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BARRIERS, CHALLENGES AND OPPORTUNITIES TO SUSTAINABLE FINANCE

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ABSTRACT
The finance sector is a pivotal pillar of actualizing the global commitment to climate and biodiversity conservation. Its efforts are a source of the $1.5 trillion required for transition into a green economy. On the other side, from the direct emissions of their enterprises (Scope 1 and 2 emissions), banks' decarbonization will be realized and banks will become aligned with the economy with regard to the goals and the spirit of the Paris Agreement. Banks will do that through changes in their credit and investment portfolio (Scope 3 emissions). In line with this, banks are being advised to set strenuous goals and objectives that will significantly increase their investments in green portfolios, bringing about energy transition, boosting exercises to decrease deforestation and ensuring the overall climate change adaptation. (López-Portillo, n.d.)

INTRODUCTION
Sustainable finance is an upcoming field which aims to addressing climate change and social need through the finance of sustainable project and business. It's a very complex and a broad concept that do encompass a lot of interrelated concept like climate finance, sustainable finance and environmental finance(https://link.springer.com/chapter/10.1007/978-3-030-65133-6_1 Sustainable finance refers to the process of making financial decisions that take environmental, governance, and social considerations (ESG) into account. The planet's natural resources are being depleted due in large part to rapid industrialization, making a sustainable way of life imperative. This involves implementing sustainable behaviours in both personal and professional spheres to the greatest extent possible. (Ziolo

,2021In the past, finance was just for stockholders. Now, finance cares about the environment and society. People's actions hurt the environment because of fast industry and global connections. The United Nations describes sustainability as meeting today's needs without hurting the future. This research looks at sustainable finance, or "green finance," with its benefits, difficulties, and problems. When a study starts, there are always gaps. So, there are still three gaps in it, like different accreditation schemes which are bad for investors. (*Insight Report 3 - Scaling up Sustainable Real Estate Investment - BCLP Perspectives*, 2024). Investors fear being accused of greenwashing. It could slow progress. Cost stops investment too. Green finance needs a lot of money at first, but gives back little.

It's hard to explain accreditation systems. Many programs exist, like BREEAM and LEED. But, no one agrees on what sustainability really is.

Investors using sustainable finance get better brand image and more money. (Ortiz, 2023) . People who care about the environment, shoppers, and the government all want to meet their goals and support sustainable practices. Sustainable finance is now part of regulations and rules, but steps to include it in financial safety rules are suggestions, not requirements. Banks and other financial

companies can help increase green finance by providing special products for businesses and directing money towards eco-friendly projects. Businesses (https://www.bis.org/review/r221222a.pdf).

Nevertheless, there are some major obstacles for green finance upscaling, including developing the framework for a robust third-party verification and assurance, fitting eco-friendly economic activities with clear-cut definitions and tackling data and reporting standards in a short period. Additionally, the blooming of the sustainable marketplaces in the countries with emerging economies is essential as these economies are playing a minor role in the global clean market. Nonetheless, the chosen pathway is important in some of the emerging markets where government leaders and private sector investors are already taking advantage of the green revolution since some other countries are at risk of facing more challenges. The data disclosures regulations are very important in helping investors, with whom risks are then properly incorporated to the values, and consequently the sustainable finance markets in developing economies can become stable. (IMF, Rohit Goel, Deepali Gautam, and Fabio Natalucci, 2022),4.

In another paradigm, the financial sector in India has created green finance instruments and promotes the use of green bonds, and there has been a rise of sustainable debt recently. Tools like the blended finance and risk-sharing facilities are also in place to make the project fund for climate and sustainability related projects. The new insight of the private sector is that it has no other way out than to engage itself with the bigger future

challenges. The initiatives of the public sector can either through incentivizing the banks to provide support in terms of transition finance for the businesses that are not so green. Nevertheless, availability of the data and disclosures is an issue then tackles it immediately Prescribed mandatory disclosures by the top 1000 listed entities by market capital alignment in India are a welcome trend, and listed entities are bound to adhere and enhance the added voluntary disclosures as well. In a nutshell, sustainable finance is capable of delivering both difficulties as well as chance to the climate change and social needs. Although there are many roadblocks to pulling back on green finance, green economies, for instance, the one of India, have definitely started and are on the path to transitioning to low-carbon economies. Data disclosure requirements have been proven to be relevant to the investors, prices of which should be determined based on allocation of the associated risks. This is a necessary step to develop sustainable finance markets in emerging countries. Not only the public sector, but also the implementation of its initiatives is capable of being a key driver of banks' motivation to give financial assistance to companies and sectors that are not yet really green. But efficient communication to investors, regulators, and other green finance stakeholders must be integrated to the platform quickly after its launch to the market. Consequently, here we're going to introduce how the sustainable finance can be hindered, faced with obstacles and is even being fostered.

LITERATURE REVIEW: SUSTAINABLE FINANCE

The finance sector is a pivotal pillar of actualizing the global commitment to climate and biodiversity conservation. Its efforts are a source of the $1.5 trillion required for transition into a green economy. On the other side, from the direct emissions of their enterprises (Scope 1 and 2 emissions), banks' decarbonization will be realized and banks will become aligned with the economy with regard to the goals and the spirit of the Paris Agreement. Banks will do that through changes in their credit and investment portfolio (Scope 3 emissions). In line with this, banks are being advised to set strenuous goals and objectives that will significantly increase their investments in green portfolios, bringing about energy transition, boosting exercises to decrease deforestation and ensuring the overall climate change adaptation. (López-Portillo, n.d.)

During the transition to a low-carbon economy there will be capital investments, which is difficult to fund without the participation of the private sector. Adding ESG (Environmental, Social and Governance) aspects to private investments transitions this strategy from the risk management one into a significant innovator and generator of options which is an option that creates sustainable value both for the company and for society. Nonetheless, capital aggregation for the green investments suffer to some extent because of the underlying micro-economic economic obstacles. This also includes migration of maturities from long-term green assets to other liabilities. It follows, just as well as the short-term time horizons of investors that this as well impacts the capital mobilization. First, financing and environmental policies are seldom compatible between themselves.

The definition of 'green' and the classification of 'green' activities into a key framework are highly critical to facilitate the inflow of investments and financiers' competence in making judgments. Green washing over the definition of green financing should be amended within standards to be more concrete and clearer.

Uniform set of basic green taxonomy criteria is also required to reroute money into the projects which return the environment and its people's well-being in consideration, and to screen the markets and provide benchmarking. Besides that, the green finance instruments will be internationally or locally affected by disclosure policies and rules. Advocated for granting financial markets frameworks involving voluntary green finance standards regularly and supervised by legislative bodies across all types of assets. (Kelkar, 2024)

Research Question

What are the challenges, barriers and opportunities in sustainable finance impacting investments?

Research objectives

1. To analyze the reason behind low investments in sustainable finance.

2. To understand how sustainable finance leads to long term value creation.

3. To understand the various mentalities of people going into investing in sustainable financing.

RESEARCH METHODOLOGY

This study adopted a quantitative research design to examine awareness, perceptions, and attitudes toward sustainable finance among respondents. Primary data was collected using a structured questionnaire designed through Google Forms, which enabled quick and wide distribution.

The questionnaire consisted Likert-scale questions focusing on awareness of sustainable finance, ESG investments, green finance, and related behavioural intentions. The survey was circulated using convenience sampling among professionals, and general investors.

A total of 164 valid responses were collected over a period of 1 month. The collected data was cleaned and analysed using MS Excel and SPSS, and results were presented using percentages and basic statistical techniques.

The research utilises questionnaires to collect data from customers which were distributed through google forms which is an online platform. A pilot study was done too with sample of 20 people to improve the questions on the feedback that was being received. The final questionnaire consisted 15 questions including the demographics such as age of the respondents. A point Likert scale from 1-5 was used in the survey method to measure the responses, where 1 was strongly disagree and 5 was strongly agree. A total of 164 respondents filled the survey wherein majority of them were between the age of 18 to 25(65%). The data collected was analysed through SPSS software by IBM where cluster analysis was done to classify the people into different segments and then analysed by their different traits using dependent and independent variables in it.

As already above, that SPPS or statistical package for social sciences which reflects original market, and then it was later changed to Statistical product and service solutions. First of all, after the responses were collected, each of them was coded according to Likert scale and then put into the SPSS, where cluster was done so that we get the people with similar kind of investment behaviour in one funnel, so on this basis three clusters were formed. All the analysis that was done will be explained and all the findings and discussions on that basis will be explained below.

BARRIERS OF SUSTAINABLE FINANCE

Financial Institutions Incapability

As a starting, the financial institutions need a support from the government and the green industry players so as to ensure the growth in green finance (Taghizadeh-Hesary and Yoshino, 2020). One of the major barriers faced by financial institution in the Green Financing involvement in weak capability. Green financing is more technical compare to conventional financing (Seshachalam and Asif Ali, 2020). Therefore, most banks, such as India, are still not comfortable working and adaptin to the green finance structures and operation. It took five to ten years for the financial institution to take the green financing to next level (Lee, 2020).

However, apart from authorities, there was a lack of the banks that would play the role of the service providers to the public and that would have both the cash circulation and the loans as their main functions at the same time.

This level of efficiency would require loan availability emerging cross all group of credit tiers. The case with tiers of demand requires green market players, lenders of finance.From financial institutions. The most important thing is the fact that it can improve the economy for many people, since they can create their own green business. Just mentioned some aspects of financing, and you know course sing at along.(Guild, 2020).

In addition to the financial institutions also were facing incapability possessing enough Knowledge in the green finance. Banker’s struggle understanding the taxonomy (Lee, 2020) of green financing terminology and lack the expertise in this field (Falcone and Sica, 2018).

That is why they have limited knowledge and feel complicated in getting the understanding and technical terms (Falcone and Sica, 2018; Zhixia et al., 2018. So, those financial institution capability issues become questionable and need to address for immediate solutions.

Capital Constraints

One of those is the fact that money transfer agencies, alongside banks, hold the power of cross-border cash transfers. Green financing is still emerging field and there is a risk that too much of investment will be made with limited information and experience required to correctly assess the project's risks unrestricted and uncontrolled (Batrancea et al., 2020; Wang et al., 2019).Secondly, the restricted budget for extending green financing is a capital limited factor credit information provision to possible loan seekers (Wang, Fan, and Shaw, 2020). The factor which led to this restriction was the perception that the candidate had certain beliefs and value positions that were not in line with the party's green financing is high costs and risky because it relies on more social issues and technology adaptive filmmaking (Taghizadeh-Hesary and Yoshino, 2020). Therefore, if others like banks are still not wholeheartedly in the green investments’ scene goes about day-to-day business, then we'll certainly not achieve the much-needed goals for the environment. I will run up against the issues of capital

lacks and this won't see as profit generation during the process of financing compared to conventional financing.

Strict policy and guidelines in green financing

This third impairment to green financing stems from policy uncertainties and a tight framework of rules. Many countries come up with different green finance regulation systems, but some are strict, less stringent, or crisis struck, and uncertainty levels of green financing differs from country to country such as Lee (2020) noted. A big principle of green financial policy is to make sure to cut the right green financial resources to the right places (Liu et al., 2019). Still in the early stage of green financing participations, the challenges are faced at the policy making level (Zhang et al.,

2020). There are two policies in green financing: a fiscal policy that undertakes allocations and preferences while a regulatory policy does the legal and administrative side.

One of the items that fiscal policy is dealing with is the financial allocation and tax exemptions. Different financial policies for different countries' fiscal structure are very unique and may be a great subsidy or little allocation of funds lower funds allocation. In any situation, banks that apply for 'green bank' status must follow green banking policy.

Guidelines provided by central banks could be contributed by Julis and Kassim in the year 2020. The banks are their only option because of their low-funds setting by Central Banks, thus, they will have to decrease lending and the approval of credit (Wang et al., 2019; Zhixia et al., 2018).

It is notable to look into the green financing regulations because there are circular policy making in this sphere.First, the (i) government demonstrated ineffectiveness in regulation and monitoring the social environment of Green projects carried out by green industry players was also one of the major setbacks. (ii) Inadequacy in the formulation of regulations and lack of proper monitoring of the social environment from green projects done by the green industry players was also a major drawback as shown by Linh and Anh(2017). The governmental and authorities bodies represented a chaotic, unguided condition as they could not state clearly what the future would be and whether satisfactory results would be reached after some time.

Vision which is also applicable to designed interventions in the UK such as ‘CityHealth’ founded by (Bergman and Foxon, 2020).Third, the insecure of random government actions and with only little interaction from state agencies in taking green technologies into commercial use economy of this approach is its development of various sets of skills (Falcone and Sica, 2018). Being that so, it will considerably aggravate the productivity level and economic situation of both nations in the affairs of trade, forming the ecological liabilities of financial entities involvement in green financing.

Weak financing structure

Financing model is also an obstacle on the way of green financing joining. There is a dilemma through which we can adjust the financing volume to the long term. The higher the loan amount, the longer the time is period for paying an instalment. Additionally, the point of green financing is to maintain the environment that urgently demands a quick solution. Thus in fact, green financing can be recognized as the short-term solution, but the approach is rather than the long term one manifestations (Falcone and Sica 2018; Lee 2020; Taghizadeh-Hesary and Yoshino 2020; Wang et al. 2019).

Political constraints

In that case, the scholar mentioned one of the policies related to green financing, known as regulatory policy. Hence, regulatory policy is imposed by the state authority and controlled as well. Politics was the reason why there was a mid-financing obstruction that prevented the green space.

The earnings thus got by the gov't completely dominate the green money management and control decisions. Thus, it can lead to a bureaucracy commissioning of the projects (Falcone and Sica, 2018). That is, using position for self-egoism. In addition, this situation might have raised a question of discrepancies, for instance, when government or public organizations set aside a significant amount of green funds and was diverted to various ends other than those initially intended of it (Aller e Tardieu, 2018). This impairment is, therefore, the case that makes the user to assisting in promoting green financing campaign as a political tactic by the government since election seasons are impending ruthlessness, guts, pursuit of gain, and dishonest acts (Guild, 2020; Janicka, 2016,Jones et al., 2020).

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Perceived as high risk and low return on investment

Green finance, which is considered highly risky, is financed by investors who may not be able to insure the future their investments could face. Amount of financial resources reserved for projects is projected.So, you should keep an eye on the loan amount versus the yield that it will bring on investment. Indeed, it did not happen. The environmental risk is that the definitive cost leader could have the capacity to acquire a greater market share and be in a dominant position. Problem with the actual feasibility of the project (Clark et al. 2018; Guild 2020).Financial institutions are conservative and doubt the decision of embodying loan amounts in the users as they think that the risk of project going wrong is very high. So,create or postpone the recognition of such agreements, eventually resulting in poor returns of investment. Another risk is that commercial banks do not realize the consequences of the financial risks they are facing due to the investments in First, the environmental impacts of big projects like fossil fuels are discussed (Linh and Anh, 2017). It would be a challenge to address such a risk as it emerges difference in financial institutions' expected returns is not in sync with the business the company handle.Many goals remain of the utmost strategies (Falcone and Sica, 2018). Moreover, riskiness of green financing prevents people from taking up this option as an investment vehicle. Green investments or green technologies are too expensive to be implemented (Taghizadeh-Hesary and Yoshino, 2020).In fact, financial institutions have the chance to achieve the limited level of ROI because of this.

Lack of access

With the green financing remaining at a sub-stage level, undoubtedly it won't be much easy for any one to get access to them. However, in this area inequality is common one. The issue is that by either way, we don't have, or a working system of database.

If the government institutions, the financial sector and the customers expect the help, it becomes a technical issue. While the application of AI in the manufacturing industry can result in productivity gains, job losses, and social disruptions, the level and type of disruption will depend on the industry, the specific applications of AI, and the willingness of workers and employers to adopt innovative approaches to work (Taghizadeh-Hesary and Yoshino, 2020; Zhixia et al., 2018). From the users' perspective, there is no point that all companies should have access to resources, and not all are equitable in their right to explore nature with reference to various studies, financing market (Clark et al. 2018; D'Orazio and Löwenstein 2020). Therefore, the lack of green data and green databases stop the projects from being implemented.

Risks and challenges for Sustainable finance

Sustainable finance faces many risks and challenges due to issues related to environmental elements and features specific to the financial system. A preliminary assessment of Romania's ability to green its financial system is conducted by the World Bank (World Bank, 2021).

When it comes to risks to the financial sector in climate change, reference is made to the three categories. Physical risks arise from the impact of climate risks on humans and the natural system (e.g. floods, droughts, storms). It generally refers to extreme events that occur more frequently (hurricanes, floods) and to global warming and sea-level rise in the longer term. The first category represents acute risks, and the second chronic risks (Task Force on Climate-related Financial Disclosures, 2017). The first category produces unforeseen shocks on both the supply and demand side, with short- and long-term economic effects; the second category impacts potential G.D.P. and growth in the medium and long term (Batten, 2018).

Transition risks arise due to the crossover to a low-carbon economy (materialized in the loss of economic value due to asset foreclosure, new regulations, the emergence of disruptive technologies, changing investor sentiment and consumer behaviour, reputational risks or image). They produce shocks in the economy on the demand and supply side or economic growth, with short- and medium term effects (Batten, 2018). The least affected sectors are health, media, I.T., services, medium impact in the banking sector, insurance, aerospace and defence, and high risks associated with the chemical industry, utilities, energy, and automobiles. Although they are high emission sectors, there are large emitters in every sector. Some companies ' emissions are associated with high temperatures, even in industries for which low emissions are identified, such as health (MSCI, 2021). According to the MSCI report, 57% of listed companies are not yet aligned to keep global warming well below 2°C, preferably up to 1.5°C, above pre-industrial levels, as set out by the Paris Agreement. Another important observation is that companies' carbon emissions are starting to rise as the global economy begins to recover from the pandemic.

The risks of litigation arise from parties who have suffered losses due to the effects of climate change. When they occur, physical risks can affect the value of collateral and assets and significantly impact insurance.

According to the European Central Bank's estimates, globally, the catastrophes caused by the weather have an increasing share, and the losses represented over 80% of the total losses caused by the catastrophes reported in insurance for 2018. This year was also a peak in the frequency of occurrence of events leading to weather-related losses.

Regarding the transition risks, the results from the literature are mixed and highlight their complex character (Friede, Busch, and Bassen, 2015 - an article summarising the results of over 2,000 empirical studies.). The market assessment of the transition risk is complex, a stage that will extend over a more extended period. At the same time, their analysis is hampered by a lack of information; when they exist, they often cannot be compared due to the lack of globally accepted standards.

Financial institutions' exposure to this risk category is measured for specific business sectors based on indicators such as, for example, carbon emissions for a particular sector. The sector analysis allows for an overview of the sector and can be helpful for the first round of approximation of financial institutions' exposures. On the other hand, the differences between companies registered in that sector are omitted.

Such an aggregate analysis of euro area banks' exposures to climate-sensitive assets was carried out by the European Central Bank and is illustrated in Figure no. 1. The European Central Bank's valuation is calculated for more than 4 trillion-euro exposures, which represents approximately 80% of total euro area loans to non-financial corporations. The highest exposures of bank loan portfolios are in the industry (20.49%) and real estate (20.25%) Another classification of climate change risks is made by the United Nations (United Nations Environment Program Finance Initiative, 2016). These are divided into five categories: financial and credit risks (loss of value of assets, inability to pay loans, difficulties in accessing capital, liquidity), market risks (reduced competitiveness, loss of market share), operational risks (higher costs, inefficient processes), reputational or image risks (damage to funded clients, recruitment difficulties), compliance or legal risks (regulatory actions, creditor liability, civil actions). Although few attempts have been initiated to classify and assess these risks and it is considered that some of them can be anticipated, the risks mentioned are complex, dynamic, and interconnected. Their impact is often unexpected and affects the stability of the whole financial system finally.

However, this impact is conditioned by several variables that are characterized by different degrees of uncertainty regarding the period of occurrence or the degree of intensity. Even if the risk of a sudden and significant global alignment is not necessarily immediate, the financial risks arise from the transition to a low-carbon economy. It may increase in the next period if financial decisions are not made in line with global and national climate goals. Regarding the specific features of the financial system, we can point out, for example, that decisions are taken by financial institutions often take into account a much shorter period compared to the time horizon in which the effects on the environment or climate change become visible. The short-term focus is on the need to deliver good results to shareholders or on liquidity requirements, leading to reluctance for green investment. An investment that can be profitable in the short term can be disadvantageous in the long run because of the adverse effects on the environment. This mismatch in the timeline has implications for the fight against climate change: while the effects of climate change are long-term, financial decisions must be made now. In such a context, where priorities are facing current issues and climate change issues are beyond business and political cycles, the mandate of some technocratic institutions they are considered the “tragedy of the horizon” (Carney, 2015). 0% 20% 40% 60% 80% 100% Loan exposures Direct emissions Energy emissions Indirect emissions All emissions Mining and quarrying Manufacturing Electricity, gas, steam Wholesale and retail trade Transport and storage Real estate activities Others “Ovidius” University Annals, Economic Sciences Series Volume XXII, Issue 1 /2022 898 Returning to the focus on providing good results to shareholders, if this is the primary concern of companies, there may be potential damage to the environment due to decisions taken if these issues are not taken into account. This leads to investments in projects that generate pollution and carbon emissions or affect a particular area. Maximizing profits and orienting decisions in the short term can have cumulative effects on the environment or are not immediately visible. Another relevant aspect is that this impact is not necessarily felt by shareholders most of the time.

Developing green or sustainable financing in developing countries, where climate change adaptation or mitigation activities are needed, is another type of challenge. This is often hampered by underdeveloped markets, high capital costs, poor regulation, or political instability. Statistical data are not always available for these countries compared to developed countries. Even in developed countries, statistical data and other information may be difficult to access; there may be a reluctance to report or apply different standards for similar concepts.

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In recent years, however, the orientation of companies towards stakeholders has been promoted more and more, aiming for businesses to generate value for all stakeholders: employees, shareholders, customers, suppliers, creditors, and the community as a whole. Such an approach, to which we can add concern for future generations, could help protect the environment and reduce the long-term effects of climate change. However, the financial system as a whole cannot be considered green.

Sufficient activities that adversely affect the environment are still being funded, including burning fossil fuels. Moreover, financial markets face the greenwashing process, namely attempts to make false or unproven claims about the positive impact on the environment.

Apart from this the other challenges which the sustainable finance can be facing are listed down below in brief:

1. **So far, the drive for sustainability has magnified global inequalities in access to finance.**

While high-income countries (HICs) already held 80% of global assets under management, they now concentrate 97% of newly established sustainable investment funds. Sub-Saharan Africa represents 1.5% of total green bonds by number, and only 0.3% by value. The good news? Scaling up the use of innovative financial tools linked to sustainability could make some developing countries more attractive for investors (e.g. sustainability bonds, debt swaps) and benefit from funding pledges (e.g. COP15's $100 billion dollar pledge for climate).

2. **High demand for sustainable recovery financing and upward pressure on interest rates linked to stimulus packages in HICs could affect other countries' capacity to attract capital.**

Low-income countries (LICs) with limited fiscal space and tight debt sustainability constraints could spend only 2.5% of their GDP on stimulus packages during the COVID-19 crisis, compared to 16% in HICs. Meanwhile, 56% of African countries with sovereign ratings were downgraded in 2020, compared to a global average of 31.8%. So LICs have far less room for manoeuvre trying to finance their sustainable recovery. A truly global stimulus package was needed to stem both COVID-19 and its economic consequences, but only 1% of HICs' stimulus packages has been directed to non domestic issues. This calls for more coherence in policies, avoiding "beggar-thy-neighbour" policies and embracing the full interconnection of SDGs and economies to tackle the root causes of global crises with adequate development finance.

3. **Divestment from non-sustainable projects, or projects not labelled as sustainable, could have major implications for resources allocations and the geopolitical equilibrium.**

There is a heated debate between partisans of "exclusionary investing"(i.e. avoiding certain sectors or activities with unknown or poor sustainability scores when constructing a portfolio) and partisans of "buying brown and helping it become green". Mineral energy materials (23%) together with hydrocarbons (49%) made up close to three-quarters of sub-Saharan Africa exports and a quarter of government revenues between 1995-2018. Divestment from some sectors on which countries are still heavily reliant for job or wealth creation should be paired with adjustment (e.g. of skills) and diversification assistance (e.g. make greater efforts to create a pipeline of sustainable, bankable and scalable projects, and identify new production and export opportunities to harness the benefits of the energy transition).

4. **Persistent barriers to investment and capacity constraints prevent developing countries from harnessing the benefits of the drive for sustainability.**

These include the insufficient depth of financial markets or the lack of capacity to demonstrate compliance with sustainability standards (e.g. lack of data or reporting mechanisms). The size of stock markets represents more than 110% of GDP in HICs, compared to 60% in upper middle-income countries (UMICs) excluding China, and below 40% in lower middle-income countries (LMICs). This calls for additional capacity building in the area of finance and investment climate, and support to sustainability reporting and monitoring.

5. **The absence of Environmental, Social and Governance (ESG) information in most developing countries could hide potential opportunities, and add to the income bias in investment decisions.**

About 90% of a country's sovereign ESG score is explained by its level of development, and failure to account for this bias in investment decisions could potentially divert flows to HICs at the expense of poorer countries. The drive for sustainability could give a new impetus to the long-overdue reform of credit and risk ratings, as well as the fight against SDG-washing in HICs, that unduly distracts investors from emerging markets. The use of innovative financial and de-risking instruments, such as results-based rewarding mechanisms or blended finance, should be further explored.

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6. **Though (logically or however) alongside the rush for sustainability, the clearing up the gap between the desires and the actual supply of sustainable financing might become more severe.**

The worldview of ambitious politicians that often focuses on particular local issues or commercial priorities, or the joint responsibility to protect our planet, could override the SDGs' universality. With the focus of the area of development cooperation moving towards long-term sustainability, there has been a pattern where the loans to Sub-Saharan African and MICs countries for energy and transport infrastructure projects increased significantly while grants to LICs and funds to a select number of sectors decreased. Although GCF spend most of its budget on the environment under the priority area 70 percent of climate funds and 93 percent of private finance mobilised are invested in mitigation and not adaptation. Only 8% and 2% of the total spend goes to Least Developed Countries (LDCs) and Small Island Developing States (SIDS) respectively for which adaptation to climate change is a life changing issue. Policies such as budgets integrated with SDGs and development ones that are inclusive financing frameworks (INFFs) could improve the alignment between sustainable finance needs and what is offered in the market.

7. **The dissemination of sustainable standards worldwide may become an obstacle to finance and investment in the less developed countries, not to mention the indisputable rising costs of workplace compliance.**

The mass of 200 sustainability standards or actors grouping up around the notions of sustainability not only creates confusion on markets; it also doubles burdened countries trying to overcome the different sets of investment standards which are required by various sources of sustainable investors, such as taxonomies. Interoperability standards that are uniform are a great need to harmonize definitions.

Taking into account the local context is the only way systems can function well. The inclusion of the developing countries in the making of International Standards will also ensure that instead of becoming a soft target and losing their rigor, the Standards should be assertive enough to fit all, with no exclusion or derogatory application.

Opportunities to Sustainable Finance

The sustainable finance and ESG (Environmental, Social, and Governance) listed investments won the commendation of the present times because of the rising awareness of environmental and other social issues, the corporate social responsibilities, and the emergence of newer investment products and methods.

Global sustainability which is the basis of such businesses as green energy, clean technology, and eco- friendly goods and services has led to the new industry formation. Investors can invest in companies operating in growing and sustainable sectors by means of effective allocation of funds to those who set sustainable goals and objectives.

ESG assets are forecast to have a market share of 35% and become more than 400%, or $50 trillion, by 2025 with the expected total global assets management at $140.5 trillion according to Bloomberg.

And therefore, the world community has moved further and tried the best to deal with the climate changes problem. The COP28, held by UAE, was the meeting where governments, both national and regional by the countries, people and private sectors had a chance to cooperate and amend the details of the national and regional financing frameworks. The collaboration thus increased transparency which in return increased investors' confidence and attracted their interest. 2He not only provided scientific advice but also actively participated in meetings and discussions with policymakers on strategic decisions related to oil exploration, development, and exploitation.

The main corporations more often than not show off their superior concern about climate change by being the ones that innovate and give new solutions to the society. Supply chains now days tend to be more transparent and environmentally friendly due to more and more information disclosure concerning companies' operations to the general public. Lastly, organizations are coming up with new structures that serve the purpose of instituting a more holistic way of approach for the aforementioned ER strategies. It is through the addition of members of senior management who hold these positions that sustainability-related functions are performed. One of the latest Global Risk Reports notes that climate change as a defining risk is one that business, finance, and social life will face (World Economic Forum, 2021). Institutional investors can benefit by employing risk-management and hedging tools in their investment portfolio. Such measures involve instruments such as green stock indices, green bonds, etc. The financial sector will ensure the rebalancing of risk allocation, maintenance of financial stability and are supporting growth in the green sectors.

Investors increasingly seek opportunities to align their financial goals with values and contribute to a more sustainable world. In 2021, over $500 billion flowed into ESG-integrated funds, contributing to a 55% growth in assets under management in ESG-integrated products.

As per the PwC survey, the percentage of organizations without an ESG strategy has decreased over the past 12 months, with 64% of respondents having implemented a formal approach. 73% of poll participants said they had committed to being carbon neutral or were working toward it. The majority of respondents—two-thirds—want the CEO and board of their company to devote more time to ESG- related matters. Two out of every five respondents are hopeful that COP28 will result in governments enhancing ESG infrastructure and offering incentives to foster green growth.

Leading up to COP28, businesses actively incorporate ESG initiatives while indicating a requirement for tangible assistance to expedite their progress.

Driving Innovation and Market Opportunities Through Sustainable Finance
Sustainable finance has a capacity of creating an innovation platform for organizations and even enabling new market options. Organizations which innovate and provide sustainable solutions e.g. renewable energy technology, sustainable agriculture methodologies and circular economy models will unproblematically be able to grab the growing markets and maintain competitive

advantage. Financial technology contributes to the creation of new approaches for sustainable finance. Also, government's role in growing sustainable investments is facilitated by supporting and regulation the area.

In the case of sustainable finance and ESG investments growth, it is the demand from investors that plays a major role. The main facets of this transformation stem from both individual investors and large institutional investors focusing a good percentage of their portfolios on green investment strategies.

1. Sustainable Investment Funds
Sustained funds reached a median return of 12.6% in the duration of the first six months of 2023, which is higher than the traditional funds which only achieved a return of 8.6%. Here the levels of their sales indicate their ability to set aside the woes surrounding their shortfall back in Feb 9,2024 as analysed in the "Sustainable Reality" publication by Morgan Stanley Institute for Sustainable Investing (Morgan Stanley, 2024). Beside the above, the said investors are unwavering in their demand for the mentioned funds hence leading to the AUM setting a record high for sustainable funds.

2. Green Bonds
Green bonds issuing is rising day by day such that only in the first half of 2023, nearly 500 billions of them were issued. They are increasing at a rate of about 18%. So, it can be anticipated that customers are both participating and supporting sustainable projects and also having a good effect on attractiveness and stability of bonds among investors.

3. Social Venture Capital
The last few years seen Sustainable Venture Capital (SVC) rising up in the ranks as one of the most preferred method of investment in social enterprise. Nowadays, the number of social venture capital companies and specifically private investors had increased a lot. This sort of social impact investing is rather potentially able to modify the way we deal with social and environmental challenges. SVC is so unique because social and environmental purposes of these investments are beyond just financial returns. Investors gain more appreciation and feel satisfaction attitude to these investments. It provides a high financial return because its direct connection with social and environmental mission gives them a new market and customers as well as a highly motivated worker.

Product Strategy
The current financial services industry is seeing different strategies utilized by active and passive managers, where sustainable and green finances are being concurrently offered. It can be done in so many ways and these entail creation of new ESG themed securities or selecting ESG focused vehicles as part of an existing product trail which uses screening mechanisms that choose the best ESG investment tools.

The diversity of PIEs (objectives of social responsibility) is nowadays recognized and the aim of management is to satisfy ESG goals in their activities.

The following are some crucial tactics being used to offer investing options with an ESG theme: The following are some crucial tactics being used to offer investing options with an ESG theme:

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1. Analysing resources, identifying the specific features of ESG as the key factor.
2. One of the steps that Investment institutes can take as part of integrating ESG investing into their current strategies is considering their investment ecosystem.
3. Designating environmental issues as targeted, perhaps even niche, investments.
4. Investing with Impact
5. Managing/ influencing to favour the corporate behaviour that is universally acceptable from ethical, social, and governance perspectives.

Potential Growth and Evolution of Sustainable Finance and ESG Investments

Investing in ESG-centred products has been a proven strategy for a while now. Institutional investors have historically shaped their investment strategies based on socially responsible themes like clean air and water, diversity, human rights, and equitable workplace practices. However, sustainable investing has recently gained substantial market traction in its current manifestation, attracting significant inflows into ESG-focused products.

Over the past six years, this has led to an average compound annual growth rate (CAGR) of 27 per cent in global assets under management (AUM).

Here, we are going to consider how sustainable finance can be opportunities to foster innovation, mitigate risks and drive inclusive growth.

Opportunity 1: The most compelling opportunity that has come out of this is the mobilization of capital towards climate action. (Sanders, 2024). Consequently, resources have been channeled by investors, governments and companies to renewable energy, energy efficiency as well as low carbon technologies as a response to the urgency required when it comes to dealing with climate change.

Sustainable finance instruments like green bonds, climate funds and carbon markets provide investment channels into environmentally positive projects. Their ability to leverage private sector funding in combination with public finance makes these mechanisms for sustainable development crucial in the accelerated move towards a low-carbon economy while at the same time reducing climate-related hazards and stranded assets (Dash, 2024).

Opportunity 2: Improve Corporate Sustainability Performance As a result of this process of thought on their behalf corporate entities would create both long term sustainability and resilience through gauging and reporting on ESG measures. Today investors take into account ESG factors as they make investment decisions prompting companies towards ethical business practices.Incorporating sustainabilityMoreover, sustainable finance mechanisms such as sustainability-linked loans and social impact bonds provide incentives for companies to achieve measurable sustainability targets, fostering innovation and driving continuous improvement in environmental and social performance.

Opportunity 3: Advancing Social Equity and Inclusive Growth The other possibility of sustainable finance that might encourage equal growth and fairness in society. It is through sustainable finance that we can direct investment to projects which solve social problems like affordable housing, healthcare and education hence reducing poverty levels and increasing socio economic developments. Impact investing micro financing as well as community development finance are examples of sustainable finance approaches that emphasize positive social outcomes together with financial returns. When the incentives for finances match the social objectives the gap between small communities and banking sector can be bridged thus enabling inclusive economic growth and prosperity for all in the nation.

Opportunity 4: Improving Resilience to Environmental And Social Risks In addition, it allows companies better hedge environmental or social risks by increased risk understanding after conducting thorough ESG due diligence (2023). Reputational, legal, compliance or operational hazards may expose an investor to certain risks if not properly considered hence risk management practices should be adhered to during decision making processes concerning investments. Sustainable finance instruments such as resilience bonds, par

Opportunity 5: Fostering Innovation and Technology Development Sustainable finance stimulates innovation and technology development by directing capital towards sustainable solutions and green technologies. Investments in renewable energy, clean transportation, and circular economy initiatives drive technological advancements and spur job creation in emerging industries. Venture capital funds and impact accelerators play

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a crucial role in supporting startups and entrepreneurs focused on sustainability and social impact. Moreover, sustainable finance mechanisms such as green venture capital and innovation funds provide funding and mentorship to promising ventures, catalyzing the transition to a more sustainable and equitable economy.

Sustainable finance offers a plethora of opportunities to address pressing environmental, social, and economic challenges while driving long-term value creation. From mobilizing capital for climate action to promoting inclusive growth and fostering innovation, sustainable finance has the potential to transform the financial system into a powerful force for positive change. By embracing sustainability principles and integrating ESG considerations into financial decision-making processes, stakeholders across the financial ecosystem can unlock new opportunities for innovation, resilience, and prosperity. However, realizing the full potential of sustainable finance requires collaborative efforts from governments, businesses, investors, and civil society to create an enabling environment for sustainable investment and development. Through collective action and strategic partnerships, we can harness the power of finance to build a more resilient, inclusive, and sustainable future for generations to come.

We can say that there are a lot of opportunities as well as challenges for sustainable finance to proceed further. But sustainable finance is not something which can easily replace or become part of the traditional finance. The reasons for this can be many for example, the developing economies might find it hard to get investors for sustainable finance because the return in this type of investment come after a very long time. We can say that there is a maturity mismatch with the investors in sustainable finance. Sustainable finance although has been around for very long is still new to many countries who are finding it hard to come up with frameworks which can ensure the safety of the asset and the investors. But we can see that there is a lot of growth in sustainable finance especially the green finance which forms the majority of the sustainability finance. This can be attributed to the success of green bonds which now have become a priority for investors who focus on the ESG matrix for investments.

HYPOTHESES

- Individuals interest and willingness in sustainable finance has increased over the year.
- Sustainable finance is growing at a faster pace.

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