because even in the same department, the two teams do not have much communication nor interdisciplinary tasks. We also do not have sufficient resources to extract more analysis from the data we have collected, which relates to the issue of scarce budget and resources. There is an abundance of outputs that can be developed from the aggregated data and the visualization. To edit the visualization in Python, we often needed assistance either from myself to categorize the funds in terms of AuM, compliance, or country. Without more programming expertise we could not get in-depth insights we possibly could have gotten from the tool like analyzing correlations in compliance to report year, country, AuM, and other indicators. In the prior report, UNCTAD proposed a framework as a guide on best practices, this can easily be done again in this report with the aggregated data, but resources and time does not allow for this. Sam notes in the interview that this would be a beneficial addition to the report.

To solve these challenges in the UN's institutional framework, the UN should work to break down the outdated silo structure and dedicate more labor and time to increasing data quality and monitoring sustainable finance. This displays a larger issue within the UN with many bureaucratic and hierarchical structures existing and a scarce budget. This framework also displays a deeper challenge within the UN of maintaining outdated practices. To combat this, the UN should work on modernizing and innovating to increase interdisciplinary work and efficiency. UNCTAD should also dedicate more time and resources to do in-depth analysis on the aggregated data. To combat lack of resources, UNCTAD can collaborate with external resources like the fellowship program that myself and Sam are part of, PhD students, or through

a Sustainable Finance University Network. According to the literature, increasing transparency is beneficial and UNCTAD should continue with reporting and monitoring on sustainable finance. More in-depth analysis can also assist in identifying the root cause of why some funds do not report and why low-compliant funds do not increase their ESG integration. IOs should also take the advice of Ehresman & Stevis (2014) that there is “no substitute for daily contact between the clients and affected persons and groups” (p. 316). To integrate long-lasting, effective ESG measures it is necessary to actively institute engagement.

Sustainable Finance

Challenges rooted in the topic itself also prevail the process making it difficult for IOs to maneuver the field and design a monitoring tool. Richard Manley (2021), Managing Director and Head of Sustainable Investing for the Canada Pension Plan, notes that “most innovation in finance in the next decade will be focused on cracking the code on ESG integration”. The analysis displayed difficulty in selecting which indicators are utilized to measure sustainable finance. ESG measures when monitoring sustainable finance show as too subjective and are not flexible enough to weigh questions and answers in a monitoring tool. The process of designing a monitoring tool also faces the challenge that ESG measures are typically qualitative data points that need to be quantified for accurate tracking and comparing. Organizations reporting on ESG should also be attentive of how transparency and ESG disclosure is applied and if it has significance towards social environmental governance.

To solve the challenges IOs face in the field, more research should be done regarding effective measurements that are flexible and objective. According to Pipino et al. (2002), a ‘one-size-fits-all’ approach should not be used. The approach to monitoring sustainable finance should be on-going with a strong awareness of how the subject is developing, the monitoring tool should therefore allow for flexibility. Developing indicators and measuring sustainable finance are both challenges in the field and for external organizations attempting to monitor it, for example, UNCTAD. Objective indicators are vital to ensure accurate monitoring. A better understanding of sustainable finance and human’s effect on environmental factors is crucial since this is currently poor understood as conveyed by Biermann & Young (2014). Addressing these challenges that UNCTAD has faced in the process of creating a monitoring tool is vital for sustainable development and advancing sustainable finance. This displays a need for further research.

7.0 Conclusion

This report has explored the *main challenges IOs face in the processes of creating a monitoring tool for sustainable finance*. It has applied experiences from an UNCTAD internship to answer the research question through an auto-ethnographic research study. With literature on sustainable finance, IOs & institutions, data quality & transparency, and monitoring sustainable finance, the research question is answered. IOs face challenges in both the framework they are subject to within their institution and the research that has been done on sustainable finance. It is evident that sustainable finance is a growing field where research has a growing importance, especially regarding how it is monitored, compared, and measured. Transparency and data quality are essential considerations when creating the indicators used to measure, so the research does not succumb to subjective perceptions. This has significant implications in the processes of creating a monitoring tool. The challenges arising from the UN's silo structure and compartmentalization of the IT department displays a need to work more interdisciplinary and dedicate more resources to extracting analysis from the aggregated data. The conclusion has limitations and implications. By only using one case study, the research is limited to experiences at this organization but is replicable across IOs. This research also raises implications. Not having effective measurements and indicators to monitor sustainable finance risks inaccurate research and comparison.

In light of my findings, there is a need for further research within the area of tracking sustainable finance and designing monitoring tools with accurate and efficient measurements. A comprehensive literature review examining how IOs and other organizations monitor performance sustainable is necessary and a helpful step in uncovering how to efficiently track sustainable finance and utilize respective monitoring tools. A larger sample size and increasing the amount of case studies to answer the research question is an area for further research. Broadening the research question to also investigate the private sector would be an interesting take on the research study. Further research is especially significant with new regulations and guidelines constantly being modernized with the rapid growth of sustainable finance. Further research is necessary to crack the code to ESG integration.

8.0 References

- Adams, T. E., Ellis, C., & Jones, S. H. (2017). Autoethnography. In J. Matthes, C. S. Davis, & R. F. Potter (Eds.), *The International Encyclopedia of Communication Research Methods* (1st ed., pp. 1–11). Wiley.
<https://doi.org/10.1002/9781118901731.iecrm0011>
- Adams, W. C. (2015). Conducting Semi-Structured Interviews. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.), *Handbook of Practical Program Evaluation* (pp. 492–505). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781119171386.ch19>
- Adler, P. A., and Adler, P. (2008). ‘Of Rhetoric and Representation: The Four Faces of Ethnography’, *Sociological Quarterly*, 49: 1–30.
- Atkinson, P. (1997). Narrative turn or blind alley? *Qualitative Health Research*, 7, 325–344.
- Biermann, F. & Young, R.O. (2014). *Series Forward in Transparency in Global Environmental Governance: Critical Perspectives*. 25. The MIT Press.
<http://www.jstor.org/stable/j.ctt7ztf0q> 25.
- Bryman, A. (2016). *Social Research Methods* (5th ed.). London: Oxford University Press.
- Coffey, A. (1999). *The ethnographic self*. London: Sage
- Cunha, F., Meira, E., & Orsato, R. (2021). Sustainable finance and investment: Review and research agenda. *Business Strategy and the Environment*. 10.1002/bse.2842.
- Duffield, J. (2007). *What Are International Institutions?* 23.
- Ehresman, T., & Stevis, D. (2014). *Transparency and Environmental Equity: The International Finance Corporation’s Disclosure Practices*. Chapter 13 in *Transparency in Global Environmental Governance: Critical Perspectives*. 25. The MIT Press. <http://www.jstor.org/stable/j.ctt7ztf0q>
- Estevez, E. (2020, November 25). *Sovereign Wealth Fund (SWF)*. Investopedia. Retrieved May 30, 2022, from https://www.investopedia.com/terms/s/sovereign_wealth_fund.asp
- Geertz, C. (1973). ‘Thick Description: Toward an Interpretive Theory of Culture’, in C. Geertz, *The Interpretation of Cultures*. New York: Basic Books.
- Global SWF. (2021). Retrieved June 16, 2022, from <https://globalswf.com/reports/2021gsr#appendices-6>
- Gordon, J. (2022, April 16). *Public pension fund - explained*. The Business Professor, LLC. Retrieved May 30, 2022, from https://thebusinessprofessor.com/en_US/employment-law/public-pension-fund-definition

- Gupta, A. (2014). *Risk Governance through Transparency: Information Disclosure and the Global Trade in Transgenic Crops*. Chapter 6 in *Transparency in Global Environmental Governance: Critical Perspectives*. 25. The MIT Press.
<http://www.jstor.org/stable/j.ctt7ztf0q> 25.
- Gupta, A., & Mason, M. (Eds.). (2014). *Transparency in Global Environmental Governance: Critical Perspectives*. The MIT Press. <http://www.jstor.org/stable/j.ctt7ztf0q>
- IFC [International Finance Corporation]. (2007a). *Banking on Sustainability*.
<https://firstforsustainability.org/media/IFC%20Banking%20on%20Sustainability.pdf>
- IFC [International Finance Corporation]. (2007b). RESEARCH METHODOLOGY AND SURVEY RESULTS. https://www.ifc.org/wps/wcm/connect/39a91c11-f076-4fc6-a63e-a982f3b5840f/2005_Survey%2BMethodology%2Band%2BResults.pdf?MOD=AJPERES&CVID=nzmbLB7
- IFC [International Finance Corporation]. (2020). *Sustainable Finance Practices in South African Retirement Funds*. <https://www.ifc.org/wps/wcm/connect/93d586c6-fe64-439e-907a-d067e640e8ec/South+AfricaRetirementFunds-SustainableFinance040221.pdf?MOD=AJPERES&CVID=nu3gl6v>
- IFC [International Finance Corporation]. (n.d.). *About IFC*. ifc.org. Retrieved June 6, 2022, from
https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/about+ifc_new
- Kumar, S., Sharma, D., Rao, S., Lim, W. M., & Mangla, S. K. (2022). Past, present, and future of sustainable finance: Insights from big data analytics through machine learning of scholarly research. *Annals of Operations Research*.
<https://doi.org/10.1007/s10479-021-04410-8>
- LeCompte, M. D., & Schensul, J. J. (2010). *Designing & conducting ethnographic research: An introduction* (2nd ed). AltaMira Press.
- Manley, R. (2021). *Listen to our Head of Sustainable Investing discuss the impact of COVID-19 on the consideration of ESG factors*. Retrieved June 6, 2022, from
<https://www.cppinvestments.com/the-fund/sustainable-investing>
- Méndez, M. G. (2014). Autoethnography as a research method: Advantages, limitations and criticisms. *Colombian Applied Linguistics Journal*, 15(2), 279.
<https://doi.org/10.14483/udistrital.jour.calj.2013.2.a09>

- Mol, A. P. J. (2014). *The Lost Innocence of Transparency in Environmental Politics*. Chapter 2 in *Transparency in Global Environmental Governance: Critical Perspectives*. 23.
- Pipino, L. L., Lee, Y. W., & Wang, R. Y. (2002). Data quality assessment. *Communications of the ACM*, 45(4), 211–218. <https://doi.org/10.1145/505248.506010>
- Schoenmaker, D. (2018). A Framework for Sustainable Finance. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3125351>
- Schwartz, M. S., & Schwartz, C. G. (1955). *Problems in Participant Observation*. 12.
- Simmons B.A., & Martin L.L. (2002) *International Organizations and Institutions*. Carlsnaes W, Risse T, Simmons BA Handbook of International Relations. Thousand Oaks, CA: Sage Publications. pp. 192-211.
- UNCTAD. (2020). *How public pension and sovereign wealth funds mainstream sustainability Practices of the frontrunners and a proposed integration framework*. 44.
- UNCTAD. (2022). *World Investment Report 2022: International tax reforms and sustainable investment*. 244.
- UNCTAD. (n.d.). *UNCTAD at a Glance*. 4.
- Van Maanen, J. (1988). *Tales of the Field: On Writing Ethnography*. Chicago: University of Chicago Press.
- Walford, G. (2004). Finding the limits: Autoethnography and being and Oxford Universityproctor. *Qualitative Research*, 4, 403-417.
- Wilson, C. (2014). *Interview techniques for UX practitioners: A user-centered design method*. Morgan Kaufmann.

9.0 Appendix

9.1 Appendix A: Questions 1-25

1. Does the fund clearly state its vision, mission or mandate on sustainable investment?
2. Does the fund set any overall targets/goals on sustainable investment or asset allocation in its vision/mission statement on ESG?
3. Is there any dedicated team established to coordinate ESG/SDG investments? Where does the team/head of ESG report to (what level)?
4. Has the fund put in place an internal policy or guidelines regarding ESG/SDG integration? (Note what policies regarding ESG the fund has put in place)
5. Is any international ESG/SDG-related standard, taxonomy or benchmark employed in the investment decision making process? If so, which ones?
6. Does the fund provide clarity on efforts it has made to meet relevant national/regional/international ESG-related regulations? Which ones?
7. Exclusion: does the fund use ESG-based negative screening/exclusions in its investment decisions?
8. General integration: does the fund incorporate ESG considerations systematically in its investment decision making process?
9. Positive Screening: does the fund use any positive or best-in-class screening related to ESG in its investment process?
10. Impact investment: does the fund target ESG-oriented sectors (e.g. renewable energy, green housing) or capital market instruments (e.g. green bonds, ESG funds) or markets (emerging and developing economies) in ESG investment?
11. SDG investment: does the fund consider SDGs in its investment decision process or asset allocation? If so which ones?
12. Social: Does the fund integrate the social dimension of sustainability into its sustainable investment strategy? (e.g. child labour, diversity, etc)
13. Governance: Does the fund consider governance issues in its investment decisions? (eg, executive pay, board diversity, tax, etc)
14. Does the fund have a specific strategy on climate or CO2 emissions?

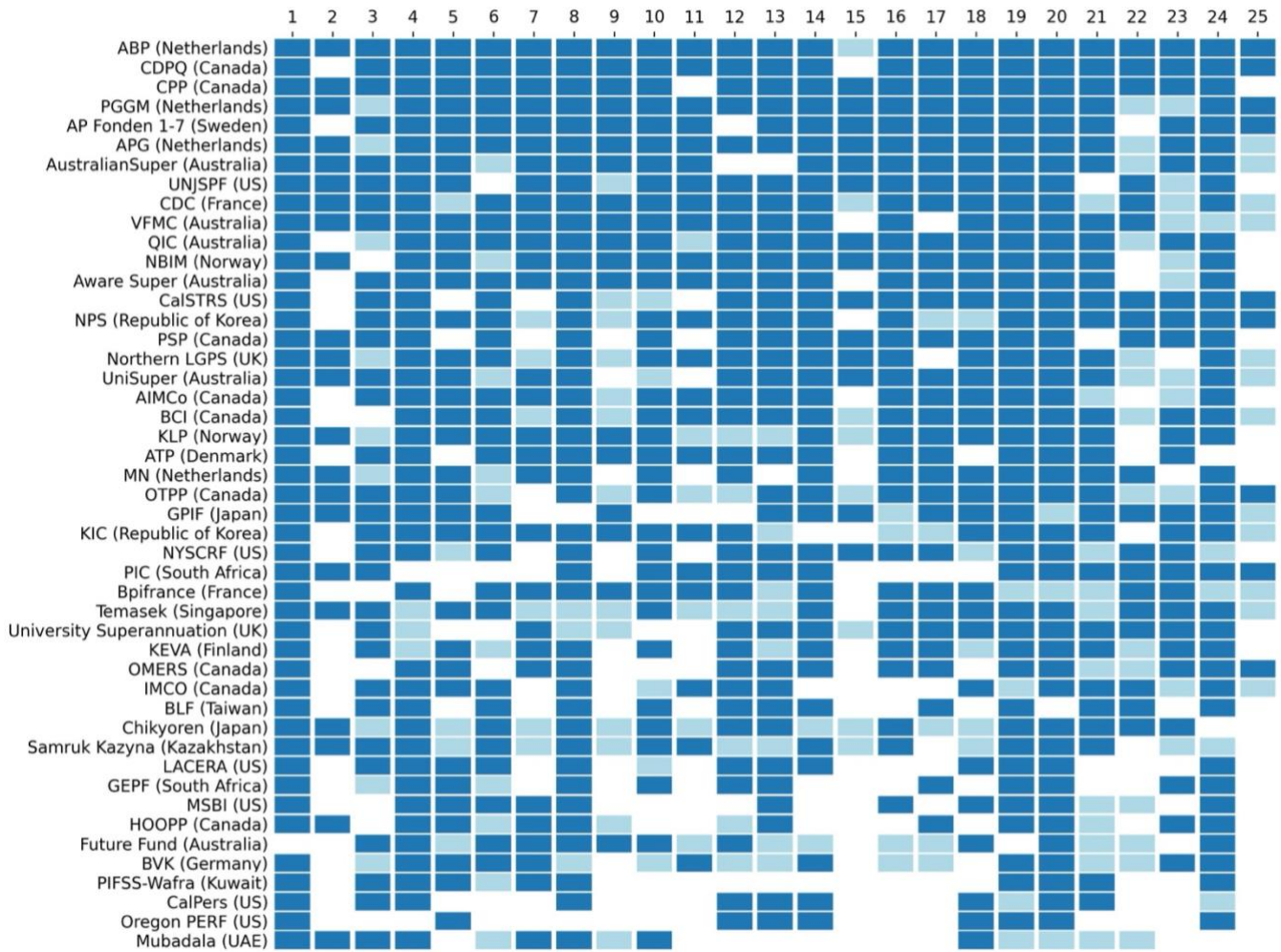
15. Does the fund undertake climate risk reporting and publish a climate risk report?
16. Does the fund use any target or goal (carbon emission, green investment or asset allocation)? If so which ones? (e.g. net zero)
17. Does the fund monitor and report with specific metrics? What reductions has the fund made? What changes in investments has it made? (eg. Reduction of carbon footprint or divestments in \$ and/or %; increases in purchases of green bonds etc.)
18. Is the fund part of any international climate response initiative?
19. Does the fund have any active engagement activities (e.g. consultations, dialogue) with any stakeholder in the investment value chain? What is the standard policy? (e.g. time limits then divestment?) Which topics?
20. Does the fund actively exercise its voting rights in its portfolio companies? Does it use a proxy or not? (Any information on resolutions it has voted on?)
21. Is there any policy, guidance or requirements on ESG (and SDG) integration provided to asset managers and/or investees/portfolio companies?
22. Any training provided for asset managers/portfolio companies?
23. Does the fund monitor and evaluate its ESG/SDG performance with specific metrics? (Note what KPIs/metrics are used - see 2020 report for details)
24. Does the fund use any international reporting framework or guidelines as a framework to report on sustainability issues? (see 2020 report for details)
25. Is ESG/SDG impact audited or certified by an external party?

9.2 Appendix B: Matrix Questions & Answer Examples

A	B	C	D	E	F
1	Fund: GPIF (Japan)				
2	AUM: 1,747				
3	Country: Japan				
4	Report year: 2020				
5	Website: https://www.gpif.go.jp/en/investment/esg/				
6	Contact details: Kenji Shiomura, Editor-in-Chief, ESG Report (ESG Team Head)				
7					
8					
9	ESG Integration mapping				Practices (yes/no)
10	1 Governance and Resources				Sources
11	1.1 Does the fund clearly state its vision, mission or mandate on sustainable investment?		Yes	We are committed to continue promoting ESG in order to reduce the negative impact of environmental and social problems on financial markets, and thus encourage sustainable economic growth and improve long-term returns from all the assets we manage.	p. 6
12	1.2 Does the fund set any overall targets/goals on sustainable investment or asset allocation in its vision/mission statement on ESG?		Yes		p. 6
13	1.3 Is there any dedicated team established to coordinate ESG/SDG investments? Where does the team/head of ESG report to (what level)?		Yes	The Board of Governors discusses and oversees the promotion of ESG and approaches to ESG investment at GPIF; The Financial Stability Board (FSB) established the Task Force on Climate-related Financial Disclosures (TCFD) in December 2015	p. 18
14	2 Policies				
15	2.1 Has the fund put in place an internal policy or guidelines regarding ESG/SDG integration? (Note what policies regarding ESG the fund has put in place)		Yes	Yes, the fund invests passively	
16	2.2 Is any international ESG/SDG-related standard, taxonomy or benchmark employed in the investment decision making process? If so, which ones?		Yes	GPIF adopted the MSCI ACWI ESG Universal Index – a general ESG index – and the Morningstar Gender Diversity Index, and began passive investment based on these two indexes.	p. 12
17	2.3 Does the fund provide clarity on efforts it has made to meet relevant national/regional/international ESG-related regulations? Which ones?		Yes	GPIF is required by law to manage pension reserves solely for the benefit of pension recipients from a long-term perspective, thereby helping to fund future pension benefits. In this context, benefit is construed as economic benefit.	p. 9
18	3 ESG investment and integration strategies (implementation)				
19	3.1 Exclusion: does the fund use ESG-based negative screening/exclusions in its investment decisions?	ESG investments seem to be done passively	No	GPIF's investments are predominantly passive	p. 13
20	3.2 General integration: does the fund incorporate ESG considerations systematically in its investment decision making process?		No	GPIF is required by law to manage pension reserves solely for the benefit of pension recipients from a long-term perspective, thereby helping to fund future pension benefits. In this context, benefit is construed as economic benefit.	p. 9
21	3.3 Positive Screening: does the fund use any positive or best-in-class screening related to ESG in its investment process?		Yes	The fund uses indexes to assess topics like high ESG scores and gender equality initiatives in investments - indexes mentioned on page 21	p. 20, 21
22	3.4 Impact investment: does the fund target ESG-oriented sectors (e.g. renewable energy, green housing) or capital market instruments (e.g. green bonds, ESG funds) or markets (emerging and developing economies) in ESG investment?		No	GPIF's ESG investment does not directly target social impact itself ... "GPIF's Investment Principles clearly state that we will promote investments that consider ESG, and we thus integrate ESG factors into all aspects of our pension reserve management. On the other hand, GPIF does not conduct investment where the explicit purpose is to create some type of social impact, such as achieving the SDGs. While this may seem like a contradiction, it is related to the legislation governing GPIF and the objective of our investment behavior."	p. 9
23	3.5 SDG investment: does the fund consider SDGs in its investment decision process or asset allocation? If so which ones?		No	GPIF does not conduct investment where the explicit purpose is to create some type of social impact, such as achieving the SDGs	p. 9
24	3.6 Social: Does the fund integrate the social dimension of sustainability into its sustainable investment strategy? (e.g. child labour, diversity, etc)		No	They do not invest where the explicit purpose is social impact; but do promote diversity, women in the workplace	p. 9, 16
25	3.7 Governance: Does the fund consider governance issues in its investment decisions? (e.g. executive pay, board diversity, tax, etc)		Yes	From a macro-economic perspective, the improvement of gender diversity may boost the economic growth of individual countries. By investing in companies with greater gender diversity, the fund aims to enhance long-term investment returns through the sustainable growth of our investments and the market as a whole.	p. 20
26	4 Climate action				
27	4.1 Does the fund have a specific strategy on climate or CO2 emissions?		Yes	As climate-change risks are highly likely to manifest over the long term, we believe that, as an asset owner, GPIF should take the lead in addressing them; GPIF regards climate change as one of the most important themes in ESG activities in general.	p. 17, 18
28	4.2 Does the fund undertake climate risk reporting and publish a climate risk report?		Yes	GPIF Publishes the "FY2020 Analysis of Climate Change-Related Risks and Opportunities in the GPIF Portfolio"	https://www.gpif.go.jp/en/ir/
29	4.3 Does the fund use any target or goal (carbon emission, green investment or asset allocation)? If so which ones? (e.g. net zero)		N/A	Not sure	
30	4.4 Does the fund monitor and report with specific metrics? What reductions has the fund made? What changes in investments has it made? (e.g. Reduction of carbon footprint or divestments in S and/or %; increases in purchases of green bonds etc.)		Yes	Analysis of Japanese companies GPIF invests in regarding climate change in Chapter 4; SDGs positive impact analysis on page 70; they conclude that Japanese companies have much room for growth	p. 70
31	4.5 Is the fund part of any international climate response initiative?	This seems contradictory to the fund's stance on SDGs	Yes	In 2020, GPIF established the SDGs Promotion Group—a committee reporting directly to the President created to develop initiatives designed to bolster the fund's ESG and SDG-conscious internal values. GPIF went on to establish the Diversity and Inclusion Promotion Group under the SDGs Promotion Group. Through these organizations, GPIF promotes ESG and the SDGs within the fund itself; member of Climate Action 100+	p. 16, 38
32	5 ESG integration along the whole of the investment value chain through active				
33	5.1 Does the fund have any active engagement activities (e.g. consultations, dialogue) with any stakeholder in the investment value chain? What is the standard policy? (e.g. time limits then divestment?) Which topics?		Yes	GPIF has been actively engaging in dialogue with index providers and ESG ratings agencies. As GPIF's investments are predominantly passive, index providers and ESG ratings agencies play a pivotal role in the success or failure of our fund management. GPIF engages in dialogue with these providers in an effort to improve ESG rating coverage and rating methodology; research paper with the World Bank Group; many interviews with companies and external asset managers about key ESG issues p. 24 and onwards; GPIF believes that active dialogue between asset managers and companies is essential in improving market sustainability and enhancing investment returns.	Y p. 13, 22, 24, 2
34	5.2 Does the fund actively exercise its voting rights in its portfolio companies? Does it use a proxy or not? (Any information on resolutions it has voted on?)		N/A	No information given	
35	5.3 Is there any policy, guidance or requirements on ESG (and SDG) integration provided to asset managers and/or investees/portfolio companies?		Yes	GPIF does not conduct investment where the explicit purpose is to create some type of social impact, such as achieving the SDGs. While this may seem like a contradiction, it is related to the legislation governing GPIF and the objective of our investment behavior.	p. 9
36	5.4 Any training provided for asset managers/portfolio companies?		Yes	SDGs Training	p. 16

42	6 Monitoring, evaluation and reporting				
43	6.1 Does the fund monitor and evaluate its ESG/SDG performance with specific metrics? (Note what KPIs/metrics are used - see 2020 report for details)	Yes	Part of the Thirty Percent Coalition and the 30% Club		p. 38
44	6.2 Does the fund use any international reporting framework or guidelines as a framework to report on sustainability issues? (see 2020 report for details)	Yes	PRI, TCFD, JPX ESG Knowledge Hub		p. 22, 39
45	6.3 Is ESG/SDG impact audited or certified by an external party?	N/A	No information given		
46					
47					

9.3 Appendix C: ESG Integration in PPFs and SWFs Heatmap



In order of most to least compliant with matrix questions.

BLUE: Yes

LIGHT BLUE: No information

WHITE: No

9.4 Appendix D: Python Code for Data Visualization

```
import pandas as pd
from matplotlib import pyplot as plt
import numpy as np
import glob

pd.set_option("display.max_columns",None) #show all columns

df_excel_file=pd.ExcelFile("ESG Integration matrix 02 Feb-3.xlsx")
print (df_excel_file.sheet_names)

for sheetname in df_excel_file.sheet_names:
    #print(sheetname)
    temp_df=df_excel_file.parse(sheetname) #load each sheet into a dataframe
    temp_df.to_csv(sheetname.replace(' ','_').upper()+'.csv',sep=";",encoding="utf-8")
    #and save the dataframe into a csv

def convert_to_number(source): #this function will take yes/no as input and return 1 and 0, or nan for not
present
    values={"yes":1,"no":0,"maybe":np.nan}
    try:
        return values[source.lower().strip()]
    except: #if something goes wrong (== the value is nan, which is not in the dict)
        return source #return nan

def mysplit(source): #return first element before string
    return str(source).split('.')[0]

#we need to open our excel file
#cycle through worksheets and do what we are doing for CSVs to them

#we open the CSV as a text file, read it line-by-line. We are interested in extracting info from the first few
lines

filenames=glob.glob("*.csv")

total_df=[] #list of all dataframes to concatenate

for filename in filenames: #we iterate in the filenames list
    #print (filename)
    with open (filename,'r') as f: #we open the file as a TEXT file
        lines=f.readlines() #we take down the lines of the file
        fund=lines[1].replace(";", "").split(":")[1].strip()
        AUM=lines[2].replace(";", "").split(":")[1].split(" ")[0].strip()
        AUM=AUM.split(' ')[0]
        AUM=int(AUM.replace(',',''))
        country=lines[3].replace(";", "").split(':')[1].strip()
        print (fund,AUM,country)
        #we now read it as a pandas dataframe, starting from the appropriate line
        df=pd.read_csv(filename,sep=";",skiprows=8)
        df[df.columns[1]]=df[df.columns[1]].astype(str)
        #print (df)
```

```

#print('***')
categories=df[[df.columns[1],df.columns[2]]]

categories=categories[(categories[categories.columns[1]].notna())&(~categories[categories.columns[0]].str
.contains('0'))]
#print(categories)
#print(df[df.columns[1]])
df=df[(df["ESG Integration
mapping"].notna())&(df[df.columns[1]].str.contains("."))&(~df[df.columns[1]].str.contains("0"))]
df["category"]=df[df.columns[1]].apply(mysplit) #apply command applies a function to all the cells in a
dataset
df["value"]=df["Yes/No"].apply(convert_to_number)
df=df[[x for x in df.columns if "Unnamed" not in x]] #this cuts all Unnamed columns
core=df[["ESG Integration mapping","value"]]
core.index=core["ESG Integration mapping"]
#print (core)
core=core.drop(["ESG Integration mapping"],axis=1) #we drop the duplicate column
core=core.transpose()
core["fund"]=fund
core["AUM"]=AUM
core["Country"]=country
total_df.append(core)

non_value_columns=["AUM","fund","Country","1"]
tdf=pd.concat(total_df) #concatenate all
#tdf=tdf.sort_values(by=['AUM','fund'],ascending=False) #removed as we do not sort by AUM anymore

tdf['total_score']=tdf[[x for x in tdf.columns if x not in non_value_columns]].sum(axis=1) #calculate score
as sum of values by row
tdf=tdf.sort_values('total_score',ascending=False) #sort data in descending order (from top to bottom)
#tdf=tdf.drop('total_score',axis=1)
tdf.to_excel('funds_template.xlsx')

funds=tdf["fund"].unique()
#print(funds)
fig,axs=plt.subplots(ncols=1,nrows=len(funds),figsize=(12,10),sharex=True) #sharex means SHARE ONE
x axis
#fields=list(tdf.columns[:-4])
fields=categories[categories.columns[0]]
for i,ax in enumerate(axs.reshape(-1)):
    color=[]
    values=[]
    #print (i,ax)
    ax.set_ylabel(funds[i],rotation=0,ha='right',va='center',labelpad=1.0) #is the y label
    ax.yaxis.set_label_coords(0.04,0.4)
    y=(list(tdf[tdf["fund"]==funds[i]].values[0]))
    for y_value in y[:-4]:
        if y_value==0.0: #it's a "NO"
            values.append(1) #still draw a bar
            color.append('white') #but in white
        elif y_value==1.0: #it's a YES
            values.append(1) #draw a bar
            color.append('tab:blue') #but in blue
        else:
            values.append(1) #still draw the bar
            color.append('lightblue') #but in light blue
    #print (values,color)

```

```

#print (len(values),len(color),len(fields))
ax.bar(x=fields,height=1,width=0.9,color=color,edgecolor='white',linewidth=0.5)
#ax.set_yticklabels([])
ax.set_yticks([])
ax.spines['bottom'].set_color('white')
ax.spines['top'].set_color('white')
ax.spines['left'].set_color(None)
ax.spines['right'].set_color('white')
#fig.set_figheight(1)
if i==0:
    ax.xaxis.tick_top()
    ax.set_xticklabels([str(x) for x in range(1,26)], minor=False)
    ax.tick_params(labelbottom=False,labeltop=True)
    ax.spines['bottom'].set_visible(False)
else:
    ax.axes.get_xaxis().set_visible(False)
#ax.spines['bottom'].set_visible(False)
plt.ylim(0,1)
plt.margins(0)
plt.subplots_adjust(wspace=0, hspace=0)
#plt.xticks(rotation = 0) #Rotates X-Axis Ticks by 90-degrees
fig.suptitle('ESG Integration',fontsize=20)
plt.savefig('ESG_integration.svg',dpi=300,bbox_inches='tight') #this and the following lines save the
image. Notice that the format is automatically recognized based on the extension of the file (SVG, JPG...)
plt.savefig('ESG_integration.jpg',dpi=300,bbox_inches='tight') #the bbox parameter tells the system to
enlarge the whitespace around the chart in order not to cut out anything

```


9.5 Appendix E: Transcript of Semi-Structured Interview with Co-intern

Malou 0:08

Hey, Sam.

Sam 0:10

Hey Malou.

Malou 0:15

Okay, so we're gonna be doing an interview now on your experience at UNCTAD and the different things that we went through in the process, okay. So please feel free to say anything you're thinking.

Sam 0:46

Is there going to be questions, or is there going to be just talking about the experience of joining the organization?

Malou 0:56

I'll ask you some questions. And you can also say, whatever is on your mind, we'll just be having a conversation. So to kick off our little interview, we will talk first about the data collection protocol. So to what extent do you think our data collection method was driven by resources?

Sam 1:29

Can you define resources?

Malou 1:31

Resources like time, skill, people.

Sam 1:36

Okay. So data collection method? Well, I'm not exactly sure what you mean, by resources. But I feel like when the setup of the of the matrix is, has been quite, quite labor intensive for people in tents to define what we are looking for exactly. Also, the adaptation from last year's report, this report, I felt like could have been maybe a bit more discussed as well. Most of these guests what they were looking for last year, what they were looking for this year. And then once he was set up, it was very labor intense to look for the right information in the matrix, and also very subjective, I'd say. For example, the Joe and I did the same funds twice, once he did it once I did it, and then we have different answers, which after discussing, we came to the same conclusions, but in the first iteration of finding out how to go to that matrix, we have different answers, which somewhat underlines the subjectivity as well of that research. This is something maybe we could be avoided with when we go to buy a computer program. But then there might be biases in the programming as byte has in the algorithms used as well. Another suggestion could be that every fund has to be done twice, and then compare, but this will most likely explode the labor the labor hours available, except maybe if you do a sustainable finance students umbrella organization, outsource that work, that would be very beneficial.

Malou 3:28

Do you think time played a big I had a big impact?

Sam 3:36

Time as in time spent on the...?

Malou 3:40

If we didn't have enough time to collect the data? Did that have any impact on what was collected?

Sam 3:47

In my opinion, we had quite a lot of time to collect the data. Well, I feel like we are both, we had somewhat a lot of time to collect the data. However, we still had a lot of pages to read through. And there were some of the most reports were between 50 and 100 pages from what I remember. And we had to read them fairly quickly. So there was no time to read every page and really get every nitty gritty detail of what the firm does in terms of sustainable investment. So they have to be read quite quickly. And what I sometimes they to really find the important spots, I defined a few key points or key search words and first of all, went through the report with just looking for these keywords, and then mapped which sections of the report might be the most important to me. And to fill out the matrix and then read those words carefully, and just overflowed the rest of the report in order not to miss anything but with this technique, it was a lot quicker doing the research but might have also missed. One or two initiatives to fund has mentioned in a different section regarding sustainable investments spent so. But spending more time on each report to read it from A to Z? I don't think it would have yielded a lot more detailed results as with the technique I've applied.

Malou 5:17

Okay, thank you. So do you do you think accuracy played a big part? Since now you speak about the way that you collected the data and you kind of tried to optimize your time? How big did accuracy how big a part did accuracy play?

Sam 6:00

I'm still fairly confident about that we've got the gist of all the investment reports accuracy. Also, in terms of the first few reports, I've read personally, I feel like I might have evaluated them differently than the last reports I've read, just because of the language that was used. Many reports are very positive in their language and how they portray their sustainability investments. And it sounds very engaged from what they're doing. And maybe in the beginning, I felt like I was influenced by that language, reading it a lot more positive in a positive ways. Maybe seeing some initiatives that are taken that that are actually not encompassing like the whole organization, or they they're just a poster initiative that doesn't have that much of an impact. And I feel like that falling into that trap in the beginning was a lot more dangerous than in the end, one good use of that language that might have had an impact on the accuracy. In the end, I've tried to reread the reports, again, the ones are reversed, but I have not had the time to read through all of them twice, either. All the other accuracy points. As mentioned before, the reading really quickly might lead us to lose some points of the of the reports that could especially if there is yes, no questions that look for very specific data. Some points could have been overlooked. But with reading to a report quickly and searching for keywords, I think this risk can be quite nearly minimized as well. So I think overall, it does give a decent overview of the sustainable investments.

Malou 8:17

Okay. Um, if we go back to thinking about which ESG reports we decided to include and which funds we included and the criteria that was necessary to include the funds? Could you maybe talk about the criteria for including the funds?

Sam 8:49

The criteria to include the funds into the 100? Or the criteria to ...

Malou 8:55

In the 50

Sam 8:57

In the 50 that we evaluated?

Malou 8:58

Yeah, what was the criteria?

Sam 9:03

So the criteria was that they have either published an ESG report separately, or they have a substantial ESG part in the annual report. So these are the two main criteria. And then sometimes we also evaluated if they had ESG information published on the website. And so these are the three criteria we looked at and then if the website we mostly excluded if it was not mentioned in a specific report published separately or in the annual report, we looked for information that was properly published by the funds and sometimes I also looked when there is when there was some there was information published. Sometimes there was additional information on the website which I have included in my revelation. But if it was all the information on the website and this font was excluded from having reported on the ESG.

Malou 10:12

Would you say there is a bare minimum amount of information? What's the threshold?

Sam 10:20

Well, there was many funds that did not have any information on ESG. Most had some information, I would say many had some information on sustainability in one way or another. But we also found ... I also found quite a few that did not have lots of information on their investing decisions, or there was more financial information in general, but then there is not a lot of information of how their investments will impact the planet beyond their financial impacts. In case of minimum, I'd say, but I've read most in the ones that have reported, or some basic guidelines on what not to invest in, for examples, many of the funds have guidelines on not to invest in weaponry, modern slavery, and child trafficking or child labor. So these were like, I felt like the basic human standards that should have should be met, to invest in something those that those are quite, maybe not universal, but quite universal. And then, for the ones that have also published needs to report, climate change was a big topic. I guess also for their own interests, since climate change will have a huge impact on the financial system in the future. So it is in their interest to divest or invest according to these changes.

Malou 12:08

Okay. So now that like we've talked about the data collection criteria, do you think there were any main challenges in the data collection and the beginning part of making the research?

Sam 12:33

For me, one of the main challenges was to find out the aim of the report Exactly. There was we collect the data, and then we very neutrally report what was happening. Which happened last year, as well. So I wanted to see, for me, it was more of a finding out first, what is the report for exactly to find the right information? Which was partially answer when we set out all the questions that were outlined. Can you repeat the question?

Malou 13:11

The main challenges, the main challenges in the data collection, the criteria part, just the things we've talked about up until now? Did you face any challenges? Or did you think that the organization faced any challenges?

Sam 13:34

A challenge, I mean, I was maybe also caused a bit into the subjectivity that we defined something we are looking for. But then in reality, take the institution of the sovereign wealth funds and pension funds they did maybe something similar but explained it very differently. Or maybe with a different goal. Many times for examples, we were looking for engagement into sustainable investments. For us the pension funds and sovereign wealth funds, they described it as transition risks or just de-risking their portfolio against climate change. So for them, it was mostly about protecting their investments and less so for investing into something sustainable for the planet. Which we which we then have to decide is that also send an investment or not, or is that just see why a technique that is implemented? Also, deciding the indicators was also a challenge since we could only include yes, no, or no information. We never really showed the degree of how much the funds did. We only showed if they did it or not. So, picking the measurements was a really important part and something I think was a bit challenging. I just had another idea as well, but I forgot. Might have not been that important.

Malou 14:47

Okay, you can let me know if you remember. So, moving on to once we collected all the data, what happened after this?

Sam 15:24

Once we collect all the data, they were set into the matrix with their yes or no questions and the comments to all the all the questions and the corresponding page numbers that was mapped too. Well, we had a meeting with Joe and then we discuss the outline of a new report or what we put, we could put into the new report. There was a very big focus on the climate change part, which was not in the last report. And then we were asked to write the climate change, due to this, pick the main findings, or we were asked, what may be the main findings of the report. During the research, there was one column that said, "What is this a best practice or not?" Which was a big part in the next step of writing report highlighting what are the front runners initiatives, whether they're doing what could other funders learn from these bits? So we were asked to put these forward. And then the core piece of the report is naturally the heatmap visually explaining who is doing what and which funds are doing what and that's a very useful tool to see which funds from which geographic are more engaged in which elements of ESG so it's literally the core piece of the of the report answering many questions that the first report may have left open as well.

Malou 17:22

Cool, what led to the creation of the heat map because we got helped to make it in Python, what led to this creation?

Sam 17:43

While there was a version of the heat map in the last report as well, that was created manually, a very daunting task to do by hand. And in this year, because we were able to code all the answers in actual sheet and then had Malou working on it on Excel, it's on Python, it was done. It was done very easily and very quickly. I was not involved in the coding, I can imagine it was very difficult, but it was it was done very quickly, which helped quite a bit in going to the writing task a lot smoother, getting all that information out of the of the heat map, which we think could start right away and evaluating or how many funds did what and then dive deeper into why they would be doing certain things in one field and not in the other fields or see compare the AuM of the funds to their engagements. So, this was that we were able to do step quite quickly and quite efficient and in a consistent manner helped to go to the writing part fairly smoothly

Malou 19:13

Okay, thank you. How was the programming received by the organization?

Sam 19:43

There was some discussion before the programming was happening about the feasibility of it as well as the general understanding of what will be programmed. How will it be done? Will it be accurate? Will be consistent? And how long it would take? Because there was also some time constraints on when we would have to start the writing. So we would not have had a month to do the programming. So in order to be for the, for UNCTAD to accepted Malou to do quite a bit of persuasion for them to accept that this bid could be programmed and done over Python rather than manually typing or coloring every cell on Excel. And once we do show the first version of it, then Joe and Yongfu, were very happy with the results. And there was some tweaking about it, there was some changing the order of the order funds, changing the colors of the cells. But once everybody understood how, how it works, and how it can be changed, and that it can be changed in quite a timely manner. The organization actually very much positively received the use of Python for programming. And there are several also looking into other aspects of maybe using it maybe for text mining, as well. So they're very happy about how efficient it was to use code to program certain aspects of that research.

Malou 21:34

Cool, thanks. Do you think it would be beneficial to use in other areas, the Python programming skill? In the report?

Sam 21:53

Yes, definitely, as I said in the beginning, there is some subjectivity involved in reading the reports and then evaluating them. And so to use Python for maybe little bit of text mining, it could be could be interesting, it can be very basic applications. For example, when one would have a library or a list of words that are interesting to report, some piece of code could either count these words within the report. To see in which reports, like there is more mentioning of this specific word, that could be a proxy for the engagement of the fund in a certain area of investment. Yeah, or just very general to have a program to make the some of the reports text machine readable. And that could also be very beneficial semantic analysis to see how certain investments are perceived. For example, there was green investments for some funds, they were writing very positively about it with very positive adjectives, or the funds are a bit more careful about these, because they were stating that green investment is a hype at the moment. And investing into it would not be beneficial because they're too expensive. So they described green investment with a bit less positive adjectives. So with a little bit of machine learning and Python

programming, that might be something that could be picked up by a machine as well, and then give a general overview over the report. I can imagine coming very difficult to write the same quality of report as we did on the with Python at the moment, that would take a lot of programming and a lot of testing. But some more support with programming, I think could be very beneficial to, to that kind of research.

Malou 23:54

Okay, thank you, you kind of implied a bit when funds talk about different types of green investments, they would use different adjectives to describe it. But in the matrix we would use, like yes or no or not sure. Do you think maybe like a critical discourse analysis or discourse analysis, even though it'd be a lot more labor intensive? Do you think that would help the industry? To understand sustainable finance and monitor it?

Sam 24:36

Well, as you said, as a function of labor, I don't think it would add so much more to the report. We were still able to identify the best practices and how the best practices are set in place and use so I think this is maybe more interesting for the funds that are in general trying to become more sustainable, rather than having a discourse on the analysis, finding out why some funds are against green investment? It's a difficult question. Because also, for many of the funds that have not reported, we don't have enough information of them, finding out why they didn't report if they're actually against the same investment, or if they're doing standard investment, and they're not reporting on it. This is a huge gray area, which would be left out silent in discourse analysis in this case, so. And, yeah, it could be interesting to have something like four different geographies, but they're also yes, and no questions can maybe shed light on the bigger part of the picture, you know, a lot quicker time, which is also somewhat necessary in the financial world that the information available does not take too long to be produced. If there is information available for this kind of research, for example, these reports are published every year. If the results of the research comes out only every two years after they're already outdated, for example, there was I don't know how much percentage increase it was. But there are so many more funds reporting on ESG this year than last year. And if we would have the same evaluation, if the reports from 2020, the picture would be completely different. And if we've the reports from this year, so I feel like these yes or no questions, we get enough of the information to report on these kinds of things. Then, maybe it can be part of a discourse analysis, but it's not full analysis.

Malou 27:01

Okay. These are some great points that you're making. Do you have any last challenges that you want to point out? Or that arose throughout this process of monitoring sustainable finance?

Sam 27:33

Good question. I will still have to reflect on the whole piece of work that we've been doing over the past few months, and we are in the final guess two and a half weeks of writing it. And my reflection usually comes after.

Malou 27:54

You did bring up a lot of challenges throughout, so that's also fine if you don't have any more.

Sam 28:04

Yeah, I guess I've mentioned the main challenges described, and it would definitely be helpful to look more into some aspects into the programming side. To write the reports to automate or

can be automated, as it is, to redo all these parts is a daunting task and it can get quite monotone, boring, in some ways as well, which would not happen to a machine. Yeah, what would also be nice is really to see the application of the report afterwards. And also, this is something UNCTAD is planning at the moment, but doesn't, it's not that ready to do the report. But having this was a very outside perspective on what the funds do, but then having an active conversation, maybe on the basis of the report with the funds, that could be very interesting. And also finding out how they got, for the front runners, for example, how they got to the point to have a more sustainable investment portfolio to build maybe a conversation basis with other funds that do not report such a forward-looking kind of paragraph would be very interesting as well.

Malou 29:47

Cool. Do you have anything more to add?

Sam 29:54

I don't think so. Otherwise, I'll call you and let you know.

Malou 29:59

Great, well, thank you so much for doing this interview, it's greatly appreciated.