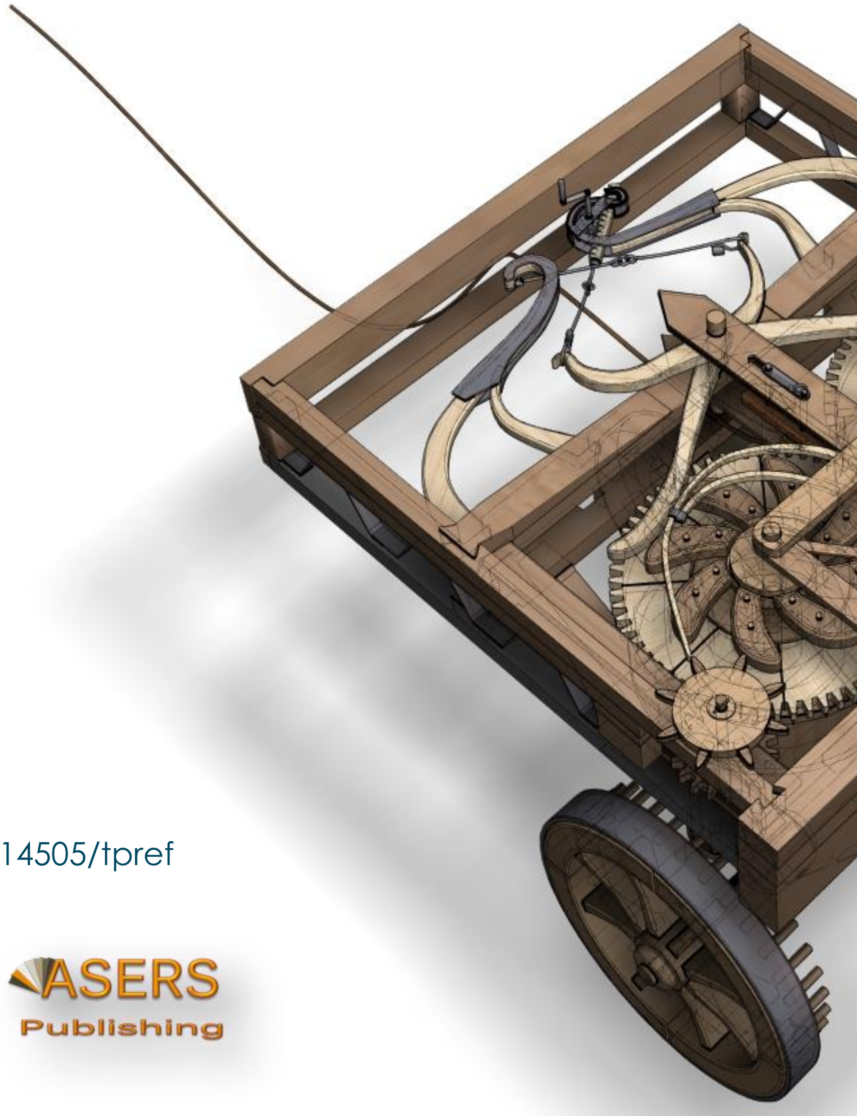
Theoretical and Practical Research in Economic Fields

Special Issue



Quarterly
Volume XV
Issue 2(30)
Summer 2024

ISSN: 2068 – 7710
Journal DOI: https://doi.org/10.14505/tpref

ASERS Publishing

Volume XV
Issue 2(30)
Summer 2024

ASERS Publishing
ISSN 2068 – 7710
Journal's Issue DOI:
https://doi.org/10.14505/tpref.v15.2(30).00

Table of Contents

Volume XV
Issue 2(30)
Summer 2024

ASERS Publishing
http://www.asers.eu/asers-publishing
ISSN 2068 – 7710
Journal's Issue DOI:
https://doi.org/10.14505/tpref.v15.2(30).00

Call for Papers
Fall Issue 2024
Theoretical and Practical Research in Economic Fields

Many economists today are concerned by the proliferation of journals and the concomitant labyrinth of research to be conquered in order to reach the specific information they require. To combat this tendency, **Theoretical and Practical Research in Economic Fields** has been conceived and designed outside the realm of the traditional economics journal. It consists of concise communications that provide a means of rapid and efficient dissemination of new results, models, and methods in all fields of economic research.

Theoretical and Practical Research in Economic Fields publishes original articles in all branches of economics – theoretical and practical, abstract, and applied, providing wide-ranging coverage across the subject area.

Journal promotes research that aim at the unification of the theoretical-quantitative and the empirical-quantitative approach to economic problems and that are penetrated by constructive and rigorous thinking. It explores a unique range of topics from the frontier of theoretical developments in many new and important areas, to research on current and applied economic problems, to methodologically innovative, theoretical, and applied studies in economics. The interaction between practical work and economic policy is an important feature of the journal.

Theoretical and Practical Research in Economic Fields is indexed in SCOPUS, RePEC, ProQuest, Cabell Directories and CEEOL databases.

The primary aim of the Journal has been and remains the provision of a forum for the dissemination of a variety of international issues, practical research, and other matters of interest to researchers and practitioners in a diversity of subject areas linked to the broad theme of economic sciences.

At the same time, the journal encourages the interdisciplinary approach within the economic sciences, this being a challenge for all researchers.

The advisory board of the journal includes distinguished scholars who have fruitfully straddled disciplinary boundaries in their academic research.

All the papers will be first considered by the Editors for general relevance, originality, and significance. If accepted for review, papers will then be subject to double blind peer review.

This Special Issue was created at the request of a group of researchers from Ukraine. It is a response to the challenging situation of Ukrainian scholars due to the Russian invasion as well as the growing demand for knowledge on Ukrainian issues.

We would like to express our endless thank to our colleagues, scholars from Ukraine who are working amid the war on topics that are important for all. Also, we thank all our international authors for their valuable contributions to this Issue.

Deadline for submission of proposals:	10th August 2024
Expected publication date:	September 2024
Website:	http://journals.aserspublishing.eu/tpref
E-mail:	tpref@aserspublishing.eu

To prepare your paper for submission, please see full author guidelines in the following file: https://journals.aserspublishing.eu/tpref/Template_for_Authors_TPREF_2024.docx on our site.

DOI: https://doi.org/10.14505/tpref.v15.2(30).19

Green Products in Banks. Case of an Emerging Country

Yasmina JABER
RRED Laboratory, Department of Accounting and Finance
Higher Institute of Management Gabes, Tunisia
ORCID:0000-0003-2920-5651
jaber_yasmina@yahoo.fr

Faten Nasfi SALEM
RRED Laboratory, Department of Accounting and Finance
Higher Institute of Management Gabes, Tunisia
ORCID:0000-0002-8875-8590
fetenasfi@gmail.com

Article info: Received 27 February 2024; Received in revised form 13 March 2024; Accepted for publication 18 April 2024; Published 28 June 2024.

Abstract: This paper explored in depth the issue of green finance within Tunisian banks. The main objective of this research was to understand how Banks can play a significant role in the development of green finance in Tunisia. In a first step, we explained the undeniable importance of green finance which presents an essential pillar of the transition towards a more sustainable and environmentally friendly economy. Financial institutions play a vital role in promoting green financial products. Banks have started to offer products and services focused on sustainability. However, these efforts are insufficient, and it is necessary to strengthen them. For this, we examined the perception of Tunisian customers towards the green financial products of Banks as well as the factors influencing their attitudes, a detailed survey reveals that awareness is growing and that trust and relevance are crucial elements to encourage their adoption. In conclusion, this work has highlighted the importance of green finance in the Tunisian context. It offers food for thought for decision-makers, practitioners, and researchers who wish to contribute to the sustainable development of the banking sector in Tunisia.

Keywords: green finance; ESG; sustainable development; CSR.

JEL Classification: M14; A13; R11.

Introduction

The whole planet is in motion due to climate risks, as a result, investors and banks are converting one by one to sustainable finance which can transform these risks into opportunities. Certainly, with the encouragement of governments and central banks, it is becoming a constantly evolving field.

Indeed, banks play a crucial role in the development of green finance due to their central position in the financial system and ability to mobilize significant capital. Their involvement is essential to catalyze the financing of sustainable projects and contribute to the transition towards a greener and more resilient economy. Here are the main aspects that underline the crucial role of banks in the development of green finance:

Direct financing for green projects: Banks can provide direct financing for green projects, whether they are renewable energy installations, energy efficiency, clean transportation, or other sustainable initiatives. They can grant specific loans to these projects based on their potential for positive environmental impact.

Issuing green bonds: Banks can issue green bonds to finance sustainable projects. Bedendo M, Nocera G and Siming L, (2023), By issuing these bonds, banks attract investors concerned about environmental impact and mobilize additional capital for green projects. Peterson K. Ozili (2022).

Green financing advisory: Banks play an important role in advising businesses and institutions on how to structure and finance green projects. Their financial expertise allows them to assess the risks and opportunities associated with sustainable investments, which can encourage more projects to adopt a green approach.

Integration of ESG criteria: Banks also have a critical role in integrating environmental, social, and governance (ESG) criteria into their operations and investment decisions. By considering ESG risks and the social and environmental impacts of their activities, banks can drive sustainable and responsible business practices across the financial sector.

Customer Awareness: Banks play a key role in creating awareness among their customers about green financial products and services. They can encourage individuals and businesses to opt for responsible financial solutions, such as green savings accounts, green loans, low-carbon credit cards, etc. This awareness helps broaden the base of potential investors and borrowers for green projects. Development of innovative green financial products, Assessment, and management of climate risks, and Influence on companies as important creditors and investors, banks have a significant influence on the companies they finance. They can use their voting power at general meetings and their dialogues with companies to encourage the adoption of sustainable business practices, the reduction of carbon emissions, and the implementation of ESG strategies.

In summary, banks have a crucial role in the development of green finance as main providers of financing for sustainable projects and as catalysts for the integration of ESG criteria in the financial sector. Their commitment and influence can significantly contribute to the transition to a greener and socially responsible economy (Daubanes *et al.* 2022; Flammer 2021; Sangiorgi and Schopohl 2021).

This paper seeks to explore in depth the crucial role of green finance in the fight against climate change while looking at how international organizations are working together to develop this concept on a global scale. More specifically, it will focus on the evolution of green financing in Tunisia and the opportunities and challenges facing this country in its quest for a more sustainable future.

In this context, this work will aim to present and clarify the concept of green finance. To better understand this concept, we proposed to treat it in the form of the following sections:

The first section sets out the definition and issues of green finance, the second focuses on the theoretical foundation of the research the third section focuses on the literature review by showing the role of banks and the State in the development of green finance, and finally the fourth section presents the practical study of the perception of green products in Tunisian banks as well as the results found.

1. Literature Review

1.1. Definition and Challenges of Green Finance

The Financial Market Council has defined green finance, by its objective, as any financial operation having the preservation of the environment and the promotion of the energy and ecological transition.

It is part of responsible investment (RI) approaches adding environmental, social, and governance (ESG) criteria to financial criteria.

Green finance refers to the use of financial products and investment instruments to support projects, businesses, and initiatives that contribute to environmental protection and sustainability. It aims to generate both financial returns and positive environmental and social benefits. (W. Li, H. Hu and Z. Hong, 2024)

For green financing to achieve its objectives, it is necessary to bring together certain basic issues:

- The energy transition: it is the main challenge of green finance through the financing of projects that serve to increase the share of renewable energies in the energy mix and reduce greenhouse gas emissions.
- Sustainable management of natural resources: green finance, by financing projects that reduce pollution and preserve natural resources (biodiversity, water, and soil), can contribute to the sustainable management of these natural resources.
- Social impact: by improving public health by encouraging investment in social infrastructure and clean transportation and by creating local jobs in renewable energies, green finance can have a positive social impact.
- Climate and financial risks: green finance helps manage these risks by financing projects that take climate impacts into account.
- The favorable regulatory framework: this is a very important issue for green finance. Governments and regulators can encourage investment in green projects by creating tax incentives and promoting transparency and disclosure of information on climate risks and environmental performance.

Indeed, green finance aims to decarbonize our economies and to meet this objective, it relies on various green financial assets. They are the set of instruments and products that finance projects and companies that have positive impacts on the environment according to the financial market advice definition.

As an example, we can cite green bonds and sustainable bonds.

Green bonds, also called green bonds, are issued to finance projects with a specific positive environmental impact. The funds raised by the issuance of green bonds are exclusively allocated to projects that contribute to the protection of the environment and the transition to a greener and sustainable economy. These projects may include initiatives related to renewable energy (solar, wind, hydro), energy efficiency, clean transportation, waste management, and protection of biodiversity, among others. Green bonds are often certified according to recognized standards, such as the International Capital Market Association's (ICMA) Green Bond Principles (GBP), to ensure that financed projects comply with required environmental criteria.

Sustainable bonds, also called 'sustainability bonds' or 'social bonds', are issued to finance projects with a positive environmental and social impact. Unlike green bonds which primarily focus on environmental projects, sustainability bonds have a broader approach by including projects that contribute to environmental and social sustainability. Funds raised through the issuance of sustainability bonds can be allocated to projects that promote gender equality, improve working conditions, strengthen food security, and support education, among other social and environmental initiatives.

In summary, the main difference between green bonds and sustainable bonds lies in the specific purpose of the projects they finance. Green bonds are issued to support exclusively environmental projects, while sustainability bonds have a broader approach by including both environmental and social projects. Both types of bonds aim to mobilize capital for positive impact projects, thereby contributing to the transition to a more sustainable and socially responsible economy.

1.2. Theoretical Basis of the Research

1.2.1. Green Marketing Theory

This theory focuses on how consumers perceive and respond to environmentally friendly products and marketing efforts. In the context of banks offering green products, consumer perceptions can be influenced by various green marketing strategies employed by banks, such as promoting environmental benefits, highlighting sustainable practices, and granting eco-labels or certifications. The theory suggests that consumers' positive perception of green products in banks is influenced by their awareness, knowledge, attitudes, and beliefs related to environmental issues.

1.2.2. Theory of Planned Behavior

The theory of planned behavior (TPB) is used extensively within and across multiple contextual studies (Ajzen 1991). TPB is the superior model theory for examining or understanding human behavior (Hagger 2019). The TPB aims to understand the complex nature of Generation Y's green behavior on green products. The TPB is developed from the theory of reasoned action (TRA) insufficiency to determine human behaviors based on perceived behavioral control (PBC); which is seen as a special case for TPB (Ajzen 1991).

1.2.3. Stakeholder Theory

This theory emphasizes the importance of considering the interests and expectations of various stakeholders, including customers, in organizational decision-making. In the case of green products offered by banks, customers are key stakeholders whose perception matters. Banks that offer green products are likely to be perceived positively by environmentally conscious customers, who value sustainable practices and prioritize environmental considerations in their banking choices. The theory suggests that banks that align their offerings with their customers' values and expectations can improve their reputation and build customer loyalty. Hooda KS and Yadav S (2023).

1.2.4. Institutional Theory

This theory focuses on the influence of institutional pressures and norms on organizational behavior. In the context of green products in banks, institutions such as regulations, industry standards, and societal expectations play an important role in banks' perception and adoption of green practices. Banks can offer green products in response to external pressures and to maintain their legitimacy in a society increasingly concerned about environmental issues. The theory suggests that the perception of green products in banks is influenced by the broader institutional environment and the extent to which banks conform to or deviate from existing standards. B. Guy Peters (2022).

These theoretical foundations provide different insights into the perception of green products in banks. Actual perception is likely influenced by a combination of these theories, as well as contextual factors such as individual values, beliefs, and sociocultural influences.

1.3. Role of Green Finance in the Transition to a Sustainable Economy

Papista and Krystallis (2013) and Huang (2022) report that numerous studies aiming to explain pro-environmental behaviors have mobilized different versions of models based on the influence of values, beliefs, or attitudes on pro-environmental behaviors such as the purchase of green products.

Financing the energy transition

Green finance plays a key role in financing the transition to clean and renewable energy sources. It supports the development of solar, wind, hydro, and other low-carbon energy projects.

Promoting energy efficiency

Green finance encourages investment in projects and technologies aimed at improving energy efficiency. This includes initiatives such as the energy retrofit of buildings, the use of energy-efficient lighting technologies, and the adoption of sustainable transport systems.

Encouraging sustainable business practices

Green finance incentivizes companies to adopt sustainable business practices by integrating ESG considerations into their operations. It promotes environmental and social responsibility, climate risk management, the promotion of diversity and inclusion, and stakeholder accountability.

1.4. Impact of Green Bonds on the Financing of Sustainable Projects

Mobilization of specific capital: Green bonds attract investors specifically interested in projects with a positive environmental impact. This allows capital to be mobilized toward projects that may not have been financed otherwise or that would have had more difficulty obtaining traditional financing.

Financing sustainable projects: Green bonds are issued to finance specific projects that meet rigorous environmental criteria. These projects may include renewable energy initiatives (solar, wind, hydro), energy efficiency, clean transportation, waste management, and biodiversity protection, among others.

Improved transparency and disclosure: Green bond issuers are required to provide transparent information on the use of funds and the environmental impact of the projects financed. This strengthens investor confidence in the real impact of green bonds and encourages the disclosure of data on the environmental performance of projects.

Development of the sustainable investment market: The increasing issuance of green bonds has contributed to the development of a market dedicated to sustainable investments (Rahman *et al.* 2024).

This attracts more investors and capital to environmentally friendly initiatives, driving growth and innovation in the sustainable projects sector.

Strengthening Commitment to Sustainability: Issuing green bonds encourages issuers to make a greater commitment to sustainability and environmental responsibility. This can lead businesses and governments to adopt more sustainable business practices and take concrete steps to reduce their environmental footprint.

1.5. The Advantages of Green Bonds

Ottman, Stafford, and Hartman (2006) identify five main types of personal benefits of green products for consumers: (1) efficiency and savings; (2) health and safety; (3) performance; (4) symbolism and status; (5) practicality. The rise in popularity of car sharing is linked to the fact that it allows access to a vehicle while limiting maintenance expenses, repairs, and insurance, has.

a.Benefits for investors:

- Portfolio diversification: Green bonds offer investors an opportunity to diversify their investment portfolio by investing in projects with positive environmental and social impact.
- Financial return: Although green bonds have an environmental and social objective, they offer financial returns similar to those of traditional bonds (Johnstone and Tan 2015).
- Brand image and reputation: Investing in green bonds can improve the brand image and reputation of investors by showing their commitment to sustainable development (Bennett and Williams 2011).
- Risk management: Investors can use green bonds to manage environmental and social risks in their investment portfolio.
- Mésonnier (2022) and Degryse *et al.* (2020) also use the Eurostat GHG emission data (matched with the French and the Belgian credit registers, respectively) to analyze changes in the lending attitude of banks to polluting sectors.
- Assessment of risks and opportunities: Green bonds allow investors to measure the risks and opportunities associated with sustainable investments and to better understand the environmental and social impacts associated with the projects financed.

- Influence on Business Practices: Investors can exert influence on the business practices of issuers by using their investment power to encourage issuers to adopt sustainable and responsible business practices. Spaargaren G. (2003)
- Regulatory compliance: In some cases, green bonds can be used to comply with certain environmental or social regulations.
- Development of new financial products: The green bond market has spurred the development of new sustainable financial products, such as sustainable mutual funds and stock indices (Devinney, Auger, and Eckhardt 2012).

b. Benefits for issuers:

- Access to new investors: Green bonds allow issuers to access a new group of investors interested in environmental and socially responsible projects.
- Brand image and reputation: Issuing green bonds can improve the brand image and reputation of issuers by showing their commitment to sustainable development.
- Diversification of financing sources: Green bonds allow issuers to diversify their financing sources by issuing bonds that are specifically intended to finance environmentally and socially responsible projects.
- Tax and regulatory benefits: Some governments offer tax and regulatory benefits to green bond issuers to encourage investment in environmental and socially responsible projects.
- Innovation: Issuing green bonds encourages innovation in sustainable products and services, which can provide competitive advantages for issuers.
- Access to less expensive sources of financing: For issuers with a strong reputation for sustainability, green bonds can provide access to less expensive sources of financing than traditional bonds.
- Better investor visibility: Green bonds can provide issuers with better visibility to investors seeking sustainable investment opportunities.
- Social and environmental responsibility: By issuing green bonds, issuers can demonstrate their commitment to social and environmental responsibility and strengthen their reputation among stakeholders.

2. Experimental Methods

In Tunisia, even if progress in green finance seems timid for the moment, it is interesting to refer to companies whose job is to protect the environment and those seeking to follow the path of energy and ecological transition.

To satisfy the objectives of the stakeholders, these companies in an approach of social responsibility have contributed to the challenges of sustainable development, and have chosen to involve citizens and partners by popularizing the tools making it possible to facilitate green economy projects, to create an environment promoting ecological objectives, blocking energy-intensive projects and favoring green projects with a big impact on carbon reduction. Renewable energy projects strengthening the solar market and supporting the implementation of the Tunisian solar plan have taken shape.

The Tunisian state has put in place public policies to encourage green financing. Among these policies, we can cite; the legal framework, by The finance law of the year 2022 seems to have as its main aim the protection of the environment, focusing on the encouragement of a green economy through financing. The tax and customs incentive through tax exemption for the benefit of companies with green activities advanced by article 29, of December 28, 2021, relating to the 2022 finance law which opted for the encouragement of the implementation of solar energy in the country by importing solar collectors, the import of the latter now brings to its author the advantage of reducing customs charges to 10% of the customs tariff in force.

3. Case Studies

The Tunisian State has established several public-private partnerships (SUNREF TUNISIE program, the French Development Agency (AFD), the European Union, the National Agency for Energy Management (ANME), the National Agency of Environmental Protection (ANPE), for green financing. These partnerships make it possible to mobilize significant financial resources to support environmental projects. Public-private partnerships also promote collaboration between public and private actors for the implementation of sustainable and innovative solutions.

In this context, this work will aim to present and clarify the concept of green finance. To better understand this concept, we proposed a questionnaire with the following central question: Regarding 'green finance', do you think that, currently, the terms 'finance' and 'green' can coexist? The term FINANCE evokes notions and logics of 'profitability', wealth', 'freedom', 'and excess' … while the term GREEN evokes the notions and logics of 'ecology', 'nature', 'respect ', 'limits' which a priori seem contradictory.

Data collection was carried out using an online form which was distributed to participants strategically. Participants were invited to complete the form which was designed in a user-friendly manner to ensure a pleasant experience for participants, thus promoting an optimal response rate. Our sample is made up of sixty-three individuals of different intellectual levels.

4. Research Results

The results obtained from the responses of 63 participants provide significant insight into their perceptions and attitudes towards Banks' green products.

Table 1. Distribution of Respondents according to their sex

Tranche	Effective	Percentage
Women	52	82.4%
Men	11	17.6%
Total	63	100%

Source: Authors

➢ The data shows that the majority of respondents are women, making up 82.4% of the sample, while men make up 17.6%. This distribution may have implications for how different genders perceive and interact with sustainable financial products.

Table 2. Perceptions of Green Finance Depending on the Socio-Professional Category of Participants

What is green finance?	Unemployed	student	Member of the liberal profession	Employee	Total
A form of finance that aims to finance sustainable projects.	1	15	7	7	30
A form of finance that aims to finance economically profitable projects.	3	6	5	3	17
A form of finance that aims to finance socially responsible projects.	3	9	2	2	16
Total	7	30	14	12	63

Source: Authors

➢ Analysis of the responses reveals that the most numerous students associate green finance with the financing of sustainable projects, with 15 positive responses. Employees and members of liberal professions also have a preference for this definition, with 7 responses each. Regarding the definition of green finance as financing economically profitable projects, the unemployed and students are the main respondents. Finally, regarding the definition of green finance as financing of socially responsible projects, students are still in the lead, with 9 positive responses.

Green finance is a growing field that integrates economic, environmental, and social aspects. The responses given by participants reflect this diversity of perspectives. It is important to note that green finance can encompass all of these dimensions.

Financing sustainable projects: This interpretation emphasizes environmental sustainability. Investments in sustainable projects aim to minimize negative impacts on the environment while promoting responsible use of natural resources.

Economic profitability: The idea that green finance is economically profitable indicates that investors can achieve a positive return on investment by supporting environmentally friendly projects. This encourages the alignment of financial interests with environmental goals.

Social Responsibility: The social responsibility aspect of green finance highlights the importance of considering positive social impacts while financing sustainable projects. This includes aspects such as creating green jobs and promoting fair practices.

➢ Green finance encompasses a wide range of interpretations, from environmental sustainability to economic profitability to social responsibility. This diversity reflects the complexity and versatility of green finance as a field that aims to reconcile financial objectives with environmental and social imperatives.

Table 3. Participants' Opinions on the Reputation of Sustainable Businesses and the Relevance of Environmental Sustainability in the Selection of Financial Products Depending on Age

		Your age is			
Do you think that companies that adopt sustainable and environmentally friendly practices have a better reputation and are more attractive to investors?	Would you say that environmental sustainability is an important factor to consider when selecting a financial product?	Between 25 and 34 years old.	Between 35 and 44 years old.	Under 25.	Total
Yes	Yes	14	7	21	42
Total of yes		14	7	21	42
Total		14	7	21	42

Source: Authors

- The data appears to be linked to two separate questions asked of respondents:

The first question concerns the perception of sustainable and environmentally friendly practices by companies and their impact on reputation and attractiveness to investors.

The second question concerns the importance of environmental sustainability when selecting a financial product. Responses to the first question indicate that 42 respondents answered 'Yes' to the question of whether companies that adopt such practices have a better reputation and are more attractive to investors.

- Reputation and Investor Attractiveness: The perception that companies adopting sustainable practices have a better reputation and are more attractive to investors is consistent with current financial market trends. Investors, particularly institutional investors and Environmental, Social, and Governance (ESG) funds, are increasingly giving importance to environmental, social, and governance (ESG) factors in their investment decisions. Companies with high ESG ratings often have lower financing costs and are more attractive to responsible investors.

Importance of Environmental Sustainability: The second question, regarding the importance of environmental sustainability when selecting a financial product, suggests that respondents consider this aspect when choosing financial products. This may indicate that they attach importance to sustainable investments or financial products that incorporate ESG criteria.

- Data shows that the majority of respondents believe that companies that adopt sustainable and environmentally friendly practices have a better reputation and are more attractive to investors. This perception reflects the growing importance of environmental sustainability in the financial world.

The second question regarding the importance of environmental sustainability when selecting a financial product indicates that sustainability is a factor considered by many investors and consumers. This suggests a trend towards greater environmental awareness and a growing demand for financial products aligned with ESG criteria.

Overall, this data highlights the growing importance of environmental sustainability in investment and consumption decisions, with potential implications for businesses and financial products seeking to meet this growing demand.

Table 4. Investor Motivations for Green Products: An Analysis of Participants' Preferences

	Percentage
Reduce financial risks linked to climate change	19.6%
Improve their brand image, reputation, and attractiveness	21.6%
Position yourself advantageously in the future economy	27.5%
Take advantage of tax advantages and subsidies granted by the State	27.5%
Generate attractive financial returns	2%

Source: Authors

- Reducing Financial Risks: The response that people are investing in green products to reduce financial risks related to climate change is important. Investors increasingly view climate change as a potential risk to their portfolios. By investing in green companies and products, they seek to minimize the risks associated with exposure to industries vulnerable to climate disruption.

Improving Brand Image and Reputation: Improving brand image and reputation is also a key factor. Companies that adopt sustainable practices often attract loyal customers and strengthen their reputation among stakeholders. This can result in greater customer loyalty and better company valuation.

Positioning in the Future Economy: Investing in green products to position yourself advantageously in the future economy reflects the long-term perspective. Investors recognize that future economies will be focused on sustainability, and they seek to anticipate this trend by investing in green sectors and technologies.

Tax Advantages and Subsidies: Some investors are attracted by the tax advantages and subsidies granted by the State for green investments. These financial incentives can make investments in green products more financially attractive.

Attractive Financial Returns: Although fewer respondents chose this option, the potential to generate attractive financial returns remains significant. Investors do not want to sacrifice profitability by investing in green products, and more and more opportunities offer competitive returns.

➢ Data indicates that the main reason people choose to invest in green products varies, but reducing financial risks from climate change and improving brand image and reputation are key factors. Additionally, the long-term perspective of positioning oneself in the future economy and benefiting from tax benefits and government subsidies also plays an important role. This shows that green investments are influenced by a combination of financial, economic, and social motivations. Investors are increasingly aware of the financial benefits and opportunities that green products offer while recognizing the importance of long-term sustainability for businesses and the economy.

Table 5. Participants' Preferences Regarding the Main Role of Banks in Green Finance

Tranche	Percentage
Finance and sustainable projects	51%
Encourage businesses to adopt sustainable practices	29.4%
Advising clients on sustainable investments	19.6%
Total	100%

Source: Authors

➢ Economic and financial analysis: The predominance of responses indicating that the main role of banks is to finance sustainable projects (51%) suggests that the majority of participants view financing as a key driver of growth in the green economy. This perspective reflects the need to provide financial resources to support environmentally friendly initiatives and promote economic sustainability. However, 29.4% of respondents consider that the role of banks is to advise clients on sustainable investments, thus highlighting the importance of financial advice in promoting green finance. Finally, 19.6% believe that banks should play an incentive role by encouraging businesses to adopt sustainable practices, thus highlighting the influential power of financial institutions to promote sustainability within the business sector.

➢ In short, the opinions shared by the participants highlight the complexity of the role of banks in green finance. Although financing sustainable projects is seen as a priority, other dimensions, such as financial advice and encouraging companies to adopt sustainable practices, should not be underestimated. This diversity of perspectives highlights the importance of financial institutions in promoting green finance, also the need to adopt a holistic approach to foster a more environmentally friendly economy.

➢ The majority of respondents, regardless of their gender, socio-professional category, or age, seem to have already heard of green products and ecological credits. This indicates some awareness of these concepts within the sample. However, it is notable that among the unemployed, awareness appears to be slightly lower, with 8.33% reporting having already heard of these products.

➢ Overall, the data suggests that awareness of green products and eco-credits is relatively high among respondents, regardless of their socio-professional category, age, or gender. However, there is still room for improvement, particularly among the unemployed. This increased awareness can help further promote green finance and financial sustainability in society.

➢ Description of green products and ecological credits:

Responses to the question of whether participants have ever heard of green products and eco-credits show a diversity of responses and a certain degree of awareness of these concepts. Some responses indicate a general understanding of the nature of green products and eco-credits, while others express a lack of knowledge on the subject. It is important to note that some respondents associate green products with environmentally friendly project financing mechanisms, while others mention things such as eco-labels and financial benefits.

Table 6. Distribution of Awareness of Green Products and Ecological Credits according to Gender, Socio-Professional Category, and Age of Respondents

			Have you ever heard of green products and eco credits before?	
What is your gender?	What is your socio-professional category?	Your age is	Yes	Total
Women	Unemployed	Between 35 and 44 years old	8,33%	8.33%
	Total for unemployed		8,33%	8.33%
	Students	Between 25 and 34 years old	8.33%	8.33%
		Under 25	50%	50%
	Total for student		58.33%	58.33%
	Employee	Between 25 and 34 years old	16.67%	16.67%
		Between 35 and 44 years old	8.33%	8.33%
	Total employee		25%	25%
Total for women			94.67%	91.67%
Man		Over 44 years old	8.33%	8.33%
	Total for men		8.33%	8.33%
Total			100%	100%

Source: Authors

➢ Responses reflect a variety of understandings regarding green products and eco-credits, suggesting that awareness of these concepts may vary considerably among respondents. However, some responses indicate a general understanding of green products as environmentally friendly products and green credits as financing mechanisms for projects with a positive impact on the environment. This highlights the importance of education and awareness to promote green finance.

➢ In conclusion, the answers to the question on understanding green products and ecological credits indicate a diversity of knowledge among the respondents. Some participants have a solid understanding of these concepts, while others need increased awareness. To further promote green finance, it is essential to provide clear and accessible information on these topics and increase awareness of their importance for environmental and financial sustainability.

Table 7. Perception of the Main Characteristic of a Green Credit from Banks in Tunisia Depending on the Age of the Respondents

					Your age is
In your opinion, what is the main characteristic of a green loan offered by banks in Tunisia?	Between 25 and 34 years old.	Between 35 and 44 years old.	Under 25.	Over 44 years old.	Total
The credit comes with a favorable interest rate.	17.78%	12.5%	30.43%	50%	27.45%
The credit is intended to finance environmentally friendly projects.	72.22%	87.5%	60.87%	50%	68.63%
The credit amount covers up to 100% of the equipment acquisition cost.			8.7%		3.92%
Total	100%	100%	100%	100%	100%

Source: Authors

➢ The responses show that the perception of the main characteristic of green credit offered by Tunisian Banks varies depending on the age of the respondents. Among respondents aged under 25, 30.43% believe that green credit comes with an advantageous interest rate, while 60.87% believe that the credit is intended to finance environmentally friendly projects. environment. Among respondents aged 25 to 34, 27.78% think that the advantageous interest rate is the main characteristic, and 72.22% consider that green credit finances environmentally friendly projects. Among respondents aged 35 to 44, 12.50% emphasize the favorable interest rate, and 87.50% emphasize financing environmentally friendly projects. Finally, among respondents over 44 years old, 50.00% believe that green credit comes with an advantageous interest rate, and 50.00% consider that it finances environmentally friendly projects.

➢ In conclusion, the responses show that the main perceived characteristic of green credit offered by Banks in Tunisia varies depending on the age of the respondents. Younger respondents tend to emphasize financing environmentally friendly projects, while older respondents place more emphasis on a favorable interest rate. This variation in perception highlights the importance of understanding the needs and preferences of different segments of the population to design effective and attractive green financial products.

Table 8. Preferences for Green Financial Services and Products according to the Age of Respondents

					Your age is
What types of financial services and products are you most interested in?	Between 25 and 34 years old.	Between 35 and 44 years old.	Under 25.	Over 44 years old.	Total
The green bank card.	6	4	8		18
Green insurance.	3		1		4
Green savings accounts.	8	6	15		29
Ecological credits.	5	1	4	2	12
Total	22	11	28	2	63

Source: Authors

➢ Analysis of the responses highlights respondents' preferences for financial services and products based on their age. Among respondents aged 25 to 34, there appears to be particular interest in green bank cards and green savings accounts. Ecological credits are also attracting some interest. Among respondents aged 35 to 44, green savings accounts are the most popular, followed by the green bank card. Respondents under 25 years old show strong interest in green savings accounts, green bank cards, and ecological loans. Finally, among respondents over 44, green savings accounts are the most popular financial product.

➢ In conclusion, the responses show that green savings accounts are the most widely appreciated financial product, regardless of the age of the respondents. There is also some interest in green bank cards, particularly among younger respondents. Ecological credits, although interesting for some respondents, seem to attract less interest. This table highlights the importance of offering a diverse range of green financial products to meet the preferences and needs of different segments of the population.

Table 9. Opinions of Participants on Improving the Range of Sustainable Financial Products of Tunisian Banks

	Percentage
By offering more advantageous offers to customers	21.6%
By improving communication around its green products	43.1%
By offering more innovative products	35.3%
Total	100%

Source: Authors

➢ Among respondents, 21.6% believe that banks should offer more advantageous offers to customers to improve their range of sustainable financial products. This suggests that some participants consider that financial incentives such as attractive interest rates or tax benefits could encourage more customers to opt for sustainable financial products. On the other hand, 43.1% believe that improving communication around green products is essential. This response highlights the importance of educating customers about the benefits and features of sustainable financial products. Finally, 35.3% believe that the bank should offer more innovative products to attract customers to green finance. This suggests a potential demand for innovative sustainable financial products adapted to customers' changing needs.

➢ In conclusion, the responses indicate that to improve their sustainable financial product ranges, Banks in Tunisia must consider a multi-faceted approach. This includes offering better deals to certain customers, effective communication about green products to increase public awareness, and creating innovative products to meet changing market needs. This diversity of responses highlights the importance of adaptability and strategy to promote green finance within the bank.

5. Discussions

The results of this study reflect increasing awareness among participants of the importance of green finance and environmental sustainability. Recognition of the positive impact of sustainable practices on business reputation highlights changing consumer attitudes. The varied responses to the question on the definition of green finance reveal a general understanding but also some confusion, highlighting the need for more education on this concept.

The results suggest an emerging demand for green financial products. The importance given to environmental sustainability as a criterion for choosing financial products presents an opportunity for Banks to develop their range of sustainable products to the expectations of participants.

However, the low familiarity with green products and ecological credits highlights the need for more targeted and informative communication from Banks. Participants' expectations for more advantageous offers and innovative products indicate possible ways to improve the bank's offering in the field of green finance.

In conclusion, these results provide useful indications for the adaptation of Banks' products and communication strategies, to better respond to the changing needs and expectations of customers in terms of sustainable financial products.

The conclusions drawn from this study highlight a positive development toward increased awareness of the importance of green finance. The recognition that sustainable businesses have a better reputation and are more attractive to investors suggests a positive shift in participants' views towards environmentally friendly practices. The diversity of responses to the question on the definition of green finance highlights the need to further clarify this concept to the general public. This ambiguity could influence participants' perceptions and highlight the importance of continuing education in this area.

The finding that the majority of participants consider environmental sustainability as an important criterion when choosing financial products highlights the opportunity for Banks to capitalize on this growing interest in green products. However, the lack of awareness of green products and eco-friendly loans suggests that the bank can benefit from a more effective communication strategy to increase customer awareness of these offers. Preferences for reasons to invest in green products, including the desire to position themselves favorably in the future economy and to benefit from tax benefits and subsidies, indicate participants' underlying motivations. These insights could guide Banks in their designs of green financial products to meet these specific needs and desires. The identification by the majority of participants of the role of financing sustainable projects as the main responsibility of banks in green finance is consistent with traditional expectations of the banking sector. However, the lack of familiarity with green products and ecological credits shows that Banks have opportunities to expand their ranges of green products while increasing their visibility.

In summary, the results of this study provide a solid basis for Banks to adapt their green product offerings and communication strategies based on changing customer needs, expectations, and perceptions.

Conclusions and Further Research

The study provides an enlightening overview of the attitudes and perceptions of the Tunisian population towards green finance, with important economic implications. Overall, it is clear that green finance has become a topic of growing interest in the country. Investors, particularly younger generations, are showing a strong interest in sustainable financial products and an increased understanding of their economic and social potential.

The idea that companies adopting sustainable practices enjoy a better reputation and are more attractive to investors is a strong signal of the importance of sustainability in the economic landscape. This suggests that companies that integrate sustainable practices into their business model can not only improve their brand image but also attract more investment, which has positive economic implications.

Furthermore, the perception of green finance as a means of financing socially responsible projects highlights a preference for investments with a positive impact on society and the environment. This trend reflects a growing demand for investments aligned with sustainability goals, which can encourage the growth of sustainability-focused projects and businesses.

The perception that banks have a key role in promoting green finance also highlights their potential as influential economic actors. Financial institutions have the opportunity to boost the financing of sustainable projects, which can contribute to job creation and economic growth while promoting the transition to a more environmentally friendly economy.

Ultimately, the study highlights the potential of green finance as an economic driver in Tunisia. Investors are increasingly aware of the potential benefits, both in terms of financial returns and reputation. Businesses and financial institutions have an opportunity to meet this growing demand by developing sustainable financial products and services, which can foster a greener, more resilient economy in the long term. The emphasis placed on green finance can thus contribute to job creation, economic growth, and the preservation of the environment in Tunisia.

Credit Authorship Contribution Statement

Yasmina Jaber: Conceptualization, Investigation, Methodology, Software, writing – original draft, Supervision, Writing – review and editing,

Faten Nasfi Salem: Project administration, Formal analysis, Visualization, Data curation, Validation, Funding acquisition

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of Use of Generative AI and AI-assisted Technologies

The authors declare that they have not used generative AI and AI-assisted technologies during the preparation of this work.

References

[1] Ajzen, I. (1991). The theory of planned behavior. *Organ. Behav. Hum. Decis. Process*., 50 (2): 179–211.

[2] Bedendo, M., Nocera, G. and Siming, L. (2023). Greening the Financial Sector: Evidence from Bank Green Bonds. Journal *of Business Ethics*, 188: 259–279. Available at: https://hal.science/hal-04318899/document

[3] Bennett, R.E. and Williams (2011). Formative assessment: A critical review. *Assessment in Education Principles Policy and Practice,* 18(1). DOI: http://dx.doi.org/10.1080/0969594X.2010.513678

[4] Daubanes, J.X., Mitali, S.F., and Rochet, J.-C. (2022). Why do firms issue green bonds? Swiss Finance Institute Research Paper 21–97. https://ceepr.mit.edu/wp-content/uploads/2022/01/2022-001.pdf

[5] Degryse, H., Roukny, T., and Tielens, J. (2020). Banking barriers to the green economy. Working paper

[6] Devinney, T., Auger, P. and Eckhardt, G. M. (2012). The Myth of Ethical Consumer, *Business Philosophy.* Available at: http://plataforma.responsable.net/sites/default/files/myth_ethical_consumer.pdf

[7] Flammer, C. (2021). Corporate green bonds. *Journal of Financial Economics*, 12: 499–516. DOI:https://doi.org/10.1016/j.jfineco.2021.01.010

[8] Hagger, M.S. (2019). The Reasoned Action Approach and the Theories of Reasoned Action and Planned Behaviour. *Oxford Bibliographies in Psychology.* New York, NY: Oxford University Press.

[9] Hooda, K.S. and Yadav, S. (2023). Green Finance for Sustainable Aviation Stakeholder Perspectives and Systematic Review. *International Journal of Professional Business Review*, 8(5).

[10] Huang, D. (2022). Green finance, environmental regulation, and regional economic growth: From the perspective of low-carbon technological progress. *Environmental Science and Pollution Research*, 29 (22): 33698–33712. DOI: https://doi.org/10.1007/s11356-022-18582-8

[11] Johnstone, M.L. and Tan, L. P. (2015). An exploration of environmentally conscious consumers and the reasons why they do not buy green products. *Marketing Intelligence and Planning*, 42(2).

[12] Li, W., H. Hu, and Z. Hong (2024). Green finance policy, ESG rating, and cost of debt - Evidence from China. *International Review of Financial Analysis*, vol 92.

[13] Mésonnier, J.-S. (2021). Banks' climate commitments and credit to carbon-intensive industries: New evidence for France. *Climate Policy*, 22: 389–400. DOI: http://dx.doi.org/10.1080/14693062.2021.2012121

[14] Ottman, J. A., Stafford, E. R., & Hartman, C. L. (2006). Avoiding Green Marketing Myopia: Ways to Improve Consumer Appeal for Environmentally Preferable Products. *Environment: Science and Policy for Sustainable Development,* 48*(5),* 22–36. DOI: https://doi.org/10.3200/ENVT.48.5.22-36

[15] Papista, E., Krystallis, A. (2013). Investigating the Types of Value and Cost of Green Brands: Proposition of a Conceptual Framework. J Bus Ethics 115, 75–92. DOI: https://doi.org/10.1007/s10551-012-1367-6

[16] Peters, B. Guy (2022). Institutional Theory, Handbook on Theories of Governance*, Political Science and Public Policy.* DOI: https://doi.org/10.4337/9781800371972.00039

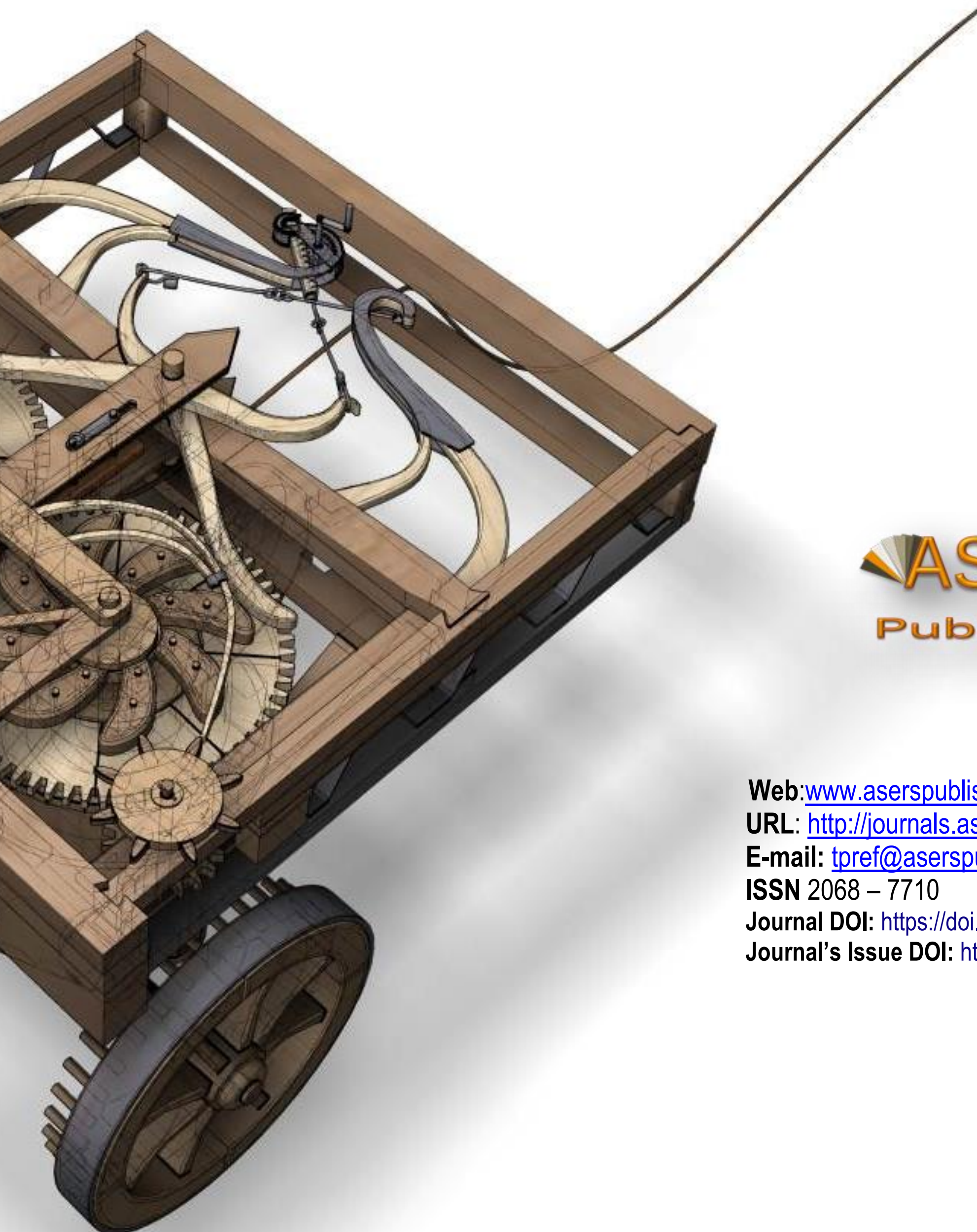
[17] Peterson K. Ozili (2022). Green finance research around the world: a review of literature. *International Journal of Green Economics* (IJGE), 16(1). https://www.inderscience.com/info/inarticle.php?artid=125554

[18] Rahman, Md H, *et al.* (2024). Corporate social responsibility and green financing behavior in Bangladesh: Towards sustainable tourism, *Innovation, and Green Development,* 3(3). DOI:https://doi.org/10.1016/j.igd.2024.100133

[19] Sangiorgi, I., and Schopohl, L. (2021). Explaining green bond issuance using survey evidence: Beyond the geranium. *British Accounting Review*.

[20] Spaargaren, G. (2003). Sustainable Consumption: A Theoretical and Environmental Policy Perspective. Society & Natural Resources, 16(8), 687–701. DOI: https://doi.org/10.1080/08941920309192

ASERS



ASERS Publishing

Web:www.aserspublishing.eu
URL: http://journals.aserspublishing.eu/tpref
E-mail: tpref@aserspublishing.eu
ISSN 2068 – 7710
Journal DOI: https://doi.org/10.14505/tpref
Journal's Issue DOI: https://doi.org/10.14505/tpref.v15.2(30).00