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SUSTAINABLE FINANCIAL MANAGEMENT: A CRITICAL ANALYSIS OF CURRENT RESEARCH AND FUTURE PROSPECTS

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Abstract

Sustainable Financial Management has emerged as an important paradigm in the modern financial world, reflecting the urgent need to integrate environmental, social, and governance (ESG) considerations into financial practices. The study in this research uses the literature research method. The results show that; 1) The integration of ESG factors in financial decisions shows the potential to improve long-term financial performance and reduce risks. 2) Key challenges include the lack of standardisation in ESG metrics, data limitations, and gaps in understanding among practitioners. 3) Technological advances, especially in data analytics and artificial intelligence, open up new opportunities for more effective analysis and implementation. 4) Global regulatory trends are leading to an increased need for sustainable finance practices. With that, sustainable financial management offers significant opportunities to create long-term value while contributing to global sustainability goals.

Keywords: Sustainable Financial Management, Future Prospects

Introduction

In recent decades, the world has faced increasingly complex challenges related to climate change, environmental degradation and social inequality. In response to these challenges, the concept of sustainability has become a major focus in various sectors, including the financial sector. Sustainable financial management emerges as a new paradigm that integrates environmental, social, and governance (ESG) aspects into financial decision-making and business strategy. (Sepetis, 2020).

Global regulatory changes have been a key factor in driving the urgency of sustainable financial management. In recent years, more and more countries and international organisations have implemented sustainability-related regulations and standards. The 2015 Paris Agreement on climate change, for example, has prompted many countries to adopt carbon emission reduction policies that have a direct impact

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on the financial and business sectors. (Zhao, 2023). In addition, the Sustainable Development Goals (SDGs) set by the United Nations in the same year have become a global frame of reference for sustainability, influencing the direction of policies and investments in various countries. In the European Union, the implementation of the EU Taxonomy for sustainable economic activity and the sustainable financial disclosure regulation (SFDR) have created new standards for companies and investors. Meanwhile, in Asia, countries such as China and Singapore have also introduced green regulations that affect their financial markets. These regulatory changes not only create new obligations for financial market participants, but also open up new opportunities for innovation and growth in the sustainable finance sector. (BARTOSH et al., 2020).

Investor demand for sustainable practices has increased significantly in recent years, reflecting a paradigm shift in the investment world. Institutional and individual investors are increasingly recognising the importance of environmental, social and governance (ESG) factors in evaluating long-term investment risks and opportunities. They no longer focus solely on traditional financial performance, but also consider a company's impact on the environment and society. This has prompted companies to be more transparent in reporting their ESG practices and integrate sustainability into core business strategies (Miśkiewicz & Oliwa, 2021).. Investors are also increasingly active in exercising their shareholder voting rights to influence corporate policies on sustainability issues. This phenomenon has resulted in rapid growth in sustainable investing, with ESG funds and other responsible investments recording significant inflows. As a result, companies that do not meet investors' expected sustainability standards risk facing higher capital costs and potential divestment, creating strong incentives for management to adopt more sustainable financial practices. (Arsic, 2021).

Climate change and the global transition to a low-carbon economy have created a complex new landscape of risks and opportunities for finance and business. On the one hand, physical risks from climate change such as more frequent and severe natural disasters can threaten companies' assets and operations, while transition risks such as changes in regulation, technology and consumer preferences can drastically alter asset values and business models. However, on the other hand, this transition also opens up huge opportunities for innovation and growth in sectors such as renewable energy, green transport and clean technology. (Tarczynska-Luniewska & Majewski, 2020). Financial institutions face challenges in assessing and managing these new risks, but also have the opportunity to develop innovative financial products and services that support the transition to a sustainable economy. Companies that are able to anticipate and adapt to these changes can not only mitigate risks, but also position themselves to capitalise on new growth opportunities, creating long-term value for shareholders and other stakeholders. (Purwidianti et al., 2022)..

While there has been increasing interest and research in the field of sustainable financial management, there are still significant gaps in its understanding and implementation. Many companies and financial institutions still struggle to integrate sustainability principles into their operations effectively. In addition, there is a need for critical analyses of existing research to identify trends, gaps and opportunities for future research (Raimi et al., 2024)..

With that, this research examines sustainable financial management with the theories related to it.

Research Methods

The study in this research uses a literature review. The literature research method, also known as a literature review, is a systematic approach to collecting, analysing and synthesising information from various literature sources relevant to a particular research topic. (Jelahut, 2022); (JUNAIDI, 2021).

Results and Discussion

Definition of Sustainable Financial Management

Sustainable Financial Management is a comprehensive approach to managing the financial aspects of an organisation or company by considering environmental, social, and governance (ESG) factors in financial decision-making and long-term business strategy. The concept integrates sustainability principles into traditional financial practices, with the aim of creating value for stakeholders while simultaneously contributing to sustainable development and the reduction of negative impacts on the environment and society. (Beranová & Severová, 2022). Sustainable Financial Management involves various aspects, including ESG risk assessment, sustainable investment, sustainability reporting, and the development of financial products that support the transition to a low-carbon economy. (Kumar, 2021).

In practice, Sustainable Financial Management encompasses activities such as allocating capital to green projects, implementing investment strategies that consider ESG criteria, developing innovative financing mechanisms to support sustainable development, and managing risks related to climate change and energy transition. This approach also emphasises transparency and accountability through comprehensive non-financial reporting, as well as active engagement with stakeholders to ensure that business practices are in line with evolving social and environmental expectations. (Mondal et al., 2024). By adopting Sustainable Financial Management, organisations not only seek to maximise short-term financial performance, but also strive to build long-term resilience and create a broader positive impact on society. (Bhandari, 2023).

Principles of Sustainable Financial Management

Sustainable Financial Management is based on a set of key principles that guide financial practices and decision-making. The first principle is the integration of ESG

(Environmental, Social, and Governance) factors into financial analyses and decision-making processes. This means that in addition to considering traditional financial metrics, organisations must also take into account the environmental, social, and governance impacts of their activities. The second principle is long-term orientation, which emphasises the importance of creating sustainable value rather than focusing solely on short-term gains. This involves strategic planning that considers long-term risks and opportunities related to sustainability. (Ozili, 2023).

The third principle is transparency and accountability. Organisations implementing Sustainable Financial Management are expected to openly disclose information about their sustainability performance, including ESG metrics, to stakeholders. The fourth principle is stakeholder engagement, which recognises the importance of dialogue and collaboration with various parties that are affected by or have an interest in the organisation's activities. The fifth principle is financial innovation for sustainability, which encourages the development of new financial products and services that can support the transition to a more sustainable economy. (Traci, 2023).

The sixth principle is holistic risk management, which requires organisations to identify, assess and manage sustainability-related risks as an integral part of their risk management framework. The seventh principle is positive contribution to sustainable development, which means that financial decisions should not only avoid losses, but also actively contribute to the achievement of sustainable development goals. (IEFYMENKO, 2020). Finally, the eighth principle is continuous learning and adaptation, which recognises that Sustainable Financial Management practices should continue to evolve as our understanding of sustainability changes and the global challenges we face. (Colombage, 2023).

By applying these principles, organisations can create sustainable value, manage risks more effectively, and contribute to broader global development goals. This approach not only benefits the organisation itself, but also society and the environment as a whole, creating the foundation for a more sustainable and prosperous future.

Development of Sustainable Financial Management Concept

The concept of Sustainable Financial Management has undergone significant development in recent decades. Initially, the main focus of financial management was solely on profit maximisation and shareholder value. However, along with the increasing awareness of the environmental and social impacts of business activities, a more holistic approach to financial management has emerged. (Bystryakov & Klynovyi, 2022)..

In the 1980s and 1990s, the concept of the "triple bottom line" began to gain attention, emphasising the importance of economic, social and environmental performance. This became the starting point for companies to consider non-financial factors in their financial decision-making. Subsequently, in the early 2000s, the concepts of socially responsible investment (SRI) and impact investing began to develop, encouraging investors to consider ESG criteria in their investment strategies. (Versal & Sholoiko, 2022)..

The 2008 global financial crisis was an important catalyst in the evolution of Sustainable Financial Management. The crisis revealed weaknesses in the traditional financial system and emphasised the importance of long-term risk management and consideration of non-financial factors. As a result, regulators and policymakers around the world began to push for the adoption of more sustainable financial practices. The Paris Agreement on climate change in 2015 and the launch of the UN Sustainable Development Goals also provided further impetus for the integration of sustainability into financial decisions. (Touil et al., 2024)..

In recent years, Sustainable Financial Management has become mainstream, with more and more companies and financial institutions adopting ESG frameworks and reporting on their sustainability performance. Innovations in sustainable financial products, such as green bonds and sustainability-related loans, have grown rapidly (Shkalenko & Nazarenko, 2024). In addition, technological advances, including big data analytics and artificial intelligence, have enhanced the ability of organisations to measure and manage sustainability-related risks and opportunities. These developments mark a paradigm shift in financial management, where long-term value creation and positive contributions to society and the environment are becoming as important as short-term financial performance (Semwal et al., 2024)..

The development of Sustainable Financial Management continues at a rapid pace. Today, we are witnessing a deeper integration between sustainability and finance across sectors. Global regulations are increasingly driving transparency and accountability in sustainability reporting, as seen in the European Union's initiative for a Sustainability Taxonomy and climate-related disclosure requirements. This encourages companies and financial institutions to take sustainability-related risks and opportunities more seriously. (Novita, 2021).

Innovation in sustainable finance instruments continues to grow. In addition to green bonds, we are seeing the emergence of social bonds, sustainable bonds, and other innovative financial products designed to support the transition to a low-carbon and inclusive economy. Fintech and blockchain technology are also beginning to play an important role in improving transparency and efficiency in sustainable finance. (Cristofaro, 2020).

Attention to climate risk and energy transition has become a key focus in Sustainable Financial Management. Central banks and financial regulators around the world increasingly recognise the importance of climate risks to financial stability, encouraging financial institutions to integrate climate considerations into their strategies and risk management. This has led to an increase in the use of climate scenarios and stress testing in financial planning. (Simanjuntak, 2024).

With that, the development of Sustainable Financial Management reflects a fundamental change in the way we view the role of finance in society. From a narrow focus on short-term profits, we have shifted towards a more holistic approach that recognises the interconnections between financial performance, social well-being and environmental health.

This evolution is driven by a growing awareness of global challenges such as climate change, inequality and environmental degradation, and the recognition that the financial sector has a key role to play in addressing these challenges. Regulatory developments, product innovations and technological advancements have accelerated the adoption of sustainable finance practices (Bhattacharya & Sarkar, 2023)..

However, the journey towards a fully sustainable financial system is far from over. Remaining challenges include standardising sustainability metrics and reporting, tackling greenwashing, and ensuring a just transition to a low-carbon economy. Nonetheless, current momentum suggests that Sustainable Financial Management will continue to be a key driving force in shaping the financial and business landscape of the future (Kapesa, 2024).

As such, Sustainable Financial Management is no longer just a trend, but has become a strategic imperative for organisations that want to survive and thrive in the long term. It offers opportunities to create greater and more enduring value, not only for shareholders, but also for society at large.

Future Prospects of Sustainable Financial Management

The future of Sustainable Financial Management will be heavily influenced by technological advancements. Artificial intelligence (AI) and machine learning will play a crucial role in analysing large and complex ESG (Environmental, Social, and Governance) data. Blockchain technology can improve transparency and traceability in supply chain and sustainability reporting (Mirzayev, 2024). In addition, big data analytics will enable more informed and rapid decision-making with regard to sustainability risks and opportunities. The integration of these technologies will enable more efficient, accurate and comprehensive sustainable financial management.

Going forward, we can expect the scope of Sustainable Financial Management to expand to previously underrepresented sectors and geographies. Developing countries and emerging markets will increasingly adopt sustainable finance practices, driven by the need to address pressing environmental and social challenges. At the same time, there will be a stronger push for global standardisation in sustainability reporting and measurement. This will facilitate comparisons across companies and countries, enhancing the credibility and usefulness of sustainability information in financial decision-making. (Oharenko et al., 2021)..

The future outlook also suggests significant evolution in sustainable finance products and services. We may see the emergence of new financial instruments specifically designed to address specific sustainability challenges, such as biodiversity bonds or financial products linked to achieving the Sustainable Development Goals (SDGs). (Mugano, 2024). In addition, banking and insurance services will increasingly integrate sustainability factors into their business models, offering incentives for sustainable behaviour and better managing climate- and environment-related risks. These developments will drive greater capital flows to sustainable projects and initiatives, accelerating the transition to a low-carbon and inclusive economy. (Kivisaari, 2020).

In the future, we can anticipate an increase in regulations and policies that support sustainable financial management. Governments and regulatory bodies around the world will increasingly emphasise the importance of disclosing climate-related and environmental risks. This may include mandatory requirements for sustainability reporting, the introduction of broader carbon taxes, and fiscal incentives for green investments. This kind of regulation will encourage companies and financial institutions to take sustainability considerations more seriously into their strategies and operations. (Ahmed, 2021).

Growing awareness of sustainability issues will continue to change investor and consumer behaviour. Investors, especially the younger generation, will increasingly demand investment portfolios that not only provide good financial returns, but also contribute positively to the environment and society. Consumers will also prefer products and services from companies that demonstrate a strong commitment to sustainability. These changing preferences will drive companies to focus more on sustainable business practices and transparency in their sustainability reporting. (Filipiak & Dylewski, 2020).

As such, the future outlook for Sustainable Financial Management shows significant evolution and an increasingly important role in the global financial landscape. The integration of advanced technologies will improve efficiency and accuracy in sustainability analysis and reporting. Expansion of coverage and global standardisation will improve the comparability and credibility of sustainability information. Innovations in financial products and services will open up new opportunities for sustainable investment. Increased regulation will provide a stronger framework for sustainable finance practices, while changes in investor and consumer behaviour will continue to drive demand for environmentally and socially responsible financial solutions.

Overall, Sustainable Financial Management will no longer be considered a fringe trend, but will become mainstream in the financial world. It will play a crucial role in addressing global challenges such as climate change, social inequality, and environmental degradation. Companies, financial institutions and finance professionals that can adapt quickly and effectively to these changes will be at the forefront of shaping a more sustainable and responsible financial future.

Conclusion

Sustainable Financial Management has undergone significant development in recent years, fuelled by a growing global awareness of the importance of sustainability in business and financial practices. Recent research shows that the integration of environmental, social, and governance (ESG) factors into financial decisions not only benefits the environment and society, but can also improve long-term financial performance. However, challenges such as standardisation of ESG metrics, lack of consistent data, and gaps in understanding still need to be addressed to maximise the effectiveness of sustainable financial management.

The future outlook of Sustainable Financial Management shows promising trends. Technological advances, especially in data analytics and artificial intelligence, will enable more sophisticated and accurate analyses of sustainability factors. Global standardisation in sustainability reporting will increase transparency and comparability, while innovations in sustainable financial products will open up new investment opportunities. Increasingly stringent regulations and changing investor and consumer preferences will further drive the adoption of sustainable finance practices across sectors.

Overall, Sustainable Financial Management is projected to become an integral component of the global financial system in the future. Its role will be increasingly important in addressing global challenges such as climate change and social inequality. While there are still challenges to overcome, the direction of developments suggests that sustainable financial management will become the new norm in the financial world, playing a key role in creating a more sustainable and responsible economy. Organisations and professionals that can adapt quickly to these changes will be at the forefront of shaping a greener and more inclusive financial future.

References

Ahmed, A. (2021). Sustainable Financial Planning for Event Management. *Event Project Management*, *Query date: 2024-09-29 20:20:36.* https://doi.org/10.23912/9781911635734-4791

Arsic, V. B. (2021). Challenges of Financial Risk Management: AI Applications. *Management:Journal of Sustainable Business and Management Solutions in Emerging Economies*, *Query date: 2024-09-29 20:20:36.* https://doi.org/10.7595/management.fon.2021.0015

BARTOSH, S., IVASHCHENKO, O., & KOROLENKO, M. (2020). Attaining Sustainable Development Goals: Global trends in budget decentralisation. *Naukovi Pratsi NDFI*, *2020*(1), 101-119. https://doi.org/10.33763/npndfi2020.01.101

Beranová, M., & Severová, L. (2022). Economic aspects of financial literacy in the context of sustainable management. *Terra Economicus*, *20*(2), 147-159. https://doi.org/10.18522/2073-6606-2022-20-2-147-159

Bhandari, S. (2023). Financial Feasibility of Solar Energy for Sustainable Energy Management. *International Journal of Science and Research (IJSR)*, *12*(11), 419-425. https://doi.org/10.21275/sr231104220006

Bhattacharya, G. D., & Sarkar, A. (2023). Perceptions of Financial Literacy among Students in Higher Education. *Perspectives in Sustainable Management Practices*, *Query date: 2024-09-29 20:20:36*, 120-128. https://doi.org/10.4324/9781032640488-16

Bystryakov, I., & Klynovyi, D. (2022). FORMATION OF FINANCIAL SPACE OF SUSTAINABLE MANAGEMENT. *Environmental Economics and Sustainable Development*, *11*, 6-16. https://doi.org/10.37100/2616-7689.2022.11(30).1

Colombage, S. (2023). Financial Technology (Fintech) and Sustainable Financing: A New Paradigm for Risk Management. *Journal of Risk and Financial Management*, *16*(12), 502-502. https://doi.org/10.3390/jrfm16120502

Cristofaro, T. D. (2020). Materiality in Financial Reporting. *Encyclopedia of Sustainable Management*, *Query date: 2024-09-29 20:20:36*, 1-10. https://doi.org/10.1007/978-3-030-02006-4_170-1

Filipiak, B. Z., & Dylewski, M. (2020). Sustainable financial reporting in the context of ensuring sustainability of financial systems. *Finance and Sustainable Development*, *Query date: 2024-09-29 20:20:36*, 235-267. https://doi.org/10.4324/9781003011132-14

IEFYMENKO, T. (2020). FINANCIAL MANAGEMENT TRANSFORMATIONS AND SUSTAINABLE DEVELOPMENT OF THE NATIONAL ECONOMY. *Economy of Ukraine*, *2020*(7), 5-13. https://doi.org/10.15407/economyukr.2020.07.005

Jelahut, F. E. (2022). *Various Theories and Types of Qualitative Research*. *Query date: 2024-05-25 20:59:55*. https://doi.org/10.31219/osf.io/ymzqp

JUNAIDI, J. (2021). *ANNOTATED QUALITATIVE RESEARCH METHODOLOGY JOHN W. CRESWELL*. *Query date: 2024-05-25 20:59:55*. https://doi.org/10.31237/osf.io/6kt5q

Kapesa, T. (2024). Public Financial Management Laws and Financial Sustainability of Local Governments. *Financial Sustainability of Local Governments in Southern Africa*, *Query date: 2024-09-29 20:20:36*, 28-46. https://doi.org/10.4324/9781003498230-3

Kivisaari, E. (2020). Sustainable Finance and Prudential Regulation of Financial Institutions. *Making the Financial System Sustainable*, *Query date: 2024-09-29 20:20:36*, 75-103. https://doi.org/10.1017/9781108908269.007

Kumar, S. (2021). EXAMINING FINANCIAL MANAGEMENT IN PROMOTING SUSTAINABLE BUSINESS PRACTICES & DEVELOPMENT. *ECONOMICS, FINANCE AND MANAGEMENT REVIEW*, *3*, 59-68. https://doi.org/10.36690/2674-5208-2021-3-59

Mirzayev, V. (2024). ROLE OF NATURAL RESOURCES ON ECONOMIC DEVELOPMENT: PERSPECTIVE ON FINANCIAL MANAGEMENT. *Global Sustainable Development*, *2*(2), 31-38. https://doi.org/10.69471/gsd-11

Miśkiewicz, D., & Oliwa, B. (2021). Book review of: 'Finance and Sustainable Development: Designing Sustainable Financial Systems' by the Ziolo, M (Ed). *Management:Journal of Sustainable Business and Management Solutions in Emerging Economies*, *Query date: 2024-09-29 20:20:36*. https://doi.org/10.7595/management.fon.2021.0003

Mondal, Md. S. A., Akter, N., Moni, S. J., & Polas, M. R. H. (2024). Financial and non-financial disclosures on sustainable development: The mediating role of environmental accounting disclosure practices. *International Journal of Financial, Accounting, and Management*, *5*(3), 387-406. https://doi.org/10.35912/ijfam.v5i3.1702

Mugano, G. (2024). Sustainable Debt Management for South African Municipalities. *Financial Sustainability of Local Governments in Southern Africa*, *Query date: 2024-09-29 20:20:36*, 98-111. https://doi.org/10.4324/9781003498230-7

Novita, N. (2021). Managerial Ability and Sustainable Financial Performance. *Proceedings of the 1st International Conference on Sustainable Management and Innovation, ICoSMI 2020, 14-16 September 2020, Bogor, West Java, Indonesia*, *Query date: 2024-09-29 20:20:36*. https://doi.org/10.4108/eai.14-9-2020.2304490

Oharenko, V., Merzlyak, A., Tomareva-Patlakhova, V., Vikhort, I., & Skriabina, D. (2021). State regulation of sustainable innovation project funding in the EU countries and Ukraine. *Investment Management and Financial Innovations*, *18*(2), 374-390. https://doi.org/10.21511/imfi.18(2).2021.30

Ozili, P. K. (2023). Financial Inclusion, Sustainability and Sustainable Development. *Contemporary Studies in Economic and Financial Analysis*, *Query date: 2024-09-29 20:20:36*, 233-241. https://doi.org/10.1108/s1569-375920230000110a012

Purwidianti, W., Tubastuvi, N., Darmawan, A., & Rahmawati, I. Y. (2022). Does Financial Behaviour Mediate The Relationship Between Financial Literacy and Financial Experience Towards Financial Performance of Small Businesses? *Advances in Economics, Business and Management Research*, *Query date: 2024-09-29 20:20:36*. https://doi.org/10.2991/aebmr.k.211225.033

Raimi, L., Abdur-Rauf, I. A., & Ashafa, S. A. (2024). Does Islamic Sustainable Finance Support Sustainable Development Goals to Avert Financial Risk in the Management of Islamic Finance Products? A Critical Literature Review. *Journal of Risk and Financial Management*, *17*(6), 236-236. https://doi.org/10.3390/jrfm17060236

Semwal, M., Sharma, M., Dhyani, A., & Dangwal, R. C. (2024). Linking Financial Inclusion With Sustainable Development. *Advances in Logistics, Operations, and Management Science*, *Query date: 2024-09-29 20:20:36*, 218-231. https://doi.org/10.4018/979-8-3693-2346-5.ch014

Sepetis, A. (2020). A Holistic Sustainable Finance Model for the Sustainable Capital Market. *Journal of Financial Risk Management*, *2*, 99-125. https://doi.org/10.4236/jfrm.2020.92006

Shkalenko, A. V., & Nazarenko, A. V. (2024). *Integration of AI and IoT into Corporate Social Responsibility Strategies for Financial Risk Management and Sustainable Development*. *Query date: 2024-09-29 20:20:36*. https://doi.org/10.20944/preprints202404.0804.v1

Simanjuntak, R. (2024). Navigating the Dynamics of Corporate Financial Management for Sustainable Growth. *Advances in Economics & Financial Studies*, *2*(2). https://doi.org/10.60079/aefs.v2i2.172

Tarczynska-Luniewska, M., & Majewski, S. (2020). Designing sustainable financial instruments. *Finance and Sustainable Development*, *Query date: 2024-09-29 20:20:36*, 61-77. https://doi.org/10.4324/9781003011132-5

Touil, A., Babounia, A., & Hamidi, N. E. (2024). How does adopting sustainable supply chain quality management improve corporate financial performance? A transaction cost perspective. *Investment Management and Financial Innovations*, *21*(3), 170-186. https://doi.org/10.21511/imfi.21(3).2024.15

Traci, D. (2023). Financial management as the main mechanism to take into account in the sustainable development of agricultural enterprises. *Competitiveness and Sustainable Development - 2023*, *Query date: 2024-09-29 20:20:36*, 55-61. https://doi.org/10.52326/csd2023.09

Versal, N., & Sholoiko, A. (2022). Green bonds of supranational financial institutions: On the road to sustainable development. *Investment Management and Financial Innovations*, *19*(1), 91-105. https://doi.org/10.21511/imfi.19(1).2022.07

Zhao, D. (2023). Analysis and research on financial accounting management strategy under sustainable development strategy. *International Journal of Innovation and Sustainable Development*, *1*(1), 1-1. https://doi.org/10.1504/ijisd.2023.10056548