

**A Summary of the Manuscript
for
*How to Integrate ESG in Financial Decision Making***

This study analyzes what determines ESG (Environmental, Social and Governance) and its performance. Through qualitative case studies, it aims to answer the research question of what makes effective ESG integration difficult and how to overcome the challenges.

This study examines the fundamental reasons for the lack of empirical findings of the financial impact of ESG integration in literature. The literature clearly lags the movement in the industry, which also awaits more empirical evidence to build their cases, making this study highly valuable in terms of the timing and significance. Also, conducting interviews with the major players in ESG integration worldwide, a unique feature of this paper, helps to generate useful insights into the current development of ESG integration.

To find the answers for the research questions as mentioned earlier, I conduct qualitative case studies in this study, involving the major players in ESG integration such as credit rating agencies, an asset manager and an artificial intelligence (AI)-driven ESG research firm. Interviews and followup research are used for analysis. The following summarizes the paper's contributions to the literature:

First, this study finds that the biggest motivating force that accelerates ESG integration is the shift in the investment activities of the asset owners and managers worldwide. The similar concepts to ESG have existed for a long time in the context of ethical and strategic matters. What makes it different this time? To explain this, I explore what constitutes the differences among the similar concepts first and find the motivation in ESG integration before conducting qualitative case studies.

Second, this study finds that the incomplete and sometimes conflicting approaches at different agents are the main cause for the difficulties in ESG integration and research. The analysis of the qualitative case studies involving the major players in ESG integration suggests that their differing views and approaches constitute the major obstacle in realizing the financial benefits of ESG integration.

Third, this paper discusses the challenges that hinder effective ESG integration today that are categorized as follows: lack of credibility, lack of motivation, lack of voice and lack of education. Lack of credibility is related to the weakness of the data that are mostly reliant on voluntarily submitted survey responses by the companies. As a partial solution, I suggest using technological innovations in collecting and analyzing ESG data, such as machine learning and natural language processing (NLP). Lack of motivation arises from the lack of incentives for the managers to integrate ESG within their organization, which requires substantial capital spending. Aligning the interest of managers to that of companies by designing the compensation scheme

accordingly or making ESG integration one of their key objectives can help to mitigate the problem. Lack of voice is relevant to different types of assets. For example, equity investors are directly involved in the management of the companies with voting rights and direct ownership, hence more voice to exert pressure on the companies into accelerating ESG integration. On the other hand, bond investors do not have direct ownership of the companies, hence the indirect influence over them. What this study suggests to resolve such an issue is that, with typically a much bigger size of the investment, bond investors can urge issuers to address ESG matters internally by letting them enjoy more favorable terms of issuance in capital raising. This is different from purchasing green bonds because green bond issuers are only required to use investment proceeds for the completion of the preset environmental projects. Lastly, lack of education refers to the lack of knowledge and recognition among the managers. The government can be involved in this matter to educate the public and/or small companies in particular about why ESG matters and how to integrate ESG measures within an organization at a lower cost.

Finally, this paper introduces two novel developments in ESG integration, *technological innovations* and *COVID-19* for discussion. These are the recent themes in ESG integration that are expected to act as a catalyst to enhance the breadth and depth of the research as well as to accelerate ESG integration within companies going forward.

Despite its importance, ESG integration is still at its initial stage in both academia and practice. With an aim to contribute to the development of ESG integration even marginally, this paper examines the obstacles and solutions for effective ESG integration and offers guidance for those in academia and practice.

Lastly, this is a working manuscript from a doctoral student. Therefore, the manuscript is incomplete and will be developed with more examples and detailed discussion of the implications going forward. The manuscript currently has most references and exhibits in place, but some revisions may occur without altering the main findings and argument in the paper. The word count is currently 10,594 and may be increased or decreased accordingly.