Literature Review of ESG Investment

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Abstract. ESG is considered as an increasingly significant factor under the aggravation of global issues. It comprises four main bodies (ESG facilitators, ESG evaluators, ESG investors, and ESG practitioners). This paper systematically reviewed the current development of ESG investment from the perspectives of the ESG investing development process, ESG investors, ESG investment process, as well as ESG strategies. ESG investment stands from the stakeholders' side, which promotes the development of society towards ESG by financial means.

Keywords: ESG Investment, ESG Investor, ESG Investment Strategy, ESG Investment Process

1 Introduction

With the aggravation of environmental, climate and social issues, as well as the challenges brought by COVID-19 to the global economy, the idea of "ESG sustainable development" has increasingly caught people's attention. In particular, ESG is the acronym for Environmental (E), Social (S), and Governance (G), which represents the standard of business sustainable development from the above three dimensions [1]. Compared with the traditional shareholder theory (emphasizing shareholder value maximization) [2], ESG commits enterprises to a broader social network and emphasizes considering the benefits of entire stakeholders [1]. The four main bodies involved in the ESG system are ESG facilitators (who advocate the concept development and formulate guidance framework), ESG evaluators (who establish and develop ESG rating system), ESG investors (who practice ESG investment philosophy), and ESG practitioners (who are committed to carrying out business activities according to ESG standard) [3].

Taking the climate issue as an example to explain these four main ESG bodies. According to the global risk report released by WEF (World Economic Forum) in 2020, climate issues have become the most threatening long-term risk in the world [4]. From the perspective of ESG facilitators, there is a total of 193 Parties (European Union plus 192 countries) joined the Paris Agreement until 2022 with the statement of achieving "carbon neutral" by the second half of the 21st century [5]. Specifically, British and Germany have formally legislated the announcement, while China, the United States, and Japan have issued policy declarations to add the sustainable development target into national strategies [6]. From the perspective of ESG evaluators, considering ESG-

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related factors could improve the accuracy of enterprises' sustainable value assessment, which satisfies investors' evaluation requirements for enterprises' long-term value under the pandemic. For example, the capital market assigns a higher valuation premium to new energy companies, mainly because of their strategic advantage in ESG carbon emissions [7]. Moreover, from the ESG practitioner's side, most of the world's top 500 enterprises all stressed the importance of ESG within a business operation. According to PwC's [8] investigation, the average life expectancy for small and medium-sized enterprises worldwide is less than seven years and for large companies is less than 40 years. Those longevity enterprises pay more attention to the factors related to ESG indicators [8], such as employee education, social environment governance, and altruistic belief establishment. From this view, companies need to focus on ESG factors to build longevity organizations.

At the same time, the Paris Agreement also highlights the significance of financial support in combating climate change [5]. Against this background, the global investment trend has shifted from a simple emphasis on profit to sustainability and profit [1]. However, among the numerous literature, there is a microscopic literature review on ESG investment, which is one of the four major ESG entities. Therefore, this paper will fill this gap by systematically reviewing the investigation of ESG investment.

Instead of simply considering financial profit, ESG investment refers to incorporating three non-financial indicators (environmental protection, social responsibility, and corporate governance) into the traditional investment decision-making framework [9]. It emphasizes selecting companies that also perform well in non-financial dimensions to obtain stable and sustainable returns [10]. The following will review the idea of "ESG investment", starting from its development process, and will gradually introduce ESG investors, investment process, and strategies. In addition, the future research orientation of ESG investment will also be promoted.

2 ESG investing development process

The ESG investment development process can be summarized in figure 1 below. The idea of sustainable investment could be initially originated from the rise of religious, ethical investment [11], which applies religious doctrines (such as Christianity and Islam) to investment. In the 1960s, with the rise of public movements (e.g., anti-wat, environment protection, and racial equality), some investors (e.g., Pax World Funds in 1971, Merlin Ecology Fund in 1988) shifted their thinking from investing in companies that used resources efficiently to investing in companies that emphasized on ecological conservation [12]. However, at this time, the thought of responsible investment is not mainstream within the investment market. The mainstream investment thought is still the view of profit maximization proposed by the economist Milton Friedman [11]. Since the 1990s, socially responsible investment has shifted from the ethical to the strategic level, and the conceptual framework of modern ESG investment has gradually taken shape. During this period, the definition of ESG investment was first proposed by UNEP FI in 2005 [12]. Subsequently, the United Nations (UN) established UN PRI (Principles for Responsible Investment) organization and stated the Six Principles of

Responsible Investment, which raises international attention toward ESG investment [12]. Signing this statement represents a commitment to integrate environmental, social, and corporate governance issues into the investment decision-making process and to comply with ESG investment standards. By the end of January 2021, the capital scale that meets the six principles of UN PRI has reached $103.4 trillion and is still growing [13].

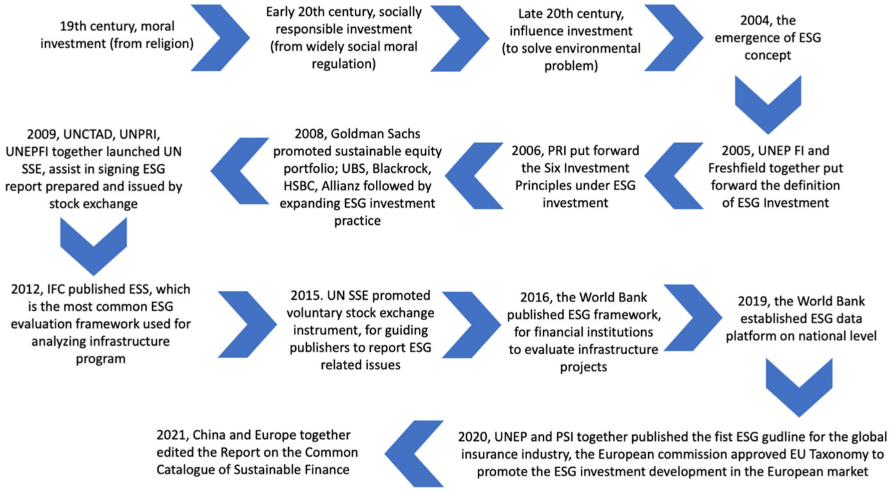

Fig. 1. ESG Investment Development Process (Self-painted)

The current scale of ESG investment has accounted for about 30% of the total global asset management scale, and the ESG investment scale is expected to achieve $7.29 trillion in 2024 [9]. However, the development of ESG investment among different regions is unbalanced. Europe, the US (United States), Japan, Canada and Oceania are the five regions with the highest proportion of ESG assets in the world [9]. From GSIA's (Global Sustainable Investment Alliance) data [14], more than 85% of ESG assets in the world come from Europe and the US. In particular, Europe is the first region to develop ESG investment [14]. However, the ESG investment development speed in the US has grown rapidly in these years, which overtook Europe's scale for the first time in 2020 [14]. Besides, the ESG investment scale in Japan is also expanding rapidly, which accounts for 8.1% and has surpassed the scales in Canada and Oceania [14]. On the other side, the decline of European ESG investments (from 66% in 2012 to 34% in 2020) may relate to the introduction of European policies that prohibit "greenwashing" (from SFDR) [15]. This policy cracks down the greenwashing behaviors, requiring all financial market participants in the EU to disclose ESG situations, and raising ESG disclosure standards to make it easier to track and measure.

It is worth mentioning that the modern ESG responsible investment idea is different from the traditional benefit maximization investment thought [2], which pursues maximizing the entire stakeholder group's interests. Besides investors, stakeholders also include the target enterprises and other industries and groups affected by the investment. ESG responsible investors invest in maximizing the interests of stakeholders, which is complementary to emphasizing social responsibility and sustainable development [16]. It helps investors realize personal value, increase long-term returns and reduce investment risks, which promotes the development of society towards ESG by financial means.

3 ESG investors and ESG investing process

3.1 ESG Investors Classification

As mentioned, ESG investors are practitioners of the ESG investment philosophy, which can be divided into institutional investors and individual investors [3]. Most ESG investors are institutional investors (more than 75%), consisting of asset supervisory authorities and partial asset owners [3]. Those institutional investors advocate ESG because they believe it will deliver long-term returns [17]. Based on MSCI's 2021 Global Institutional Investor Survey Report [18], 52% of institutional investors have adopted an ESG investment strategy, and 73% said they plan to increase their ESG investment scale. On the other side, the proportion of individual investors is mainly partial asset owners [3]. With the increasing public awareness of environmental protection and the improvement of the financial system, the number of individual investors raises continuously (from 11% in 2012 to 25% in 2020) [18]. Among the entire global individual investors, 86% said they prefer to consider ESG factors when making investment decisions [18]. Overall, among all global investors, the compound growth rate of institutional investors who joined UN PRI increased by more than 20%, while the compound growth rate of individual investors increased by more than 10% from 2012 to 2019 [13].

From the perspective of asset supervisory authorities, it is worth mentioning that compared to others, those private equity fund investors pay more attention to ESG. According to a PWC survey of 162 private equity fund managers conducted from 2015 [8], mainstream private equity funds must consider ESG performance for each portfolio when making decisions. Moreover, ESG also plays an essential role in controlling risk and increasing returns in the primary market investment of private equity investment funds. Because ESG investment improves investment return under long-term risk adjustment [9], it is used not only for mine clearance and risk control but also a new standard for long-term investment. Investment institutions continue to integrate ESG factors into their analysis and investment framework.

From the aspect of partial asset owners, they were mainly represented by public pensions, which transmitted ESG consideration towards asset supervisory authorities through the investment value chain, thus forcing those asset supervisory authorities to integrate ESG evaluation into their investment decision-making process. To complement traditional fundamental analysis, ESG factors can run through the investment and research process and be incorporated into portfolio-level risk management. A growing number of investors are incorporating megatrends such as reputational risk assessment, regulatory developments, and an aging population into their fundamental investment analysis [18]. In addition, ESG analysis is incorporated into traditional analytical frameworks such as Porter's Five elements, constituting temporary or permanent adjustments to financial indicator forecasts, modeling assumptions, valuation multiples, and financial ratio forecasts.

3.2 ESG Investment Process

The ESG investment process has become relatively transparent and standardized, mainly following the four steps below.
Step 1: Listed companies disclose ESG information based on standards [10]. Specifically, the main sources and forms of disclosure standards are listed in the following.

The main sources of ESG disclosure standards are international organization regulation (like Global Reporting Initiative) [19], bourse requirements (like HKEx's 2021 ESG Reporting Guidelines Index) [20], as well as government policy (like EU launched TEG Final Report on EU Taxonomy in 2020) [21].

The majority formulations of international ESG disclosures are mandatory disclosure (used in the US, Australia, France, Hong Kong China), semi-mandatory disclosure (used in the UK, EU, and Mainland China), as well as an explanation without disclosure (used in Brazil, Singapore) [19].

Step 2: Rating firms, such as MSCI [18], will first-rate companies' performance according to the ESG rating criteria. Then, they will further process ESG index data within the investment portfolio based on the enterprises' ESG rating [18]. The problems of the existing evaluation system mainly include: first, the standard is not unified; Second, the rating process lacks transparency. These issues result in low correlations among major rating agencies. Berg et al.'s [22] analysis of the correlations among the six major ESG rating agencies found that the average correlation coefficient among the results of each rating agency was less than 0.54. This situation is because each rating system represents different world views and values. A similar consequence was also discovered by ERM Consulting's SustainAbility research group [23]. From their "Rate the Raters 2020: Investor Survey and Interview Results" program, they pointed out that there exists a huge difference between the importance of ESG ratings to investors and the users' understanding of different ESG ratings [23].

Step 3: Index preparation companies such as Sustainalytics [24] and Thomson Reuters [25] will compile the relevant indexes based on rating results. In particular, the classification and selection strategies of indexes are diverse.
Step 4: By combining multiple ESG investment strategies, investors will consider the ESG rating and index results to make an investment decision. The detail of ESG investment strategies will be explained in Chapter 5.

4 ESG Investment Strategy

Seven ESG investment strategies in total could be divided into two categories according to market level (see Table 1 below) [26]. The most widely used strategies in the global market today are, in order, ESG integration (over $25 trillion, about 40%), negative screening ($15.9 trillion), and shareholder engagement ($10.5 trillion) [27]. Among all the strategies, ESG integration is growing rapidly, while impact investing accounts for the least proportion.

Table 1. ESG Investment Strategy [26].

ESG Investment Strategy	Definition
Type 1: Primary Market Investment Strategy	
Impact/Community Investing	Through investment, to achieve a positive influence on society and the environment, focus on the ESG impact and positive benefits generated by the investment. This method is the latest to be applied.
Type 2: Secondary Market Investment Strategy	
ESG Integration	Environmental, social, and governance factors are systematically and explicitly incorporated into the investment analysis. ESG integration is the addition of ESG aspects into the original investment framework. ESG integrated strategy's drawback is not banning investment in a certain scope.
Negative/Exclusionary Screening	This strategy is based on ethical values, internationally accepted norms, and the legal requirements of the host country of the institution to eliminate the relatively poor ESG performance companies of a range of potential targets. This method was first applied and can help avoid the negative impact of regulation and accidents on company performance.
Norms-based Screening	According to the relevant ESG standards formulated by international organizations, companies with adverse effects of business activities are excluded from investment.
Sustainability Themed Investing	Investing into sustainable solutions that contribute to environmental and social aspects, such as green buildings, sustainable agriculture, and low-carbon portfolios. Focus on forecasting long-term trends and identifying ESG investment opportunities and tracks.
Positive/Best-in-Class Screening	Invest in an industry, company, or project that has positive ESG performance. The method is often used in ESG index development.
Corporate Engagement and Shareholder Action	Leverage shareholder rights to influence corporate behavior, communicate with companies on ESG issues, submit shareholder proposals (jointly), and vote by proxy under comprehensive ESG guidelines.

There has another classification of these seven investment strategies. GSIA [27] adopted a standardized classification of ESG investment strategies in the Global Sustainable Investment Review, which divided ESG investment strategies into four categories: screening (including negative, positive, and norms-based screening), integration (including ESG integration), participation (including corporate engagement and shareholder action, impact/community investing), and theme (including sustainability themed investing).

From different countries' data, the scale of ESG investment strategies varies to a certain extent under the influence of different regions and policies. To illustrate, instead of using norms-based screening, the United States mainly adopts sustainability-themed investment and ESG integration strategies [27]. In Japan, corporate engagement and shareholder action strategies are widespread [27]. Australia uses the three screening strategies in combination, with none used separately [26]. Canada is dominated by shareholder engagement and norms-based screening strategies, while Europe is dominated by norms-based and negative screening strategies [26]. According to reports from major countries, the combination trend of multiple strategies is significant. More and more investment institutions not only rely on one strategy but combine multiple strategies.

5 Conclusion

ESG is considered an increasingly significant factor under the aggravation of global issues. It comprises four main bodies (ESG facilitators, ESG evaluators, ESG investors, and ESG practitioners). This paper systematically reviewed the current development of ESG investment from the perspectives of the ESG investing development process, ESG investors, ESG investment process, as well as ESG strategies. ESG investment stands from the stakeholders' side, which promotes the development of society towards ESG by financial means.

For future research, it is valuable to investigate ESG investment under specific theory frameworks like category theory. Topics such as whether ESG performance can better indicate investors' compassion and ESG investment in idea and identity work should also be researched more deeply. In conclusion, this paper systematically reviews the development of ESG investment from various aspects like ESG investing development process, ESG investors, ESG investment process and ESG investment strategies. The author also promotes the future research orientations of ESG investment in the end, which also points in the direction.

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