SUBLIME HARO JOURNAL OF ACADEMIC RESEARCH (SHAJAR)

ISSN-e: 2788-6107

Vol. 6, No. 1, (2024, Summer), 59-76.

Perceptions of Green Finance Adoption: A Phenomenological Exploration of Small Businesses in Twin Cities of Pakistan

Ali Imran[1]

Abstract:

This study explores the motivations and perceptions of small businesses in Pakistan about green finance adoption. The 5 research questions are related to the level of familiarity with green finance products, their potential benefits, risk and return profiles, motivational and demotivational factors for green finance products adoption, and the potential role of government and financial institutions in supporting green finance through its policies. Interviews with small businessmen have been conducted. Through thematic analysis, this research has identified the factors that influence the decision-making of small businesses, including motivations, challenges, risk perception, knowledge and awareness, and government support. The findings of this research reveal a limited understanding of small businessmen regarding the adoption and benefits of green finance options, as well as concerns about financial risks and limited resources. However, small businesses recognize the long-term benefits of green investments. This research highlights that small businesses in Pakistan will be encouraged to adopt green finance through increasing the level of awareness, government support, and financial incentives.

Keywords: Pakistan, small businesses, green finance, perception, adoption, climate change, economic development, environmental sustainability

INTRODUCTION

Many countries all over the world have started to emphasize economic growth and development as they realize the importance of eco-friendly protection in the face of mounting climate concerns. In addition to that, many researchers consider green finance a significant tool due to the rise of environmental concerns within the modern financial system. (Liu et al., 2020; Zhang et al., 2023; Akomea-Frimpong et al., 2021). It is a multifaceted concept and can be conceptualized in multiple ways. For example, businesses may refer to its Market-oriented approach which emphasizes

[1] Lecturer, Department of Accounting and Finance, National University of Modern Languages (NUML), Islamabad, Pakistan. Email: aliishaikhh@hotmail.com

mobilizing private capital for environmentally friendly projects (Liu et al., 2020) or risk management approach which considers green finance a way to manage environmental risks that are linked with conventional financial activities (Zhang et al., 2023). It may also be referred to as a tool in a broader sense to achieve social well-being and environmental protection which we can call a sustainable development approach (Akomea-Frimpong et al., 2021).

All of these three approaches discussed also depict their significance in the modern era. In the face of mounting climate change concerns, Pakistan, India and Bangladesh are among the most vulnerable countries. At the moment these countries are deprived of eco-friendly activities as well. Pakistan is also a developing country and facing economic, political, and social problems that are obstructing the eco-friendly practices and growth of this country as well (Shafique & Majeed, 2020). As discussed above, green finance practices can help mobilize capital by taking into account the environmental preservation that will curtail to mobilization of economic issues as well as assurance of social well-being (Chen et al., 2020: Flammer, 2018: Zeidan et al., 2018). Therefore, a developing country like Pakistan needs to focus on the long-term planning and sustainability of the country and green finance has emerged as a critical tool in this regard as it provides solutions through promoting environmentally friendly practices and investments.

Green finance is a medium to mitigate climate change risks, promote environmentally friendly practices and nourish long-term economic growth through directing investments towards clean technologies, sustainable infrastructure, and renewable energy (International Finance Corporation, 2023) nourish bankers, corporations, academics, and administrators, advocacy groups, investors, communities and legislators should be made mindful of the issues of the environment (Zhixia et al., 2018) otherwise the implications for not prioritizing green finance can be unsustainable development (World Bank, 2021) because climate change and its effect on the environment is a big issue in developing and developed countries (Ngwenya & Simatele, 2020). It offers an avenue for the business to contribute to the country’s greener future through environmentally friendly projects and in this way reap long-term economic benefits for themselves as well. Nevertheless, the adoption of green finance among small businesses remains insufficient across different contexts and Pakistan is no exception. 90 per cent of the total economic establishments in Pakistan are SMEs, contributing 40 per cent to GDP (Adil, 2023). That shows how significant is the portion of small businesses in Pakistan. For the future overall sustainability of the country, it is necessary to know the perceptions of small businesses about green finance projects and investments relating to it.

Despite the potential benefits of Green Finance, we have limited research in Pakistan that goes deep into the decision-making and perceptions of small businesses in Pakistan related to the adoption of green finance. They are potential investors but at the moment this information about their perception especially relating to the factors that are causing hindrance in their investment pattern in green finance investments is lacking which is a bottleneck for financial institutions and policymakers to foster green finance initiatives effectively.

Green finance has been studied in quantitative ways in Pakistan (Khan et al., 2021; Hafeez et al., 2023). Nevertheless, Qualitative methods are more appropriate to capture the nuanced perceptions and reasons the quantitative methods lack. These perceptions may include the financial benefits aspect of green finance and how potential investors conceptualize it as a source of environmental sustainability. The existing knowledge of potential investors about green finance and its possible benefits matters a lot in this regard. Even if they are motivated, they may face many investment challenges. Qualitative research can focus on employing methods like interviews that can help to have a deeper understanding of the respondents' perceptions, motivations, and challenges (Galletta, 2013). It is necessary to explore the phenomena deeper and identify the perceptions, motivations and challenges of the small businesses to address their concerns and help them in their long-term sustainability. There might be some factors that can motivate or dissuade these investors from investing in green finance projects which have long-term benefits. As discussed before, small businesses cover a large proportion of the economy of Pakistan so their investment in green projects is very crucial for the country which is lacking in resources and facing huge challenges due to climate change. Furthermore, factors like cultural attitudes towards environmentalism and economic situations vary in different countries which will likely influence small businesses' perceptions and their reasons for hesitation in green finance investments. Researchers can consider this contextual gap in Pakistan. The existing literature mentions factors like motivation, risk, awareness, and risk but does not adequately focus detailed and deeper understanding of their particular influence on the decision-making of small businesses in the Pakistani context (Khan et al., 2021).

As the phenomenon to be studied is new, that also indicates the research available on the topic is limited as well. To address this empirical gap, we need to collect our data through primary methods like interviews, surveys, focus groups, or other methods to understand the perceptions of small businesses. Moreover, green finance itself is still in its infancy so apart from the knowledge gap it has, there also exists a significant gap in policies that promote the engagement of small businesses in green finance. If we identify this knowledge gap, applying this knowledge into practical or actionable strategies is still possible. The research outcomes can help fill this gap by suggesting ways to facilitate positive perceptions and address negative ones. Through this, they can create financial products and effective policies that promote green finance adoption among small businesses. This research will explore the urban context rather than focusing on a national level to decrease the span and make it more feasible. Therefore, this research will focus on the twin cities of Rawalpindi and Islamabad.

This study focused on the following questions: are small businesses familiar with the options of green finance and their potential benefits? How do small business owners gauge the risks perceived and potential returns of green finance projects as compared to traditional investments? What are the key factors motivating the investment decisions of small businesses in green finance projects? What are the key factors obstructing or demotivating the investment decisions of small businesses in green finance projects? How can government or financial institutions and policies support and encourage small businesses in a better way to engage in green finance?

LITERATURE REVIEW

The path towards economic growth in developing nations is often accompanied by the expense of environmental well-being (Zheng et al., 2021). Many lucrative industries like steel, fertilizers, textiles, and steel, have a hazardous effect on the environment in the form of water and air pollution (Khairunnessa et al., 2021). This sort of development is unsustainable and has paved the way towards climate change, biodiversity loss and land loss (Akomea et al., 2021). As a countermeasure to these environmental challenges, the notion of green finance has emerged (Liu et al., 2020). Green finance is a tool to support environmentally friendly projects and businesses through financial instruments and services like investments and issuance of loans for renewable energy, sustainable infrastructure and energy efficiency (Shafique & Majeed, 2020). Therefore, it is a method to fill the gap between economic development and environmental protection (Liu et al., 2020; Zhou et al., 2020). Nevertheless, the success of these initiatives creates the need to focus on the level of awareness and perception of green finance. This research will especially emphasize the small businesses' familiarity with the options of green finance and their potential benefits because this category contains a major share in the business fraternity. 90 per cent of the total economic establishments in Pakistan are SMEs. They are contributing 40 per cent to GDP (Adil, 2023).

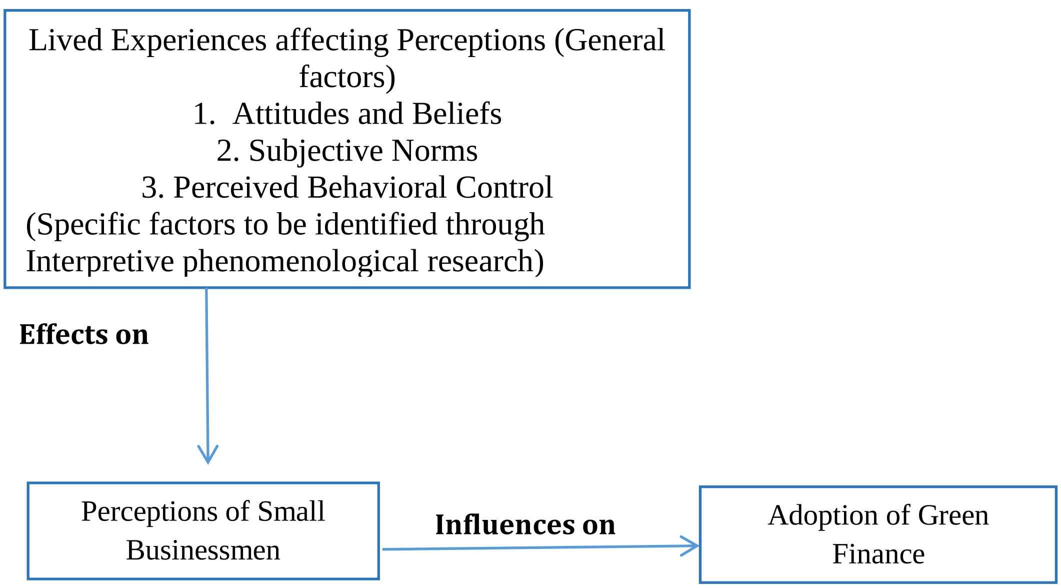
Many studies have pointed out the lack of awareness regarding green finance options among small businesses (Khan et al., 2021; Kumar et al., 2022) and this could be an obstacle to the adoption rate as well. There is an information gap between the options desired by SMEs and the green finance products (Shafique & Majeed, 2020). The reason behind that is the limited outreach by the banks to SMEs and that is a problem, especially in the cases where the application processes of these loans are hard to understand creates a problem for businesses to adopt it. Our first research question intends to know the specific information the small businesses lack and how financial institutions can effectively convey the needful information. Green finance is a novel phenomenon (Hafeez et al., 2023). Therefore it is natural for small businesses to perceive it as a riskier choice of investment, especially in the long-term landscape due to the possibility of uncertain and unforeseen environmental regulations. As we have talked about the potential complexities in the processes of green finance options, the lack of reliable information supply can also stimulate the perception of risks. Moreover, Small businesses have limited resources (Adil, 2023).

The products from green finance may have a higher initial cost as compared to conventional financing. Our second research question encompasses the required knowledge of how small businesses measure the perceived risks of green finance products and services with and possible returns as compared to traditional investments. SMEs often face challenges when making investment decisions related to green finance projects. As discussed above, many Small businessmen have limited knowledge and awareness to appraise the potential benefits of available green finance (Khan et al., 2021; Kumar et al., 2022) and this can be a barrier to investment decision-making in green finance. Also, its relative infant status (Hafeez et al., 2023) can cause businesses to consider these projects riskier in the perspective of long-term performance. Limited resources by small businesses are also a constraint to aggravate these concerns (Adil, 2023). Motivational factors for small businesses may include long-term cost savings due to a reduction in resource consumption (Berhe et al., 2023). Green finance adoption can also increase profitability by enhancing the image of the adopter among environmentally conscious customers (Shafique & Majeed, 2020). These are the general factors to obstruct or motivate an investment decision in green finance options. Our third and fourth research questions intend to delve deeper to find out more unexplored reasons that may assist in future research or policy-making practices.

To promote green finance projects, the role of government is crucial, they can introduce regulations to promulgate green finance and streamline the approval process for green projects as well (World Bank, 2021). Furthermore, the government can also incentivize commercial banks to offer green finance products and invest in the green bond markets (Ngwenya & Simatele, 2020). Our fourth research question and the objective of this research revolves around knowing the perspective of small businesses and what they expect from the government to do that may encourage these businesses to invest in green finance options.

CONCEPTUAL/THEORETICAL FRAMEWORK

As discussed in the introductory section, 90% of the businesses are small and medium enterprises in Pakistan and this number is too high to ignore (Adil, 2023). Small businesses are crucial to economies but due to constraints in resources, lack of awareness and limited access to traditional financing they face a lot of challenges (Khan et al., 2021). In Pakistan, the effect of climate change is alarmingly high. As it is a developing country vulnerable to climate change, it needs immediate sustainable development solutions (Hafeez et al., 2023). Investments in green finance can play a significant role in this regard and the perceptions of small businesses to invest in this landscape are still under-explored in the contact of Pakistan. The word perception includes the understanding of green finance, beliefs, attitudes, encompassing awareness, and the benefits the small businessmen perceive in using such products (Shafique & Majeed, 2020; Liu et al., 2020). Additionally, the perception also includes the level of confidence in the reliability and effectiveness of green financial products (Akomea-Frimpong et al., 2021). Through a qualitative research process, we will explore the specific factors that influence the perceptions and ultimately discover if these perceptions affect the adoption of green finance as well.



The expected Theoretical Underpinning is the 'Theory of Planned Behavior'

The inclusion of a section on 'factors influencing perceptions that will be identified through research' in the conceptual framework depicts our intention to explore these factors through qualitative methods. Furthermore, we are employing the Interpretative Phenomenology method which is more towards an inductive approach to understanding the perceptions of small businessmen in a more detailed and flexible manner. We can refine our conceptual framework based on this potential lens. The model indicates that we want to identify the perceptions that have huge further research implications in the future as we will potentially figure out the 'why' behind the constructs.

RESEARCH METHODOLOGY

This research applies the Theory of Planned Behavior qualitatively to understand the underlying motivations and beliefs of small business owners. Due to this theoretical basis, the valuable insights as a result of this study can be fitted for the future quantitative research as well.

Discussion on the Methodological Approach

This research has followed the qualitative dominant design as the core of my research is based on understanding the lived experiences of small businessmen regarding green finance adoption. The research intended to uncover shared patterns about how small businessmen perceive the factors that can affect their green finance adoption option decisions for that purpose interpretive phenomenology is used as it focuses on interpreting the subjective meanings the people may assign to their lived experiences. Moreover, the data collection in my research is through semi-structured interviews to explore their experiences and in-depth perceptions.

Participants and Data Collection

All of the professionals who participated in the interviews were businessmen. Invitations were extended to participants from five different businesses in Islamabad. Data collection is done through one-on-one semi-structured interviews lasting between 20 to 30 minutes, recording them on audio and transcribing the results verbatim. After the purpose and objectives of the study were made clear, written consent was acquired at the start of the interview.

Data from interviews inductively through a manual thematic analysis process. It was examined, compared, conceptualized, and categorized to codify them. This was accomplished by reading the interview transcripts several times over and making the initial notes of the terms and phrases that lead to the categories and subcategories. Following that, links were established between the categories, and when patterns showed up, the theme began to take shape (Creswell, 2012). The stages of the themes from first order showed a detailed description of the keywords in transcription which eventually refined into a broader category of 2nd and 3rd order themes.

Ethical Considerations in this Research

Participants were informed with clarity information about the procedures, benefits, potential risks, benefits and particularly the objectives of this research. Before data collection begins. their informed consents were obtained in writing. Confidentiality and Anonymity of researchers were maintained as well. Furthermore, the rigorous collection and accuracy of the data was taken into consideration to the best of researcher's ability to minimize errors and biases. Furthermore, the resources and references used are properly cited.

FINDINGS

Five themes came out of the analysis; the following section will discuss five themes by highlighting the most prominent responses by the respondents.

Understanding of Basic Concepts of Green Finance and Green Finance Products with their Environmental Benefit Potential

The respondents have expressed a basic understanding of green finance with its products and services. The understanding includes the concept that green finance is an alternative to traditional energy sources like fossil fuel and a current measure to mitigate the risk of climate change. **"**It has been linked more with climate change, as an alternative because our dependency on fossil fuel products has become you have shown about the understanding of green finance, risk and regulations etc**" (**Participant 1).

The respondents have also talked about the carbon footprint, and green finance through its products and services helps to curtail this issue. It will also help to preserve the environment and as a result, we will have fewer storms. "I am aware of the products that help in reducing carbon emissions and as per my understanding those finance that will help to reduce this are green finance" (Participant 3).

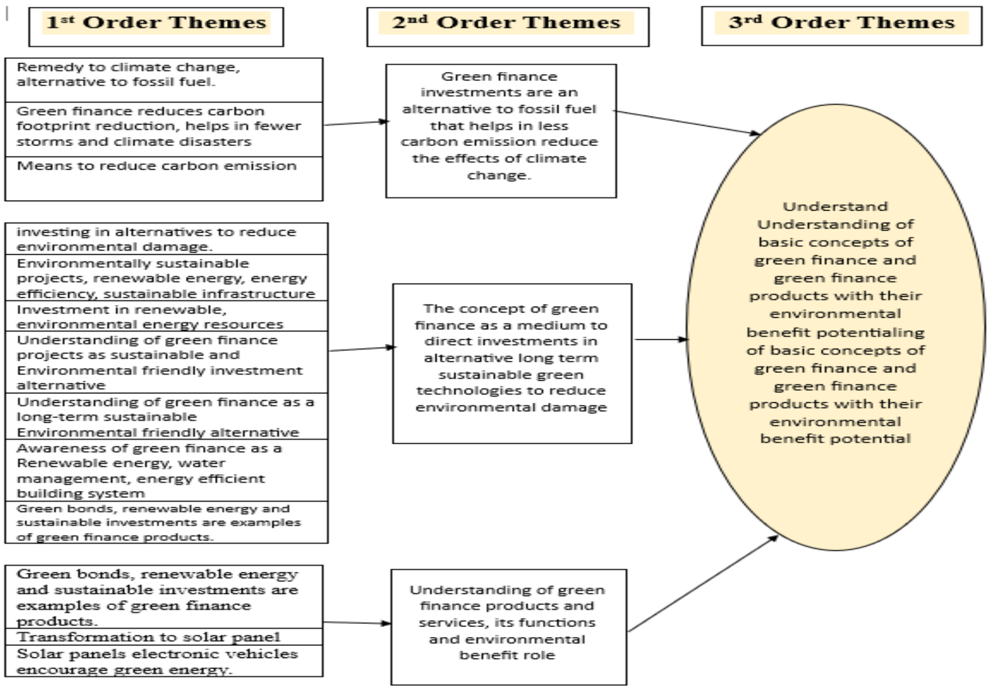
Green finance includes renewable energy sources, sustainable infrastructure, energy-efficient buildings etc. They are the source to avoid technology detrimental to the environment. "I understand green finance products as investments or financial instruments that support environmentally sustainable projects, such as renewable energy, energy efficiency, or sustainable infrastructure" (Participant 2).

In many other instances, these opinions were reiterated by the other respondents: "Alternative source of investment because our dependency on fossil fuel products has become higher and the environmental damage as the result of that. The fossil fuel can create smoke and may result in gases that are hazardous to the climate" (Participant 1).

It was also linked to sustainability and as a medium to direct investments to the benefit of society. "My understanding is that something (as an alternative) that is not polluting the environment and giving energy if we finance these on any level like government or individual level." Participants also expressed knowledge of green finance products, in which they talked about consumer items like solar panels, and electric vehicles and commercial items like green bonds, energy-efficient buildings, sustainable water management systems etc.

Respondents have talked about green finance being a source of electronic, alternative to fossil fuels, Green finance reducing carbon footprint reduction, helping in fewer storms and climate disasters, Means to reduce carbon emissions, investing in alternatives to reduce environmental damage, Environmentally sustainable projects, renewable energy, energy efficiency, sustainable infrastructure, Investment in renewable, environmental energy resources, Understanding of green finance projects as sustainable and Environmental friendly investment alternative, Green bonds, renewable energy and sustainable investments are examples of green finance products, Solar panels electronic vehicles encourage green energy; "It is related to renewable energy infrastructure, energy-efficient building developments, or sustainable water management systems" (Participant 5).

> I am also aware that products like you can say that renewable energy, and solar panels, encourage green energy, they reduce carbon emissions. The same is the case with the electronic vehicles. Electronic vehicles significantly reduce carbon omission because no fossil fuels are used there, and the companies that can help you with low marks up in having the EVs (electronic Vehicles) (Participant 3).



Rapid Technology Change is an Uncertainty, Risk Measurement for Green Products and Services is Difficult and Standard Measurement Methods are also Lacking

This section talks about the risk and return measurement of green finance products and how the respondents as investors will measure the green finance risk and return while considering it as an investment opportunity. All 5 businessmen know traditional computational techniques to measure the feasibility of projects like Return on investments, opportunity cost, volatility, beta, standard deviation, price-to-earning ratio, debt-to-equity ratio etc. They have also talked about broad factors like market trends, economic indicators, industry outlook etc. They consider these things while evaluating the investment opportunity;

> Volatility, beta, and standard deviation, alongside qualitative evaluations of market trends, economic indicators, and sector-specific dynamics to determine expected returns. For example, when evaluating a traditional stock investment, I may consider historical performance data, industry outlook, and financial ratios like price-to-earnings (P/E) ratio or debt-to-equity ratio (Participant 5).

Moreover, "returns, at least more returns that are offered by the banks. Do you mean ROI? Yes, I consider ROI." (Participant 4)." However, these respondents have unanimous on the point that these techniques cannot be applied to measure the risk and returns of green finance products. As it is in the early phases of its business lifecycle so still lacks adequate methods to calculate risk and return; "every product has its risk and reward system as well. The biggest risk is it is an evaluation (early) phase, so we do not have the proper parameters to measure it, no quantifiable measure to know about their effectiveness (Participant 1)." Moreover, "I perceive the risks and returns of green finance projects compared to traditional options differently. Green projects have different risk profiles, with potential benefits like long-term sustainability and resilience (Participant 2)."

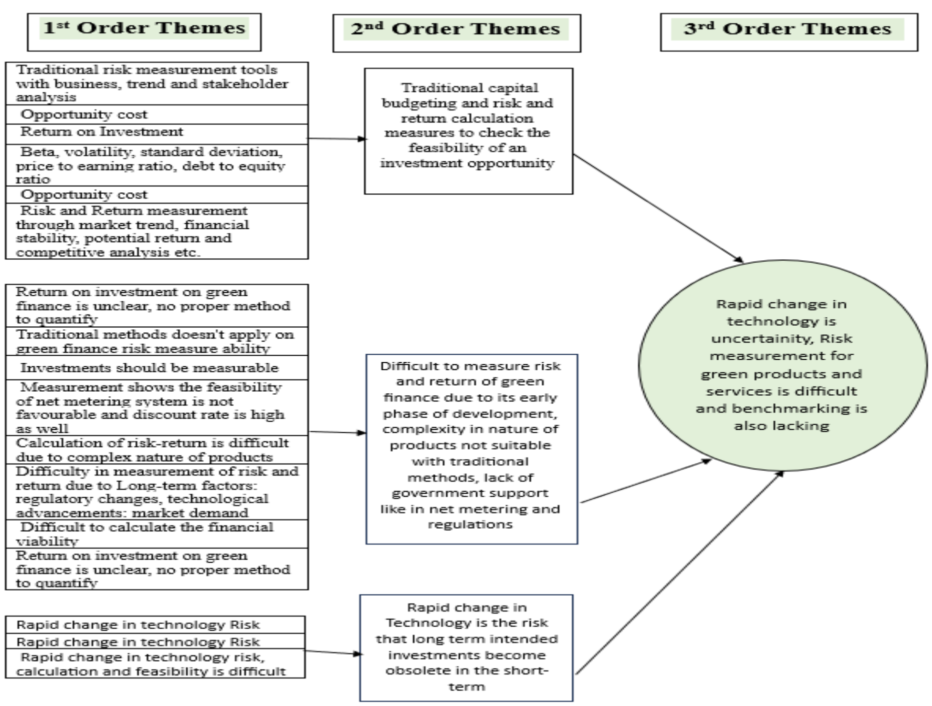
The return of green products usually requires a longer duration to come. There is not a stagnant policy rate in Pakistan as well. So, this systematic risk also creates a hurdle in the measurement process. Two different respondents said things about this. "If I include equity or involve banks then we know the policy rate in Pakistan is drastically high, but you need to consider the discounting as well and our investment will be covered in 8 to 10 years (Participant 1)." Also due to its early stage of development, it is yet to mature, as we have witnessed in mobile phones the rapid change of technologies can make the products obsolete, so it was difficult to consider investment in the long run returns. The concept applies here as well. Be it the use is commercial or personal. As per one of the respondents;

> We buy a phone, and it becomes obsolete within 6 months. The same is the case with renewable energy sources, our technology is changing drastically because it is in the evolutionary phase. When it is in the evolutionary phase then we have new things every quarter. The risk I perceive is if I Stock the EV Models. I cannot think of stock them and then plan to sell them out after a year (Participant 3).

This rapid technology change is itself a big risk that hinders that doesn't allow the easy calculation of the financial viability of any investment.

> When I was considering a renewable energy source for my home, I was curious about the rapid technology change, as panels have been evolving as well. If you ask me generally, it is difficult to quantify the risk now. As the risk and return calculation measures are specifically designed for traditional investments and the investment nature so as the returns are different for green finance, at the moment their calculation I feel is not easy (Participant 5).

There are many other instances the respondents have talked about this inherent risk and it further creates a hurdle to set the standard of risk and return calculation. Therefore, benchmarking is also absent.



The Desire to Reduce Dependency on Others Aligns with the Environmental Benefit Commitment that can be Comparatively Cost-Efficient in the Long Run

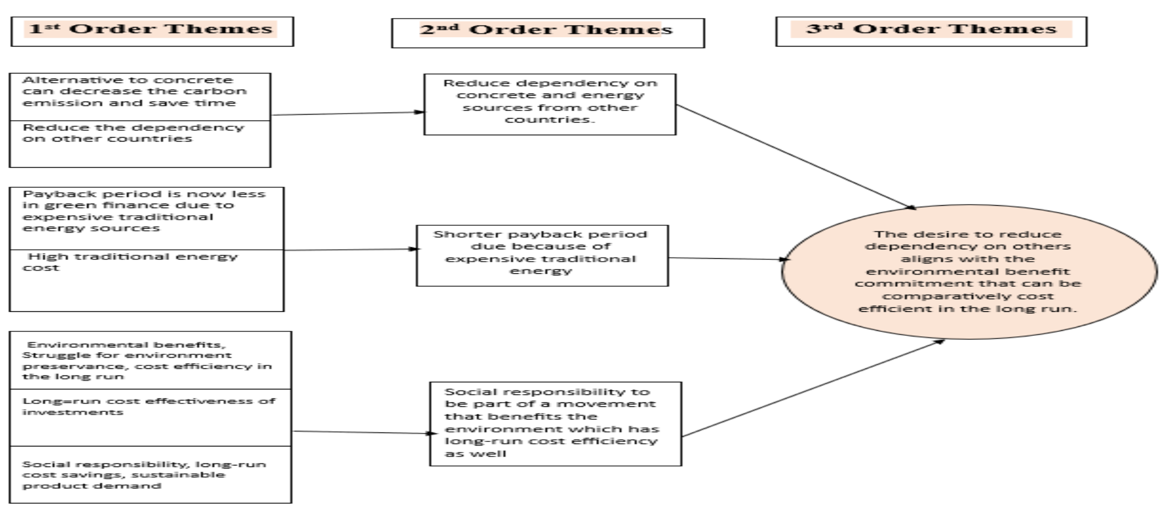
This section will discuss the motivational factors considering the responses we have received from the respondents. The main points of encouragement of respondents are a social responsibility to benefit the environment that leads to a sustainable future, the other one is a desire to get a cost-efficient long-term future. "The environmental benefits and their importance, cost efficiency in the long run. Also, the number of efforts being done all over the world for the awareness I respect that because due to it the perceived value for investing in green investments is not only in terms of money but contributing to the environment as well" (Participant 5).

At another point, the similar response was; "I feel socially responsible to contribute to safe surroundings for the stakeholders. There are some other benefits as well, for example, potential cost savings through energy efficiency in the longer run, and according to my knowledge it has a potential to meet customer demand for sustainable products or services" (Participant 2).

At the country level, another motivation is to have self-reliance as countries are dependent upon fewer other nations for their power needs. The following extract supports this fact; ""Their dependency was too much on Russia and the gulf countries for energy. Due to the recent developments, they must reduce their dependency" (Participant 1).

Another motivational factor in Pakistan has been created in recent years due to high inflation. Due to exorbitant utility bills, installing an alternative green energy source is more beneficial now. As per the following extract; "Now energy cost is so high that its payback is coming in 2 years. In my opinion, the energy being produced in Pakistan from fossil fuels is so expensive now that every investment in green energy is better" (Participant 3). Moreover, "the rising prices of the bills have compelled me to do that. Now I am feeling utility in it to get it installed" (Participant 5).

Concrete is a source that is expensive and not very environmentally friendly as well. Green energy as an alternative source can reduce carbon emissions and save costs as well it manages to decrease the price of alternative products. As per the following extract; "concrete is the source of Carbon omission. We have to work a lot on this. If we convert ourselves from concrete to steel, we can not only save time but the environment as well" (Participant 3).



Informational and Financial hurdles to Green Investment, Limited Expertise and Awareness, and Fewer Options and Short-Term Focus of investors

This section is about the factors that cause hindrances for investors in green finance investments. Respondents frequently talked about high initial cost, as it is formidable for small businessmen to bear, especially in the early stage of the business cycle where uncertainty is more prevalent. This capital expenditure is usually recovered in the far future and small businesses especially at their outset stages do not have the surety for long-term prospects, especially in the context having dynamic environments like Pakistan. As per the following extract; "High cost, setup cost, lack of expertise, there are uncertain regulations, we don't know what new regulation or law we see in future" (Participant 1). As they (respondents have talked about high CAPEX with a long-term payback period, even if they invest, due to the infant stage of the industry the products are not mature enough which creates a high OPEX as well. Also, the dismantling cost and replacement cost is a problem to justify for the financial managers; "The biggest uncertainty in that is the CAPEX I am investing in a plant, will it run for the next 7 years till my payback? In case it doesn't run what will be my replacement cost" (Participant 3).

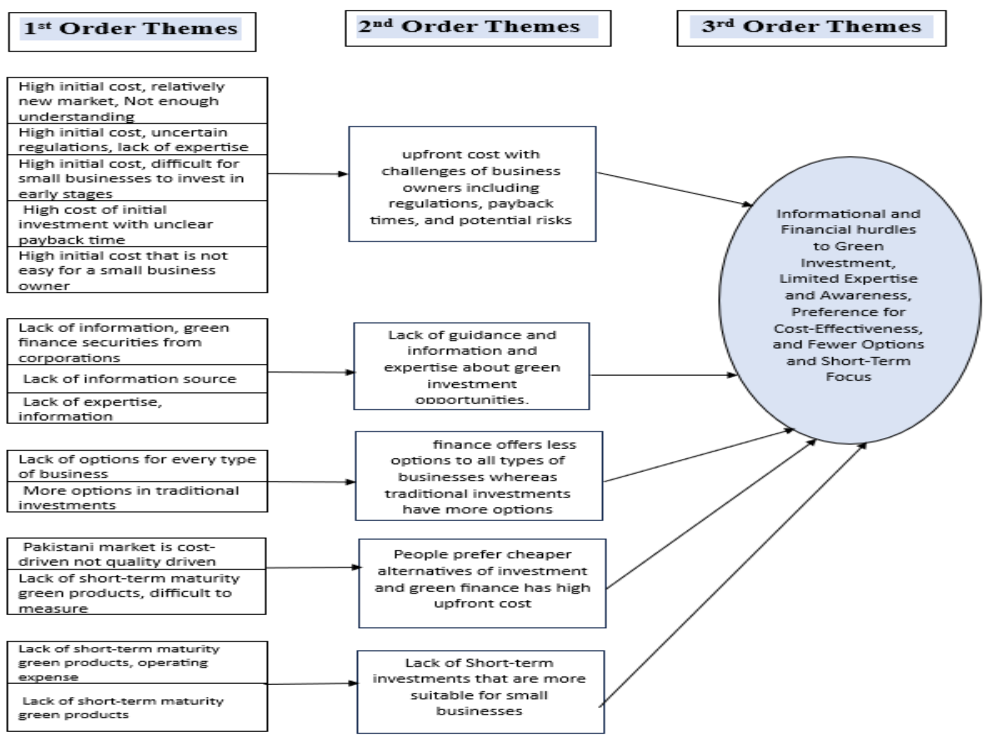
Even if Investors want to invest, they need guidance, and information to get convinced about that. Due to no standard regulations, the information is not homogeneous but rather scattered, this is a demotivating factor. Also, the options are very limited to invest as well in green products, one of the owners of a trading company has said about the options; "But with my shift towards trading business, I did not find any suitable product to invest in that can benefit me in the longer run" (Participant 2). Another extract; "I did not find any companies or corporations offering any securities dedicated to their environmental spending, hence I felt the options were very few" (Participant 2).

Options are very few especially for all kinds of business as per the direct quotes above. Information sources. When investors are keen on the opportunity the source of guidance lacks. Our respondents have talked about uncertain regulations as well, the lack of regulation itself is a demotivational factor as it impedes the calculation of the concerned project's feasibility. We also lack the source of information for guidance, different banks offer different rules that cause a dilemma for the investors to avail of the opportunity or let it go. Referring to the direct quotes of the respondents; "The same is the case in the research as well if you want to do research in this field. It's very difficult to find people for that" (Participant 4). Moreover, "Quality awareness is lower in the market and there is no available platform to provide this sort of information" (Participant 3).

Another big issue this section is related to is the cost-driven behaviour of the people. There is a large segment of the society that doesn't care about the product and its intention, they are looking for the cheaper source. This is a huge problem that is related to the initial high CAPEX of green products and services. Not all people are quality-driven or environment-conscious; "I would like to talk about it. Our Pakistani market is cost-driven, not quality-driven. The one who is cost-driven, the issue is the client asks for a cheaper alternative" (Participant 3).

As traditional investments are well established and have operated in the market previously, therefore, the attraction is high for that. This also demotivates from green finance counterparts as people want certainty and cheap alternatives; “For traditional investments, as they are offered in diverse ranges from short to long term and the markets are still running on conventional non-green products” (Participant 2).

Our respondents have talked about uncertain regulations as well, the lack of regulation itself is a demotivational factor as it impedes the calculation of the concerned project’s feasibility. We also lack the source of information for guidance, different banks offer different rules that cause a dilemma for the investors to avail of the opportunity or let it go.



The Role of Government and Institutions

This section is also the extension of the challenges of the investors but related to the role of government and institutions. The first prominent issue highlighted by respondents is public awareness campaigns regarding green finance, its products and benefits which is not up to the mark. As discussed previously as well the source of information is rare in the market and policies are not mature as well. Referring to the direct quote; “The level of awareness of a customer has not been built yet towards that industry. Even if we view it at the government level, we have launched SUVs (Sport Utility Vehicles), but we should have launched EVs (Electric Vehicles). SUVs have higher consumption as compared to the vehicles we were using before. Had we shifted to EVs we may have a better” (Participant 4).

This shows that the government is supposed to spread awareness to the public about the importance of green finance but it needs awareness itself to think about the sustainable future rather they are investing in traditional SUVs. Also, the installation of the products needs training and information as well. Installing a solar panel is sensitive to the position as well. That structural technicality is highlighted in a direct quote from the respondent; “To install a normal solar panel on a house, the structure is the basic thing. You may have seen videos of things flying during the storm etc. People are spending 12 to 14 lakhs on average on a house. The level of awareness of a customer has not been built yet towards that industry" (Participant 4).

Seminars and workshops are conducted by the government but this is not enough because practicality matters as well, the role of social media is crucial nowadays in this regard; "Social media has a role to play. We can convey things significantly. Even the government can play a big role in that" (Participant 4).

Implement financial incentives (tax breaks, carbon credits, taxes and preferential loans): Fiscal policy is the tool for a government to encourage or discourage any investment. Government through tax cuts and tax credits, or levying high taxes on traditional sources of energy, can encourage environmentally friendly investments to secure a sustainable future. "Governments and financial institutions can support small businesses like mine by offering incentives such as tax breaks, grants, or low-interest loans for green projects" (Participant 2). Moreover, "they should give grants, tax benefits, promote awareness, through education, also they should give more affordable green finance options brother! Training programs are the most important if you ask the bank to reserve a certain amount of granting loans to the green projects and also give it on a subsidized basis" (Participant 1).

Another facilitating measure is the preferential loans for green investments, as aforesaid, there must be a quota of loans specifically created for the investors interested in green investments. This should have easier conditions for loan issuance with comprehensive loan application processes and policy rates lenient than the market. The two direct quotes that are a source of these findings are as follows; "Preferential loan terms, financial incentives, loans on less than the policy rates, give clean instruction to bank, the certain percentage of loan has to be given to those attempting for green energy" (Participant 1). Moreover, "The process of application is a tedious and complex verification process, you have to give much evidence that the money you will get is for a specific purpose. Also, the rules are difficult to understand, we will be trying to consult people about that, but people are not properly aware" (Participant 2).

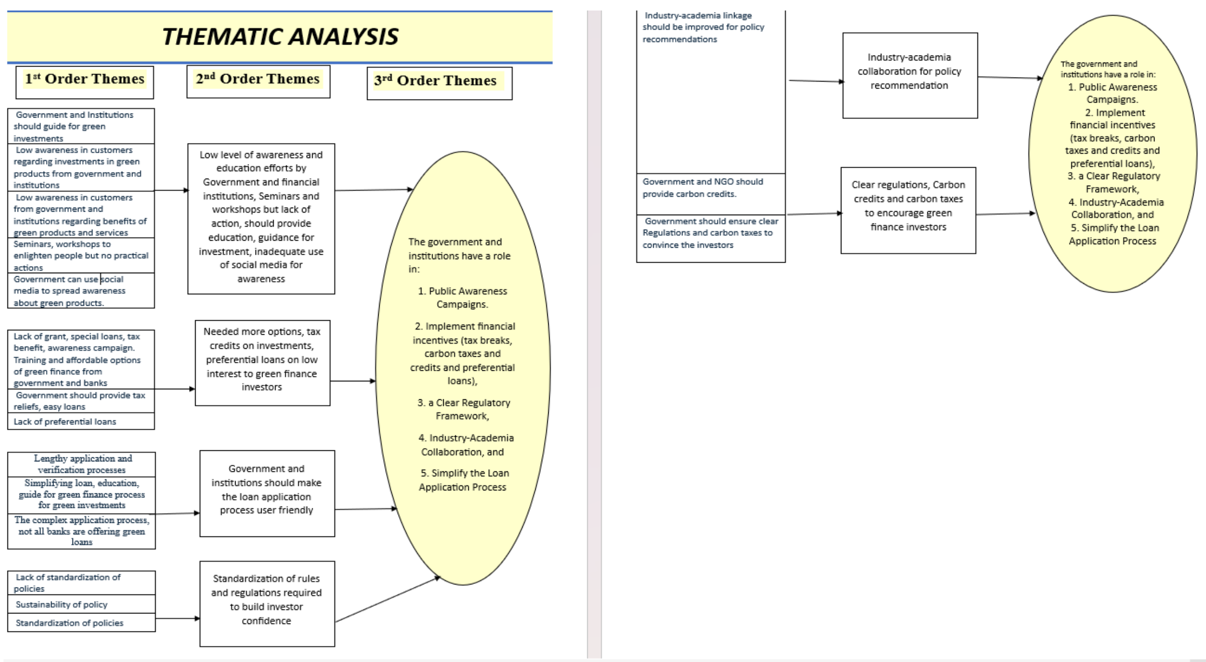
There should be a clear 'Regulatory Framework' to curb the level of insecurity from the investors. At the moment people are apprehensive about investing for the long term because they may encounter a new policy during their investment duration that may lead to an unpleasant surprise for them in the form of losses.

> Clear regulatory standards I think are important, this will give the business owners a sense of security to invest for the long term. The implementation of carbon pricing mechanisms can also encourage them to adopt green finance products. For example, carbon taxes can create a scenario for businesses to reduce carbon emissions and encourage them to invest in better cleaner technologies (Participant 5).

This standardization of policy will create a sense of security, and this point is emphasized by approximately every interview respondent. This standardization should be for the country's economic policies and the green products themselves. To understand this in a better way, there is a direct quote; "It's a good thing that PV modules have no GST in Pakistan. But if GST is applied? Therefore, the stability of a policy is not there. You don't have the sustainability of the policy through which you can do your business" (Participant 3).

This standardization of policy can address the lack of information problem as well, when the rules are defined, it results in more recognition of that industry and instead of financial institutions making their own rules that they can change whenever they want to, they are bound by the rules provided by the government, that creates more certainty. “For the green finance products like green loans and bonds, I feel like there is a need to make policies and regulatory frameworks mature because if you go to any bank their policies are not the same and you have to spend some time to understand them, it is a cumbersome exercise” (Participant 5).

An Important point highlighted by an individual respondent Industry-Academia Collaboration for the awareness program is worth mentioning. Industrial issues and needs can be resolved to a greater extent if the collaboration is robust, whatever issues the industry encounters, the academia can complement through research and the results can be intimated to the government or financial institutions according to which they can design the environmentally friendly items for the certain industry. As we have previously discussed green finance products are not suitable for every type of business. “Your industrial academia linkage should be at an extreme level, which doesn’t exist at all. Even we are from studied at the same university. The industrial academia linkage of even our university is not enough. A practical industrial problem is not entertained enough” (Participant 4).



DISCUSSIONS

The findings have the insight for my research questions, my first question was related to the level of awareness of small businesses about green finance, products and their benefits. Based on the detailed findings section above we can observe that businessmen are aware of the products, their benefits, and even the technical issues associated with the products. Some of them were so informed that they even knew the green securities issued by the foreign big names. “Recently being worked are 5 products, the first one to talk about is green bond. Apple and Bank of America have taken an initiative with the name of green bonds and certain investments will only be done through green bonds. In Pakistan, there is no concept of this” (Participant 1).

They are informed about the products as well whether it comes to consumer items or commercial items, as discussed above concerning the responses in this study. They also have the concept of green finance as an alternate investment medium to channel the investment towards environmentally friendly practices: “I am aware of the products that help in reducing carbon emissions and as per my understanding those finance that will help to reduce this are green finance” (Participant 3).

The second research question was pertinent to the measurement of risk and return regarding green finance investments as compared to traditional investments. For that purpose, we have asked questions related to the investment considerations of our respondents when it comes to traditional investments. They consider the traditional risk and return methods that are both direct and indirect. Direct methods related to capital budgeting techniques that involve cost-benefit analysis, Opportunity cost, Return on Investment, payback period etc. The indirect methods involve market and economic trends, industrial analysis etc. We are referring to the direct quotes: “Market conditions, market trend, financial stability, potential return, competitive analysis etc.” (Participant 1).

> Volatility, beta, and standard deviation, alongside qualitative evaluations of market trends, economic indicators, and sector-specific dynamics to determine expected returns. For example, when evaluating a traditional stock investment, I may consider historical performance data, industry outlook, and financial ratios like price-to-earnings (P/E) ratio or debt-to-equity ratio (Participant 5).

However, all of them agreed that there is no standard to measure green finance products’ risk and return now, and the reasons are many. First, it is an early stage so there are no proper computation techniques like in traditional investment opportunities. The lack of standardization of laws has also made things difficult to calculate because every financial institution has its own set of rules that create ambiguity in information and a lack of expertise. Rapid technology change is another risk due to which long-term risk assessment becomes formidable. Therefore, the risk and return system has yet to evolve for green finance and its products and services; “Rapid technology change now. I am working on a project and a recent event has happened in America, I have attended that event. Big companies were present what I have analyzed that (new) big products were coming from China” (Participant 1).

Research question three relates to the reasons of motivation for investors to invest in green finance. Motivations at the individual level are to contribute to the environment and a sense of belongingness to the worldwide struggle for environment preservation. A direct quote; “The environmental benefits and their importance, cost efficiency in the long run. Also, the number of efforts being done all over the world for the awareness I respect that because due to it the perceived value for investing in green investments is not only in terms of money but contributing to the environment as well” (Participant 5).

Another motivation source is the long-term cost efficiency. Even if CAPEX is high it will save many other costs, like fuel costs in bikes in the case of electric vehicles, and electricity costs in the case of solar panels. Energy-efficient buildings may be expensive to make but in their useful life, they do not use much energy that cost is saved. The third big motivation is country level, that is to gain selfsufficiency in the energy sector. This can give motivation at the government level, especially in today's scenario with uncertainty of resources along with the global politics is prevailing. A direct quote from a respondent; "'Their dependency was too much on Russia and the gulf countries for energy. Due to the recent developments, they have to reduce their dependency" (Participant 1).

The fourth research question was about the challenges, hindrances, or sources of demotivation for investors to invest in green finance investments. The biggest concern raised by respondents was the high startup costs, which are particularly difficult for small business owners to endure during the early stages of the business cycle when uncertainty is more common. The capital expenditure is typically recouped in the distant future, and small enterprises, particularly those in their early phases, lack certainty over their long-term prospects, particularly in countries with dynamic environments like Pakistan.

Another challenge is that it takes advice and knowledge to persuade investors, even if they possess the desire to invest. One issue that demotivates is the lack of standard regulations, which causes the information to be dispersed rather than coherent. According to one of the proprietors of a trading company, there are also relatively few possibilities available for investing in green products. According to the above straight quotations, there are very few options, particularly for all types of businesses. When investors are eager to seize the chance that the source of advice does not provide. Uncertain regulations have also been mentioned by our respondents; the absence of restrictions deters people from pursuing the project in question since it makes it more difficult to determine its viability. We also lack a reliable source of information; different banks have varied policies, which makes it difficult for investors to decide whether to take advantage of an opportunity or let it go.

People's behaviour that is motivated by cost is another significant topic that this section addresses. We have discussed in the 'Findings' section before that a sizable portion of the people is unconcerned with the product or its purpose; instead, they are only interested in finding the best deal. This is a serious issue associated with the high initial cost of green products and services. Not everyone is concerned about the environment or quality of work.

Traditional investments are quite appealing since they are well-known and have a history of success in the market. Since individuals need certainty and affordable alternatives, this demotivates their colleagues in green finance as well. Uncertain regulations have also been mentioned by our respondents; the absence of restrictions deters people from pursuing the project in question since it makes it more difficult to determine its viability.

The last research question was about the existing role of government and the suggestions our respondents can give to the government and financial institutions to promulgate green finance. The government should focus more on the awareness campaign. Instead of using old methods, they should use social media to improve practicality. Moreover, they should give tax benefits to those who take loans for the green investment. As loans are the main source of capital. The government can compel to invest in green investment by applying carbon taxes to alternative investment mediums like using cars causing smoke is taxed more a cleaner alternative is tax tax-free. Institutions and governments can persuade investors by allocating a quota of loans as discussed before in the findings section. Industry-academia collaboration can further diagnose the problems and needs different types of businesses have. The rapid research process may be able to cater for the needs of the diverse business landscape.

CONCLUSION

This research examines Pakistani small businesses' attitudes and motivations to use green finance. The results show a lack of knowledge and the advantages of green finance options, along with apprehensions of financial risk it may carry. Despite the obstacles, small businesses understand the long-term advantages of green finance initiatives. In order to encourage small firms in Pakistan to adopt green finance, the study highlights the necessity of more knowledge, government measures and financial assistance.

Limitations of the Research

The interviews were conducted in a way to extract maximum amount of data but the number of respondents could be more and other than twin cities of Pakistan to improve theoretical saturation of the intended responses. Business owners were all males and they may not represent all types of small businesses as the Small businesses are of many types.

Narratives	Propositions
Small enterprises indicate a want to comprehend the advantages and alternatives of green finance.	If small businesses were aware of the precise advantages and available options, they would be more likely to embrace green funding.
For small businesses, significant start-up expenses and financial obstacles are prohibitive.	Small businesses may use green finance more frequently if the financial burden is lessened and low-cost entry options are made available.
Support from the government is thought to be essential for advancing green financing.	Subsidies, tax breaks, and incentives offered by the government may encourage small businesses to implement green finance.
Making decisions is made more difficult by the absence of established risk and return metrics.	Small firms would be better able to evaluate the risks and returns of green finance investments if standardized evaluation standards were developed.
Although initially expensive, green finance is thought to provide long-term benefits.	Small business owners may find green finance more enticing if it is positioned as a long-term investment with gradual rewards.
The quick evolution of technology is raising concern in green finance.	Increased knowledge and assistance about flexible technologies may cause worries about the speed at which technology is developing.

References:

Adil, F. (2023, Jul.). *Small businesses, big impacts: Pandemic, small and micro enterprises and fair recovery in Pakistan* (Occasional Paper Series No. 81). Southern Voice.

Akomea-Frimpong, I., Adeabah, D., Ofosu, D., & Tenakwah, E. J. (2021). A review of studies on green finance of banks, research gaps and future directions. *Journal of Sustainable Finance and Investment, 11*(1), 1-24.

Afraz, N., Hussain, S. T., & Khan, U. (2018). *Barriers to growth: The case of small firms in Pakistan* (Working Paper). International Growth Centre.

Berhe, A. A., Mengistu, D. A., & Alemneh, A. T. (2023). The impact of green investment and green marketing on business performance: The mediation role of corporate social responsibility in Ethiopia's Chinese textile companies. *Journal of Cleaner Production, 366,* 1-24.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Pearson.

Galletta, K. (2013). *Mastering the interview and other qualitative methods.* SAGE Publications.

Hafeez, M. B., Majeed, A., & Abbas, F. (2023). Green finance in Pakistan: A literature review. *Journal of Economic Cooperation and Development, 44*(2), 229-52.

International Finance Corporation. (2023, Feb. 15). Green Finance. https://www.ifc.org/en/what-we-do/sector-expertise/financial-institutions/climate-finance/green-finance

Khairunnessa, F., Vazquez-Brust, D. A., & Yakovleva, N. (2021). A review of the recent developments of green banking in Bangladesh. *Sustainability, 13*(5), 1-21.

Khan, Z. A., Khan, M. A., & Rehman, Z. U. (2021). Climate change finance in Pakistan: Opportunities and challenges for small and medium-sized enterprises (SMEs). *Pakistan Journal of Social Sciences, 41*(2), 87-100.

Kumar, L., Nadeem, F., Sloan, M., Restle-Steinert, J., Deitch, M. J., Ali Naqvi, S., ... & Sassanelli, C. (2022). Fostering green finance for sustainable development: A focus on textile and leather small medium enterprises in Pakistan. Sustainability, *14*(19), 1-24.

Liu, N., Liu, C., Xia, Y., Ren, Y., & Liang, J. (2020). Examining the coordination between green finance and green economy aiming for sustainable development: A case study of China. *Sustainability, 12*(17), 1-26.

Malsha, K. P. P. H. G. N., Anton Arulrajah, A., & Senthilnathan, S. (2020). The mediating role of employee green behaviour towards sustainability performance of banks. *Journal of Government and Regulation, 9*(1), 92-102.

Shafique, O., & Majeed, A. (2020). Factors influencing bankers' intention to adopt green finance in Pakistan. *Review of Economics and Development Studies, 6*(4), 773-85.

Smith, A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis. Theory, method, and research.* Sage.

Weber, O., & Chowdhury, R. K. (2020). Corporate sustainability in Bangladeshi banks: Proactive or reactive ethical behaviour? *Sustainability, 12*(19), 1-18.

World Bank. (2021, Jun.). Executive summary- The cost of delay: Financing the global climate change response. Author.

Yardley, L. (2008). Demonstrating validity in qualitative psychology. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to methods* (235-51). Sage.

Zhang, Y., Peng, M., & Wong, C. M. (2023). Green corporate governance, green finance, and sustainable performance nexus in Chinese SMES: A mediation moderation model. *Sustainability, 15, 1-17.*

Zhou, X., Tang, X., & Zhang, R. (2020). Impact of green finance on economic development and environmental quality: A study based on provincial panel data from China. *Environmental Science and Pollution Research, 27*(24), 19915-32.

Date of Publication	June 15, 2024