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Recent Trends In Sustainable Finance

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ABSTRACT: In recent years, our government has placed a greater emphasis on economic development and GDP, ignoring environmental changes and long-term development. Recently, the entire planet has been affected by pollution and climate changes. It is past time to focus on coping with climate change, reducing environmental pollution, and fostering harmonious cohabitation between people and nature in order to ensure the global economy and society's long-term viability. Recent Trends in Sustainable Finance, Environmental, Social, and Governance: environmental (green), social (impact investment), and governance (stakeholder) finance are the subjects of this research. This research also looks at the entire spectrum of sustainable financing, including market size and returns.

Keywords: Resent trends, Sustainable Finance, Spectrum, Environmental, Social, Governance, and Spectrum.

1. INTRODUCTION

There is currently a deep rethinking of the purpose served by businesses, as well as the emergence of a genuine and growing determination to put finance at the service of the long-term goals of sustainable development. Due to the COVID-19 pandemic, this issue becomes even more critical in this period of economic and social uncertainty.

Environmental, social, and governance (ESG) factors are becoming increasingly important in gaining a better understanding of a company's risk and performance. Climate change, carbon emissions, air and water pollution (E); labor standards, employee engagement, human rights, gender and diversity policies (S); executive compensation (E) board composition (G) The financial materiality of firms' sustainability dimensions is given a new long-term perspective by the implications of these factors on business models. The current COVID-19 pandemic is highlighting the importance of these non-financial factors, reinforcing the relationship between companies and their stakeholders (investors, employees, suppliers, communities, environment, and government).

The number of companies reporting ESG data has risen steadily in recent years, from fewer than 20 in the early 1990s to nearly 9,000 in 2016. Investors' interest in ESG data grew quickly as well. The UN Principles for Responsible Investment (PRI), which were launched in 2006 and commit to incorporating ESG issues into their investment analysis and practices, had about 2,900 signatories as of 2018, with a total AUM of about $90 trillion. A new ESG rating industry has also emerged, with several external providers providing independent assessments of companies' long-term risks based on data, analytics, and judgmental factors. Finally, regulation is forcing investment managers, banks, insurers, and non-financial companies to invest in new capabilities in order to meet ESG requirements.

1.1 Financial System role

The financial system's functions, according to Levine (2005), are to: • Produce information ex ante about potential investments and allocate capital; • Monitor investments and exercise corporate governance after providing finance; • Facilitate trading, diversification, and risk management; • Mobilize and pool savings; and • Ease the exchange of goods and services.

The first three functions are especially important for long-term finance. Finance plays an important role in allocating funds to the most productive uses. As a result, finance is well positioned to assist in strategic decision-making regarding trade-offs between sustainability goals. While broader considerations guide an organization's sustainability strategy, funding is required to meet sustainability objectives.

Banks, for example, define their lending strategies in terms of which sectors and projects are eligible for financing and which are not. Similarly, investment funds develop investment strategies that guide decisions about which assets to invest in and which to avoid.

Investors can also have influence over the companies in which they invest when it comes to monitoring their investments. As a result, investors play a significant role in controlling and directing corporate boards. The role of governance also entails balancing the diverse interests of a corporation's stakeholders. In section 3.2, we look at how progressives think about how interests, such as those of the environment and society, should be balanced.

Finance excels at valuing future cash flows by pricing the risk of future cash flows. Because environmental issues are inherently uncertain (e.g., how rising carbon emissions will affect the climate, and the timing and shape of climate mitigation policies), risk management can assist in addressing these concerns.

1.2 Sustainable Finance: Three Stages

Our framework for managing sustainable development at various levels is shown in Figure 1. There are interactions between the levels, as we've discussed. As a result, it's critical to pick the right mix of financial, social, and environmental considerations.

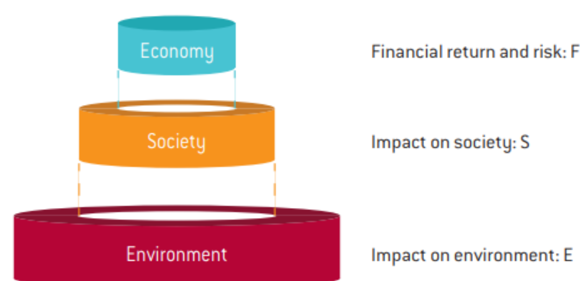

Figure 1: Managing Sustainable Development

2. REVIEW OF LITTRETURE

Charles, & Philip, (2020) - In recent years, our country has placed a greater emphasis on economic development and GDP, ignoring environmental changes and long-term development. Recently, the entire world has been affected by pollution and climatic changes. It is past time to focus on coping with climate change, reducing environmental pollution, and fostering pleasant coexistence between people and nature in order to ensure the global economy and society's long-term viability. Green finance is made up of two words: "green" and "finance," both of which are contentious topics. Green finance is the country's innovative financial model for combining environmental protection with economic growth and profit. The researcher's focus in this study is on recent trends, opportunities, challenges, and various investment avenues of Green Finance in India, in order to analyze in the path of green finance and to know the target achieved so far from the initiative taken by the Indian government. To achieve the sustainable development goal, India must focus more on green finance and contribute more to infrastructure funding, according to the analysis.

RBI (2021) - Green finance is quickly becoming a top priority for government policymakers. This paper examines the global and Indian developments in green finance. To assess the extent of public awareness (Google Trends) and financing options (bank credit and bond issuances) for green projects, we use a variety of data sources. Our findings show that, while public awareness and financing options have improved in India, a reduction in asymmetric information through better information management systems and increased coordination among stakeholders could pave the way for greener, long-term economic growth.

Dr Sabine Mauderer (2021) - This brief report provides an overview of market dynamics for securing long-term financing. It identifies three main channels through which financial

markets can assist in steering the real economy's necessary transformation towards higher levels of sustainability:1 disclosure, risk management, and capital mobilization. On these three topics, the report also includes examples of policies, regulations, and guidance addressed to market participants. Finally, it includes a set of key takeaways for policymakers and market participants to consider.

Strandberg, C. (2005) - Corporate Social Responsibility (CSR) is becoming a major international business trend, and many business executives around the world are concerned about it. 1 Ten Canadian financial cooperatives funded a study to assess international best practices, standards, and trends in CSR or sustainable finance in order to better understand how this trend is playing out in the financial services sector. They hired Strandberg Consulting to conduct the research, which looked at best practices from 21 financial institutions in the banking, insurance, and asset management sectors2 as well as ten international sustainable finance standards, principles, and guidelines. Fifty sustainable finance thought leaders from around the world were also interviewed. The third part of this research is reported in this paper: interviews with thought leaders from around the world to get their perspectives on the future of CSR or sustainable finance by 2015.

The findings back up the business trend that CSR is becoming more mainstream in the financial services sector, with banks and asset managers leading the charge. Leading financial institutions (FIs) are putting in place governance and management systems to integrate CSR into their operations, and they will increasingly report on their CSR performance with third-party validation. They're creating CSR product suites that take social and environmental factors into account, incorporating CSR into their risk management systems, and developing methods for screening investments against CSR criteria. They will continue to develop strategic CSR policies and programs in a variety of social and environmental areas in order to reduce or offset their negative direct and indirect impacts, as well as to increase their positive direct and indirect impacts. CSR-focused financial institutions will have robust stakeholder engagement programs today and in the future to solve complex sustainability challenges, provide input into business strategy, and stay on top of stakeholder concerns. While they acknowledge that the court of public opinion has yet to rule on the extent to which financial institutions have a responsibility to promote sustainability, best practice CSR financial institutions are, and will continue to be, at the forefront of promoting sustainable practices within their operations, to their customers, and to the general public. In the future, ethical consumers, governments, and other businesses' sustainable purchasing policies will moderately drive the CSR FI agenda, while niche sustainability financial institutions will continue to raise the CSR performance bar, leveraging their rich innovation cultures. Employees and non-governmental organizations (NGOs) are expected to play an important role in keeping CSR on the agenda of all companies,

including financial institutions. Many of the trends predicted for FIs are also applicable to other industries. Many industries, including finance, are treating CSR as a business strategy and opportunity – not as an afterthought, feel-good charitable endeavor, but rather as a means of generating long-term value for the company. As a result of this trend, CSR is making its way into the boardrooms of financial institutions, where targets for overall CSR performance are being set. Boards and management are, and will continue to be, involved in a heated debate about the scope of their responsibility for sustainability – does it include both indirect and direct effects? While this debate rages, many leading CSR FIs will emerge from the pack to differentiate themselves on CSR criteria, trailing only the leading mission-based CSR finance firms with explicit goals to improve social and environmental quality of life. Nonetheless, financial institutions are expected to adopt baseline CSR as an industry standard, based on international standards developed for the industry through various international fora. This will occur as public expectations for the finance industry to take a more proactive approach to sustainability rise, owing to increased information on corporate sustainability performance as well as anticipated social and environmental shocks over the next decade. Indeed, climate change, financial access, and literacy issues will dominate the CSR scene for financial institutions (FIs), with many FIs setting carbon-neutral goals for their operations and developing micro-finance and financial literacy solutions to address the growing international and domestic poverty gap. CSR FIs will be categorized today and in the future based on whether they believe CSR contributes to long-term shareholder value (mostly public companies) or if their mission and business model are based on sustainability values (mostly non-public companies). Through strong internal CSR cultures and NGO and multi-stakeholder partnerships, both will be pioneering in the CSR space. And there are and will be financial institutions whose approach is based on a fundamental commitment to using their resources to contribute to social and environmental progress, rather than on mission or shareholder value. The study also identifies a minority of people who believe CSR in finance will be ineffective, but not enough to overshadow the majority's belief that CSR will become a business necessity. Whether or not it is referred to as CSR a decade from now, financial institutions will increasingly consider social and environmental factors, as well as the perspectives of stakeholders, when making business decisions.

Schoenmaker, D. (2017) - The issue of sustainable development has many facets that must all be considered if long-term viability is to be ensured. Climate change and natural resource depletion are two factors threatening the earth's ability to regenerate on the environmental front. On the economic front, development that does not pay enough attention to income inequality and the provision of basic needs to everyone is on the verge of collapsing. This paper examines the role of finance in ensuring that investment protects the environment and promotes internally sustainable economic systems.

This essay offers a framework for moving in this direction, as well as guidelines for combating short-termism, with a focus on incentive-compatible measures for everyone. Moving from traditional to sustainable finance necessitates confronting attitudes that are ingrained in the structure of our economic systems. Shifting away from them necessitates not only new ways of working, but also new underlying principles that prioritize sustainability in our thinking. It's critical that we start this process, and the sooner the better.

3. OBJECTIVES OF THE STUDY

1. To study Recent Trends in Sustainable Finance

2. To study the environmental, social, and governnance: environmental (green), social (impact investment) and governance (stakeholder) finance

3. To study the spectrum of sustainable finance: market size and returns

4. RESEARCH METHODOLOGY

This research paper is entirely based on secondary data, which was gathered from secondary sources such as published articles, websites, and government reports. To arrive at the findings and conclusion, the researcher reviewed a variety of literature and published government reports.

5. DATA ANALYSIS AND RESULT

5.1 Environmental, Social, and Governnance: Environmental (Green) Finance

In practice, environmental finance is now more commonly referred to as "green finance." Debt products, particularly green bonds, dominate the green finance market. In general, there are six types of green bonds:

(i) corporate bonds issued by a corporate entity to fund asset acquisitions;

(ii) project bonds backed by single or multiple projects for which the investor has direct exposure to the project's risk;

(iii) asset-backed securities collateralized by one or more specific projects, usually providing recourse only to the assets;

(iv) asset-backed securities collateralized by one or more specific projects, usually providing recourse only to the assets;

(v) asset-backed securities collateralized by one or more specific projects,

(iv) international financial institutions such as the World Bank or the European Investment Bank (EIB) issue supranational, sub-sovereign, or agency bonds;

(v) municipal bonds issued by a municipal government, region, or city, which also includes sovereign bonds; and

(vi) finance sector bonds issued by a financial institution to raise capital to finance on-balance-sheet lending (such as loa).

5.1.1 Positive Green Finance

Positive green finance focuses on climate change, pollution, and public health issues through innovation and new technologies. Mitigation and adaptation to climate change, environmentally sustainable natural resource management, biodiversity conservation, renewable energy, energy efficiency, the circular economy, clean transportation, and pollution prevention and control are all common investment goals. Green bonds do not reduce carbon emissions, but they do have other environmental benefits like better water management and biodiversity. This is true for at least a fifth of the total value of the green bond market. Blue bonds and blended finance models focusing on the "ocean economy," biodiversity, and marine sustainability have recently gained traction.

5.1.2 Negative Green Finance

Negative green financing usually invests in businesses that are reducing their carbon emissions, have a low carbon footprint structurally, or engage in low-carbon sectors. As a consequence, many of these investments have little direct impact on the climate problem or other environmental issues. 34 In the ISS ESG Ratings and Rankings survey in 2019, Microsoft, for example, was ranked first. 35 Some carbon-intensive or high-polluting businesses have issued green "transition" bonds to finance decarbonization initiatives. Cadent Gas, a British company, raised a €500 million green bond in 2020 to fund efforts to reduce pipeline leakage. In 2019, Enel, an Italian power provider, launched a green bond index tied to expanding the firm's renewable energy production capacity. 36 This kind of green financing has been connected to the push toward divestment from carbon-intensive businesses.

5.2 Environmental, Social, and Governance: Social (Impact Investment) Finance

5.2.1 Positive Social Finance

Positive social finance, on the other hand, necessitates the deployment of capital to create deliberative and additional social impact from an ESG standpoint. As a result, the vast majority of finance used for social impact is unique positive social finance. In this context, impact investment has emerged as a new model of positive social finance over the last 20 years. Impact investment is defined by the Global Impact Investing Network (GIIN), a non-profit organization dedicated to building the field's infrastructure through convening and research:

> Impact investments are those that aim to have a positive, measurable social and environmental impact while also providing a financial return.

This definition has recently been expanded by the Global Steering Group for Impact Investment (GSGII), a transnational coalition of 33 national advisory boards that supports the global development of the impact investing field:

> Impact investing seeks to balance risk, return, and impact in order to benefit people and the environment. It does so by establishing and measuring specific social and environmental goals alongside financial goals.

The emphasis on measurement as an integral component of the impact investment model in both definitions further confirms it as positive social finance that deploys capital to directly address social issues.

- **Social Bonds**

Social bonds are a more recent development in the field of social finance. Any bond whose proceeds are solely used to finance (or refinance) projects in the areas of water infrastructure, health and education, affordable housing, work integration, food security, and service access is referred to as a social bond. Social bonds are formed to directly address or mitigate a specific social or environmental issue affecting a particular population. In 2020, the International Capital Market Association (ICMA) released a set of Social Bond Principles, which include four core components that must be calibrated to the bond's stated social or environmental purpose: financial use, project evaluation processes, financial management, and impact reporting.

5.2.2 Negative Social Finance

Negative social finance refers to investments that are part of a broader corporate social responsibility (CSR) framework from an environmental, social, and governance (ESG)

perspective. CSR emerged in the 1990s as an effort to connect a company's commercial operations with a range of social or environmental projects. Various assertions have been made in favor of CSR's worth to a firm, such as that it lowers risks, enhances reputation and brand, and may aid overall business performance. However, it has been proposed that rather than being regarded as an essential element of corporate practice, CSR initiatives should be viewed as having positive spillover effects. As a consequence, CSR is at best a tool for improving corporate conduct and, at worst, a public relations exercise involving selective disclosure of fundamental, sound business practices. Furthermore, the CSR model is being criticized more and more for its lack of accountability and underperformance.

5.3 Environmental, Social, and Governance: Governance (Stakeholder) Finance

From an ESG perspective, governance finance refers to the impact of investment on a range of important stakeholders surrounding a business. In this respect, it has many negative and positive similarities with the impact goals of green and social finance. Stakeholder finance problems, which have been conceived in terms of a wider set of disputes concerning corporate "purpose," are also related to these. Organizational ownership and legal incorporation forms, on the other hand, are the main distinctive features of positive stakeholder financing.

In terms of stakeholder ownership, cooperative and mutual financing are important drivers of stakeholder effect. This is the outcome of investment in an organizational structure built on the principle of equal membership and intended to solve market failures or monopsony tendencies. Cooperatives and mutual organizations play an important role in housing, agriculture, health, 50 work integration, insurance, and banking, to name a few. Many of these businesses are important. Mutual and cooperative insurers, for example, have a worldwide market share of 26.7 percent in 2017, with assets of $8.9 trillion, across more than 90 countries. This market employs over a million people and has 960 million members or policyholders. Similarly, the worldwide cooperative banking industry had assets of €7.4 billion (2018).

There are a number of legal forms for social purpose organizations that are intended to attract stakeholder-focused financing all around the globe in terms of stakeholder forms of incorporation. These include benefit corporations in the United States (US), 56 community interest companies in the United Kingdom (UK), and European social cooperatives. Each of these legal forms of incorporation has its own set of financial and transparency obligations, all of which are in accordance with the criteria of being a recognized social purpose organization. Asset lock clauses, for example, shield community interest businesses against hostile takeovers in order to obtain access to the value of a real asset such as real estate.

5.4 Spectrum of Sustainable Finance: Market Size

A major and defining characteristic of the sustainable finance market is the range of capital types available to be deployed (and co-invested) for ESG effect. This financial spectrum includes all forms of ESG-focused private money that is invested for the long term. ESG finance may be divided into two categories: negative/exclusionary ESG finance and positive/integrated ESG finance. The former use a screening investment analysis to deploy resources thematically with the aim of "doing no harm," while the latter invests money to have a greater impact, typically in accordance with the SDGs.

Positive ESG finance focuses on private markets and early-stage, high-potential impact enterprises, while negative ESG finance usually invests in big, publicly listed corporations.

The additionality of impact, which is related to sustainable finance's "Double Delta," is another important distinction between negative and positive ESG finance. In the Double Delta analysis, the additionality of impact at the investee/enterprise level is distinguished from the additionality of impact at the investor/capital level. In this perspective, ESG money invested as listed stock or debt in mainstream markets has no extra effect, while fresh investment in new impact businesses or to develop innovations has a twofold additionality impact.

Finally, negative ESG finance typically invests in market-oriented equity and debt, whereas positive ESG finance has access to a broader range of instruments, including grants, foundation assets deployed as PRI or MRI, sub-market and market-oriented impact investments, development finance, and green agribusiness.

The Spectrum, on the other hand, extends beyond a limited definition of market-rate positive/integrated ESG financing to encompass sub-market return categories, capturing the entire spectrum of sustainable finance used for environmental and/or social impact. Figure 2 shows the range of sustainable finance in terms of both the broad positive/integrated and negative/exclusionary ESG categories.

Then, one by one, each constituent of the spectrum is evaluated in terms of its projected market size.

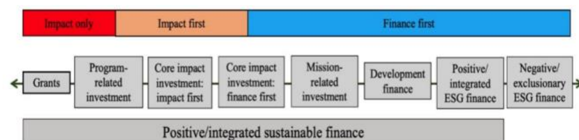

Figure 2: Sustainable Finance Spectrum

Source: Author's own research

ESG = environmental, social, and governance

5.4.1 Positive/Integrated Environmental, Social, and Governance Finance: Market Size

- **Program-Related Investment and Mission-Related Investment**

PRI and MRI form part of a foundation's total invested assets when they use endowment money to create effect. PRIs are usually used to finance programming activities using loan money, frequently in combination with grants, with the expectation of solely receiving a return of capital. In the United States, PRIs may be included in the yearly 5 percent distribution of "grant" capital. MRIs may be debt or equity, and they are usually utilized to finance the foundation's objectives while also making a profit. The potential market size of MRI investments may be equivalent to the entire assets of all foundations, which are estimated to be about $1.5 trillion worldwide.

- **Grants**

Grants have a negative anticipated return since they are never repaid, which is why they are utilized to create blended financing agreements. The $75 billion market size estimate is based on 5% of total foundation assets globally. This is a legal criterion for charity status in the United States, but not abroad. 62 Government grants to social businesses, which may be significant, are not included in this number. Since 2010, the UK government has invested more than £1 billion in the development of social business and impact investment infrastructure.

- **Impact Investing**

By 2020, the entire impact investing market is expected to have grown to $715 billion in assets under management. 69 Private debt accounted for 37% of these assets and more than half (61%) of the overall number of investments. Publicly traded debt accounted for almost a quarter of all capital invested (16%), while private equity accounted for another 16 percent. (11% of all transactions) The average transaction size across all asset types was very modest, at $5 million. Direct investments, which were invested in businesses, projects, or real estate, accounted for 76 percent of all investments. The average transaction size for real estate investments was $28 million, followed by public equity ($22 million), private equity ($7 million), and publicly traded debt ($7 million). The biggest group of investors were pension funds (18 percent of total investments). The most highly invested in sector was

energy (16 percent of total investments). 55 percent of all investment went to “mature” public and private businesses.

5.4.2 Environmental, Social, and Governance Finance

In 2018, the overall value of assets under management using an ESG thematic approach was about $60 trillion, accounting for more than half of all assets under management. All of the major investment banks, as well as a handful of specialized fund managers, currently handle ESG funds. Positive/integrated and negative/exclusionary ESG finance are the two types of ESG financing. Data on the precise size and breadth of each category is not publicly accessible. However, some general inferences may be made based on the facts provided.

- **Positive/Integrated Environmental, Social, and Governance Finance**

Thematic bonds are a key component of the positive/integrated ESG finance market. Since 2013, the sustainable finance bond market has grown significantly (Figure 3), primarily due to green bonds.

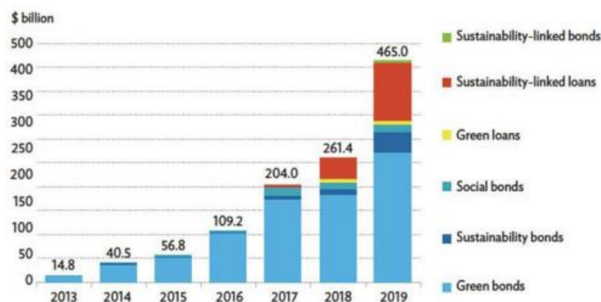

Figure 3: Growth of Sustainable Bonds, 2013–2019s

Source: Climate Bonds Initiative (2020)

- ✓ **Green Bonds**

The top green bond issuers in 2019 were the Federal National Mortgage Association of the United States ($22.8 billion), the German Reconstruction Credit Institute ($9.02 billion), the Dutch State Treasury Agency ($6.66 billion), France ($6.57 billion), and the Industrial and Commercial Bank of China ($5.85 billion). Green bonds are listed as public debt on all of the world's main stock exchanges, according to a 2019 study of 135 hedge funds from 13 countries with $6.25 trillion in assets under management, 84 percent indicated "increasing interest in ESG-oriented funds and strategies over the past 12 months.

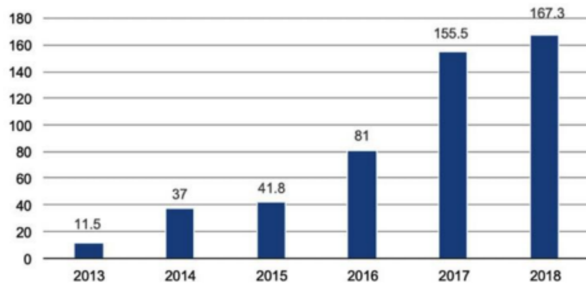

Figure 4: Green Bonds Issued ($ billion) 2013–2018

Source: Morgan Stanley Capital International (https://www.msci.com/esg-ratings).

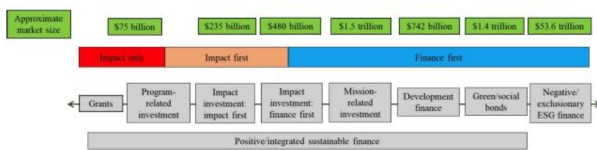

Figure 5: The Spectrum of Sustainable Finance: Market Size

Source: Author's own research.

ESG = environmental, social, and governance

- **Negative/Exclusionary Finance**

According to the evidence, more than 95 percent of ESG finance falls into the negative/exclusionary category, which screens investments based on a variety of ESG criteria, such as corporate practices, best-in-class comparators, and norms-based analysis against global standards (International Labour Organization, United Nations Children's Fund [UNICEF], Organisation for Economic Cooperation and Development [OECD]) (Figure 6 and Table 1).

Table 1: Environmental, Social, and Governance Finance Allocated by Theme, 2018

Theme	Negative/Exclusionary	Positive/Integrated
Negative screening	19.8	
ESG integration	17.5	

Corporate engagement	9.8	
Norms-based	4.7	
Best-in-class	1.8	
Sustainability themed		1.0
Community focus		0.4
Total ($ trillion)	**53.6**	**1.4**

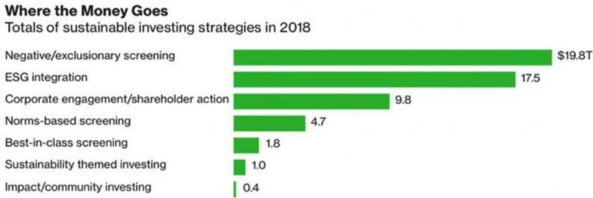

Figure 6: Environmental, Social, and Governance Investment Strategies

Source: Global Sustainable Alliance (2018)

ESG = environmental, social, and governance

Second, the data shows that public stocks and fixed-income loans account for the majority of ESG investments, suggesting a focus on publicly traded companies. These ESG investments, according to the logic of the Double Delta model, have no significant impact (Figure 7).

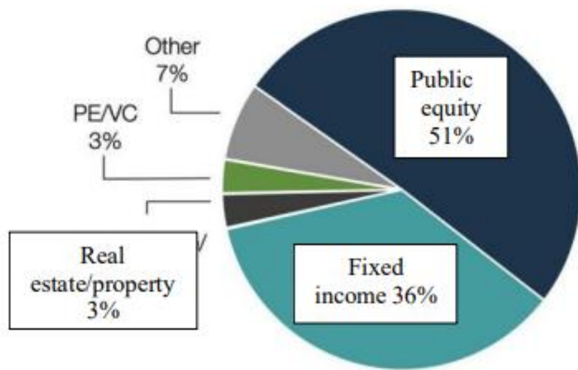

Figure 7: Global Sustainable Finance Asset Allocation, 2018

Source: GSI Alliance (2018).

PE = private equity, VC = venture capital

Finally, the European ESG market prioritized exclusionary tactics, while the American market prioritized ESG inclusion (Figure 8).

Figure 8: Sustainable Assets by Thematic Approach and Region, 2018

Source: GSI Alliance (2018).ESG = environmental, social, and governance.

5.5 The Spectrum of Sustainable Finance: Returns

5.5.1 Positive/Integrated Environmental, Social, Governance Finance: Returns

In terms of returns on investment, a major characteristic of the sustainable finance spectrum is that it covers financing with a broad range of return expectations. Grants anticipate no return on investment, while risk-adjusted market returns may exceed negative/exclusionary ESG funds. With the exception of the GIIN statistics on the two kinds of impact investing, there are no consolidated data sets on the returns of other types of capital in the spectrum (impact first and finance first). As a consequence, the returns shown here are estimates based on available data and should only be used as a general guide.

- ✓ **Grants and Principles for Responsible Investment**

Grants play a significant part in blended financing structures and transactions as both start-up risk capital and concessionary sustainable finance since they are 100 percent loss finance. The anticipated returns from PRI will vary from capital preservation to to loss-making. The KL Felicitas Foundation, for example, recorded a 2.5 percent yearly loss on its PRIs despite its goal of investing 100 percent of its assets in impact. Furthermore, under the US Internal Review Code for charity tax regulation, PRIs may be included in the required 5% of total assets that should be distributed as grants each year, indicating that they are anticipated to lose money.

Positive Return on Investment The GIIN 2020 study split the data into two groups in terms of effect investment returns: "developed market" and "developing market," followed by "kind of financing" (as annualized, realized, and gross returns). 85 Private equity delivered a 16 percent actual return with an anticipated, risk-adjusted market rate return in developed economies, while real assets delivered a 13 percent return and private debt delivered an 8% return. In emerging markets, the average actual return with an expected, risk-adjusted market rate return of 18 percent for private equity, 10% for private debt, and 8% for real assets with an expected, risk-adjusted market rate return of 18 percent was 18 percent for private equity, 10% for private debt, and 8% for real assets with an expected, risk-adjusted market rate return of 18 percent. While these returns seem to be comparable to normal risk-adjusted returns on mainstream private equity86 and private debt87, there are significant empirical concerns regarding whether they are appropriately risk-adjusted, given the non financialized effect risk variable in the total capital structure. 88 Several performance categories, including business execution and management risk (23 percent +54 percent), country and currency risk (18 percent +40 percent), macroeconomic risk (17 percent +49 percent), financing risk (13 percent +46 percent), and market demand and competition risk (13 percent +46 percent), all saw a severe or moderate financial risk in the GIIN 2020 survey.

- **Development Finance**

Aside from direct subsidies, the goal of development finance is to achieve a risk-adjusted market return. Some of the market's bigger participants can forecast development financing returns. Between 2015 and 2019, the IFC earned an average return on assets of 0.1 percent to 1.6 percent, whereas the CDC earned an average return of 10.3 percent between 2012 and 2016. Furthermore, the equity returns on IFC, the European Bank for Reconstruction and Development, and the Netherlands Development Finance Company (FMO) averaged 10% between 2003 and 2015.

- **Green and Social Bonds**

Green bond price data is still uncertain. However, according to some studies, pricing usually does not represent any kind of risk premium. As a consequence, returns are usually similar to those of conventional bonds, which have averaged between 0% and 2% over the past five years. In 2020, for example, Barclays issued a £400 million 6-year green bond with a 1.70 percent annual dividend to promote climate-related goods and activities.

5.5.2 Negative Environmental, Social, and Governance Finance

The top-performing companies in terms of negative/exclusionary ESG financing returned between 12 and 16 percent in 2018–2019, according to available data. (See Figure 10) In comparison, the S & amp;P 500 has increased by 29% during the same time period.

	Fund name	12 month return (%)
1	Axa Global Factors Sustainable Equity	16.96
2	Liontrust Sustainable Future Global Growth	16.8
3	Hermes Impact Opportunities Equity	16.07
4	Liontrust Sustainable Future Absolute Growth	15.34
5	RobecoSAM Sustainable Water	14.09
6	Triodos Global Equities Impact Fund	13.89
7	Royal London Sustainable World	13.88
8	BMO Responsible Global Equity	13.78
9	Liontrust Sustainable Future Managed	13.2
10	CCLA COIF Charities Ethical Investment	11.89

Figure 9: Returns on Top Ten Environmental, Social, and Governance Funds, 2018–2019

Source: Financial Times Advisor

However, a Barclays analysis of their funds' ESG performance from 2013 to 2020 found that ESG and non-ESG equity returns were roughly equal, with annual growth averaging around 18% (Figure 10).

Figure 10: Environmental, Social, and Governance–Non-Environmental, Social, and Governance Equity Performance

Source: EPFR, Barclay's Research.

ESG = environmental, social, and governance. Note: The sample period is from January 2013 to February 2020.

The graph shows total returns (net of fees), which are averaged by month and fund type. Funds with more than £100 million in assets under management are included in the sample.

6. CONCLUSION

It is concluded that the market for sustainable investment is still in its early stages of development. Most significantly, various nations' regulatory and transparency infrastructure is currently inadequate and uneven. As a consequence, there is a scarcity of comparable and accurate impact performance data, which is necessary for efficient sustainable financing allocation. This not only leads to inefficient capital allocation in terms of financial and social/environmental performance, but it also invites impact- or green-washing. The cost of capital allocation transactions is further increased by the absence of accurate data.

7. REFERENCES

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