

Sustainable Banking: A Literature Review and Bibliometric Analysis

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Abstract

Sustainable banking is a banking model that integrates environmental, social and governance (ESG) criteria into its operations and decision-making processes. It is focused on promoting sustainable development by considering the long-term impact of its activities on society, the economy and the environment. During the beginning of 80's, the extensive literatures on sustainable banking were unproductive and this issue continues to the end of 2000's. Based on this situation, the researchers used Bibliometric analysis of various literatures of about 719 studies which includes articles, reviews, conference papers, book chapters from Scopus and Web of Science (WoS) categories during the period 2000–2021. About 2324 studies were identified from the database. To undergo the research, we acknowledged the main domains which are closely related to sustainable banking from its evolution. The main domains such as corporate social responsibility, banking sector, economic growth, ethical banking, financial stability, green banking, sustainable finance, banking industry, banking system, micro finance and banking regulations. Further we mapped with this into VOS Viewer and analysed how these domains can contribute to sustainability in the banking sector. It is found that, several climatic risks are faced by the banking sector all over the world and hence, the financial sector must make necessary alterations to environmentally friendly strategies to climate sensitive sectors. Sustainability is still under a question mark in the banking sector as several advancements are being

introduced not only in technology but also in physical appearance day by day. Finally, to say, the banks must engage in green sustainable strategies towards sustainable banking in the banking industry.

Keywords: Sustainability, Sustainable Banking, Ethical Banking, Green Banking, Corporate Social Responsibility

Introduction

The financial system plays a key role in the economy, serving as a critical conduit for the flow of capital, supporting economic growth and development, and promoting financial stability and resilience (Suhas & Ramesh, 2021). In the broader sense we can say they provide adequate financing and liquidity for those who need to prosper not only for today but for tomorrow also. The main role of the financial system in a country is to provide funds and stabilise the liquidity of the economy. To ensure that there are financial regulators who take up the risks that would threaten the stability of the economy (Rockstrom, 2009). Banking institutions are being forced to alter by the changing economic rhythm; the future uncertainty is raising various issues about the ideal banking structure and how most banks will choose their competitive stance in these uncertain times (Joshi, 2022). The banking industry's intermediary role in finance makes it vital for mobilizing financial resources towards sustainable goals, achieved by integrating environmental,

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social and governance (ESG) considerations, offering sustainable financial products and engaging in partnerships and collaborations (Thorsten et al., 2010). Achieving sustainable development through a holistic approach that balances environmental concerns with economic progress is vital for improving human wellbeing with financial aspects and the banking industry plays a key role in mobilizing financial resources towards sustainable goals (Gavrilescu, 2011).

The difficulty for commercial banks is to guarantee profitability while adopting sustainability principles in the face of intense competition, the necessity to adhere to obligatory government priorities, and Reserve Bank of India rules (Lakshmanasamy, 2021). Sustainability is defined as “filling current demands without jeopardising future generation’s ability to satisfy their own needs” (Keeble B. R., U.N. Brundland Commission, 1987). Several external incidents affected the banking industry deeply such as the global financial crisis in 2008, politics and recently the COVID-19 Pandemic. But the last shock changed the shape of the global financial crisis. The peoples were turned into digitalisation and it paved the way for sustainable transformation of banks (Scholtens, 2009). The digital environment has revolutionised the banking industry, enabling banks to conduct business through multiple channels, use advanced systems such as crowd-lending and financial robo-advisors, analyse large amounts of data, and utilise technologies such as blockchain, 5G, cloud computing and machine learning to enhance their operations. These technological advances have transformed the banking industry, enabling banks to provide innovative and efficient financial services to customers, while also enhancing their operational efficiency and competitiveness (OECD, 2017).

Sustainable banking is defined as “the implementation management of credit / financing to banks and different economic establishments to encompass threat factors of economic, social and environmental sustainability or implementation of commercial enterprise management banking and monetary institutions by way of now not decreasing the hazard of asset loss both every party creditors (owners of capital) and the borrowers (organizations / customers who want capital), belongings in query are tangible and intangible property” (Jeucken, 2001). By considering the Corporate Social Responsibility

(CSR), the banks with a higher perceptibility among consumers reveal greater concern to get better corporate image (Castelo & Lima, 2006).

Ethical banking is another important aspect of sustainability. Banks that prioritize social consciousness have strong policies against investing in carbon-generating sectors or companies with exploitative labour practices, and instead invest in businesses focused on social justice, community development and environmental sustainability, while maintaining transparency about their business practices as part of a holistic commitment to their stakeholders. Such banks are often viewed as responsible corporate citizens, and their focus on sustainability and transparency can enhance their reputation and competitiveness in the market (Aaron & Porter, 2022). The banks ought to show transparency of their statistics or output and site of belongings are the fundamental factors that differentiate ethical banks from other monetary establishments. Climatic change is an inevitable factor in the banking sector for sustainable development. Climate-related risks pose significant physical and financial threats to the banking sector, highlighting the urgent need for banks to integrate climate risk management into their operations and decision-making processes (Park & Kim, 2020).

The delivery of payment services is being significantly reformed by digital innovation. Our lives have been modernised by information technology, and the transition from conventional to digital banking has been slow, continuing and is made up of varying degrees of financial service digitalisation (Patel et al., 2023). For that, the concept of “green banking” is a specialised form of sustainable banking that focuses on environmental sustainability and social responsibility, like the concept of ethical banking, which aims to protect the environment while providing high-quality banking services, nurturing environmental and social responsibility towards the minds of the customers (Dufays, 2012). Both concepts reflect the growing importance of integrating sustainability into the banking industry and addressing environmental and social challenges through innovative financial solutions (Bihari, 2011). The above-mentioned key factors of the banking industry led to sustainable banking. The growing trend of sustainable banking has spurred a significant amount of research, but the vast literature on the subject

often provides fragmented and incomplete perspectives, making it difficult to gain a comprehensive understanding of sustainable banking practices. A more cohesive and holistic approach is needed to fully capture the various dimensions of sustainable banking and inform effective decision-making in the industry (Karlan, 2007). Though, a comprehensive evaluation of the literature of sustainable banking as the principle research is not presented here.

To conduct the study, we adopted the different literatures of sustainable banking which was published in various indexed Journals from (SSCI) Social Science Citation Index database, (WoS) Web of Science and Scopus database. About 719 studies were published between 2000 and 2021. The analysis has been done based on multiple dimensions of banking literature through various journals from WoS categories and Scopus database and it shows the ethical perspectives of sustainable banking. Based on the analysis nine observations were found that differentiate the sustainable banking literatures. It also describes the understanding shape and connectivity styles of numerous domains, examines the fruition of various subjects and envisages the instructional recognition of interest which formed the topic of sustainable banking and facilitates to discover the research gap.

Objectives of the Study

Based on the above literature the following objectives were framed for the purpose of the study.

- To examine the concept and practices of green banking and ethical banking and their contribution to environmental sustainability and social responsibility in the banking industry.
- To conduct a comprehensive review of existing literature on sustainable banking, to identify gaps, inconsistencies and opportunities for future research, and to develop a more cohesive and holistic understanding of sustainable banking practices.

Research Method

The study is restricted to published papers of peer-reviewed category selected from Scopus and WoS

database and bibliometric analysis was used (Naveen et al., 2021). We identified 2324 publications which are inclusive of articles, conference papers, books, book chapters and review studies from WoS, SSCI and Scopus databases that match the keyword, “Ethical Banking” and “Sustainable Banking”. Apart from that, some other terms which are related to sustainable banking were also considered for study such as financial sector or industry sector. Consequently, we took the complete articles and individual abstracts to affirm the persistence of every paper. Moreover, the study adopted systematic literature reviews which particularly focus on banks sustainability rather than bank’s customers’ welfare matters (Ribeiro et al., 2022). After considering the preliminary screening of the available studies we identified some possible disagreements and to reach at the final sample selection which comprises 719 studies from 2000 to 2021.

Out of the 719 studies (articles/reviews/proceedings) which consist of more than 1723 keywords to get the relationships between them, we applied co-word analysis (Lin, Tang, Lin, Changlai & Hsu, 2022) for a benchmark process. For the purpose of analysis, we applied VOS software for grouping the different keywords of similar nature (van Eck & Waltman, 2010).

Findings of the Study

- Sustainable Banking trends over the period 2000–2021, its evolution and progress from WoS) and Scopus Database.

Fig. 1 and 2 provide a visual representation of the varying levels of research output and impact in the literature on sustainable banking between 2000 and 2021, as measured by the number of research papers/reviews/articles published, “h”-index, and citations per paper. The studies on sustainable banking had been done since 1988 and which was the first paper on the term “sustainability” was published. The banks all over the world gave predominant importance to sustainability after the 2007–2008 financial crisis. Hence, the study has given most important consideration after this period. As majority of the articles published between 2011 and 2021, research particularly focused on this period. Out of the samples 2324, about 85.31 percent of the papers published during this period.

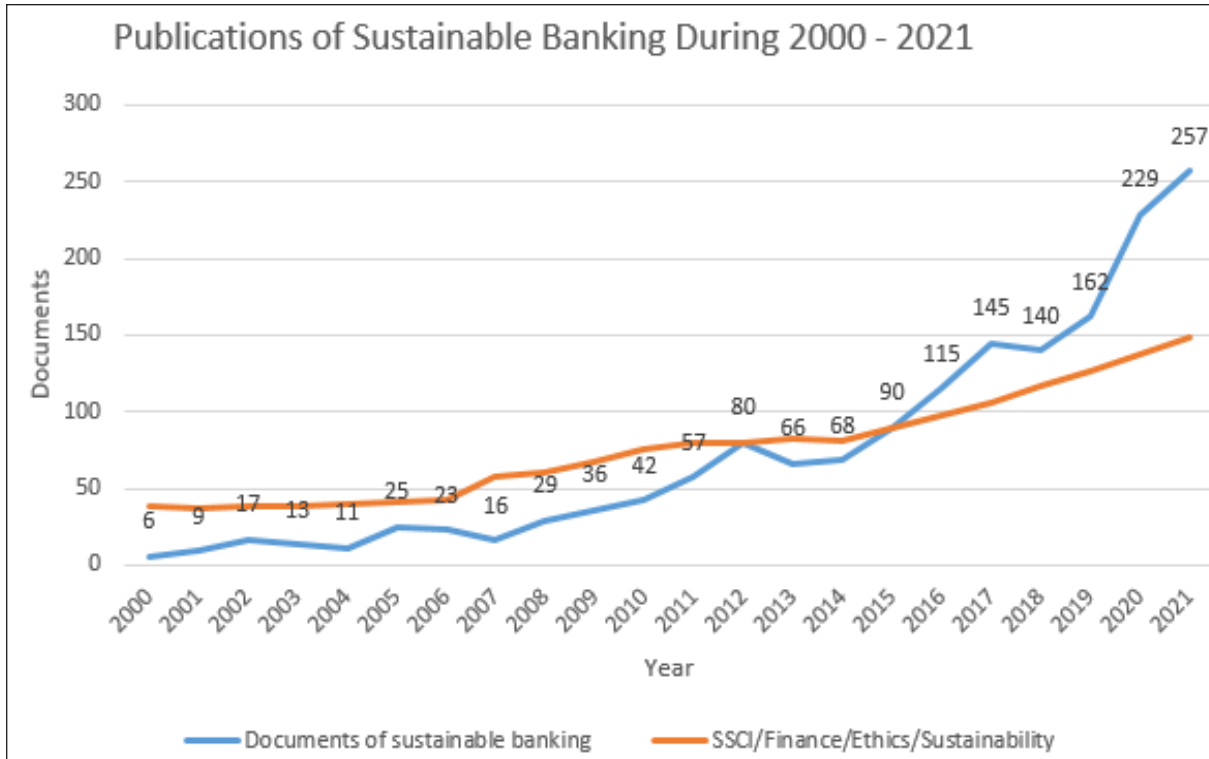


Fig. 1: Figure Showing the Total Publications in Sustainable Banking for the Period 2000-2021

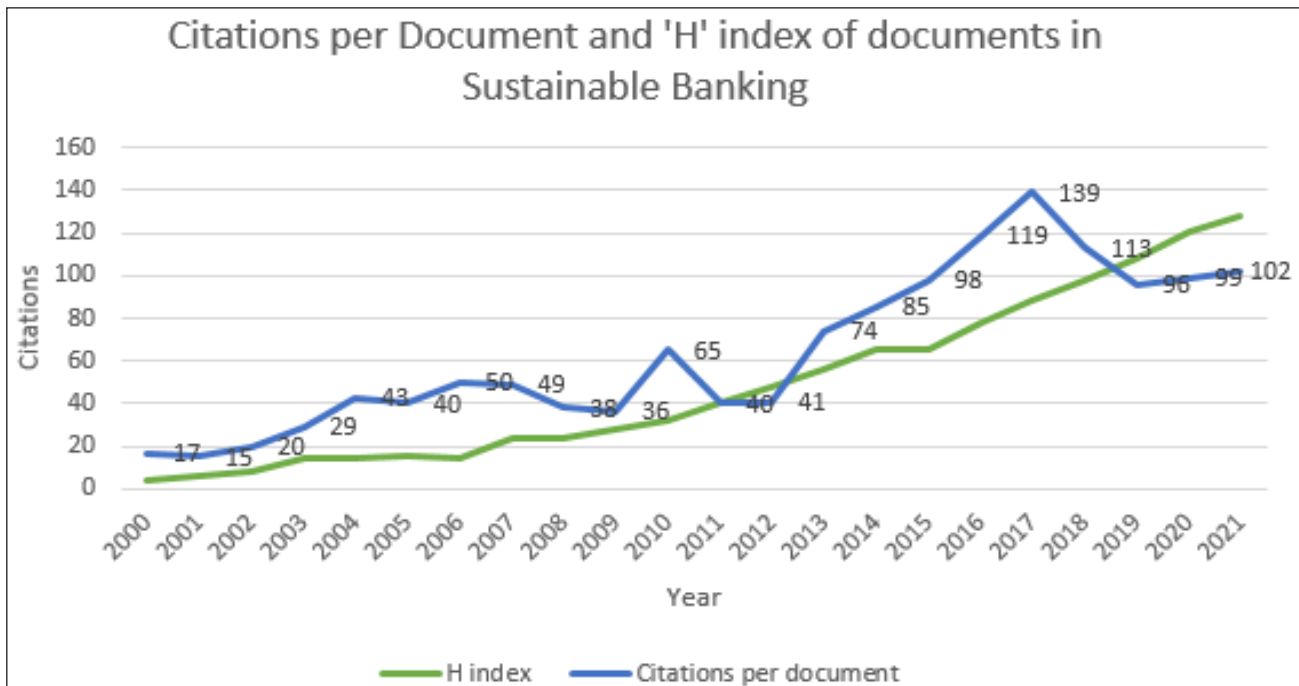


Fig. 2: 'H' Index and Citations of the Documents in Sustainable Banking

Majority of studies on sustainable banking are published in economics, business and management journals rather

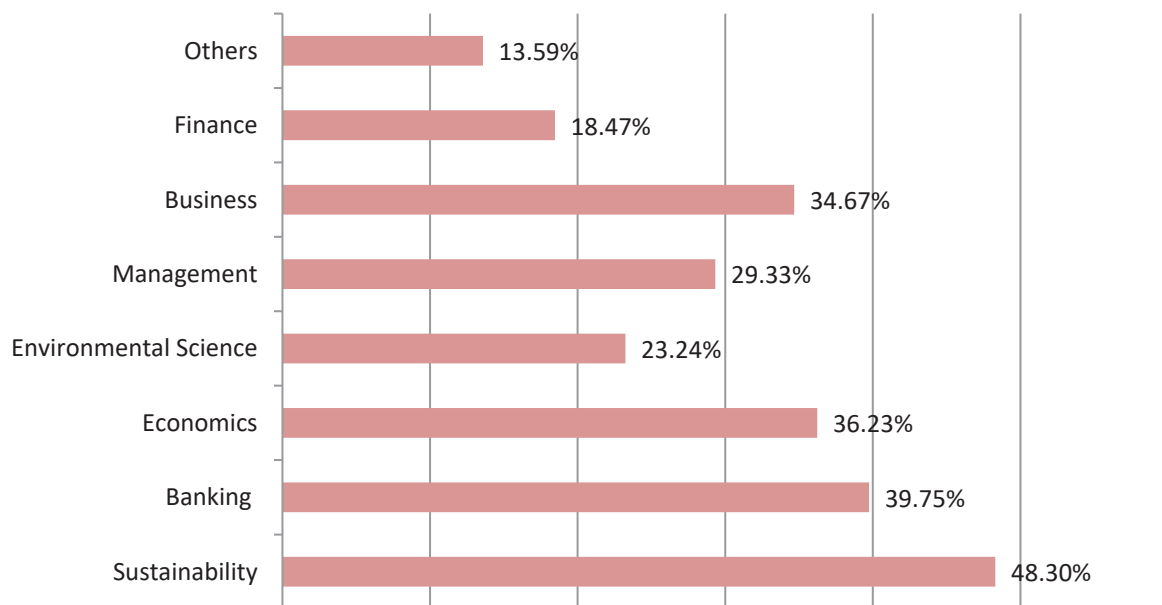
than in banking and finance journals, despite the latter being the core domain.

Table 1: Different Publications in Sustainable Banking Journals from 2000-2021

<i>Publication</i>	<i>Frequency</i>	<i>Percentage of Total Sample</i>	<i>Scopus / WoS Categories (Journal Quartile)</i>
Sustainability	46	15.69%	Environmental Science (Q2), Sustainability and Environment (Q2), Social Science – Planning and Development (Q2), Business and Management (Q1)
Corporate social responsibility & Environmental Management	29	8.36%	Environmental Science (Q1), Management (Q1)
Environment, Development and Sustainability	18	4.06%	Economics (Q1), Environmental Science(Q2)
Journal of Business Research	14	3.76%	Business (Q1)
Journal of Banking and Finance	14	3.76%	Economics (Q1), Banking and Finance(Q2)
International Journal of Sustainable Development and Planning	8	1.69%	Management (Q2), Sustainability and Environment (Q2)
Journal of Business Ethics	7	1.56%	Business & Management (Q1)

From the above Table 1 explains the transversal nature of “Corporate Social Responsibility and Environmental Management”, “Environmental Science”, “Sustainability, Development and Sustainability” are top three journals with frequent publications on sustainable banking. Though, unlike journals related to allied areas are also considered. “Economics, Planning and Development” is often expressed in “International Journal of Sustainable Development and planning”, “Business & Management” is discussed in the Journal of Business Ethics, “Business”

is included in the Journal of Business Research. Sustainable banking related studies are very few in economics or finance related Journals which are depicted in Fig. 1. According to research, the “Journal of Banking and Finance” has published fewer than 15 articles about sustainable banking, with the majority of these papers being published in 2012 or later. However, there has been a significant increase in the focus on green finance mechanisms or green banking as a means of achieving sustainability in recent years.

**Fig. 3: Percentage of Articles Published in Scopus / WoS Categories during 2000-2021**

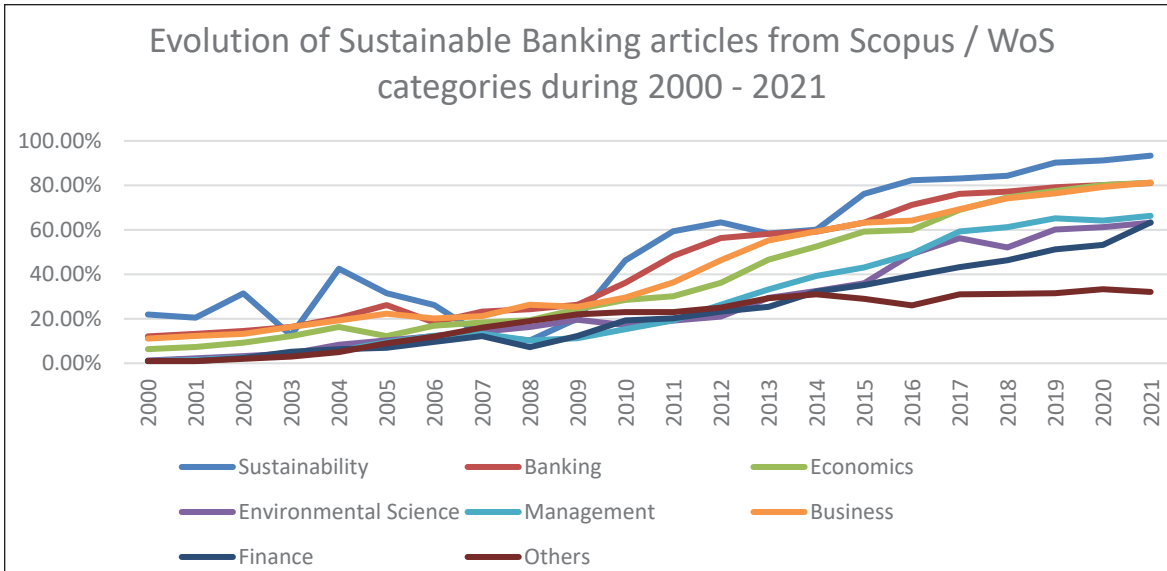


Fig. 4: Evolution of Sustainable Banking Articles from Scopus / WoS from 2000-2021

Considering the above fact, it is found that there is a huge increase in the publishing pattern after the 2007–2008 financial crisis and after the 2019 pandemic issue it rejuvenates the importance of sustainability. Nowadays,

everyone tends to use digital transactions even if it is for a very small amount. It shows the effectiveness of sustainability and how people automatically changed their minds to digital currency rather than paper.

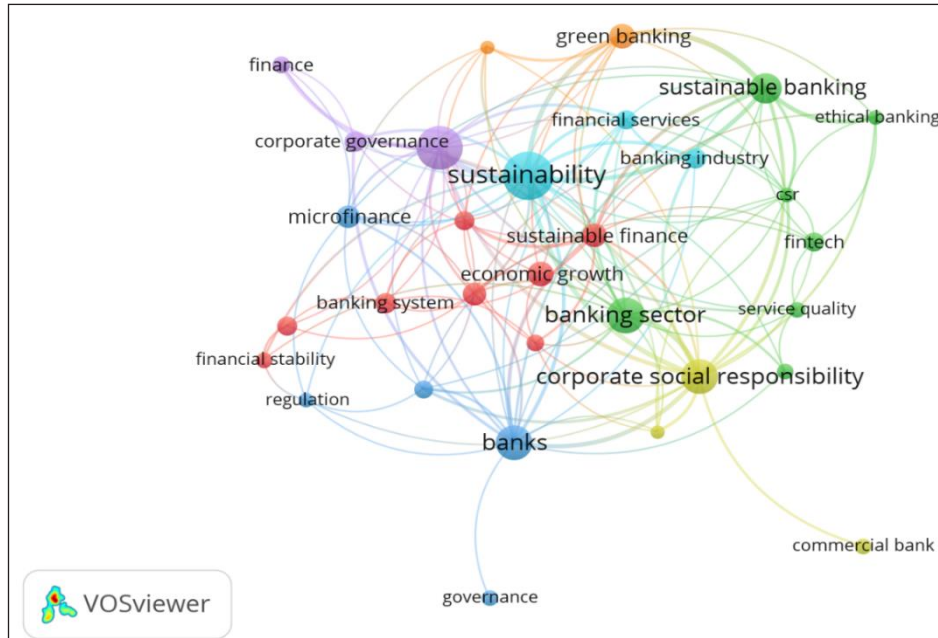


Fig. 5: Connectivity among Different Keywords to Sustainability and Sustainable Banking

Conclusion

As per the research findings it shows a clear idea about the history and evolution of sustainable banking literature

across various journals of Scopus / WoS categories. With the help of VOS viewer (van Eck & Waltman, 2010) we can identify which are all the keywords that can lead to sustainability and sustainable Banking. The concept of

“sustainability” gives attention to the minds of corporates, banks and scholars during the period of 2007–2008 financial crises and the 2019 pandemic period (Forgione & Migliardo, 2020). COVID-19 pandemic has affected all the business sectors towards sustainability. Banks have changed their approach to CSR activities after the financial crisis, because they are more aware of their credit risk and reputation (Scholtens, 2006). Globally, financial sectors and industrial sectors tried their best to anchor themselves during pandemic even though; technologically well-versed companies could sustain in the economy (Xiang et al., 2021).

From the above, the majority of the journals under finance were not considered the concept of “Sustainable Banking” as it was not their main domain. An average of 32.25% of the journals cover sustainability as the main domain of publication as compared to other mainstream journals such as Journal of Banking and Finance, Journal of Business Ethics and Journal of Business Research, etc. It will be better if the areas related to SDG’s, Sustainable Development Finance, Green Finance, Green Banking, Green IoT or Green CSR to benefit from coverage in finance-related journals.

Further it was identified there are certain studies which specifically focused on customer aspect towards their awareness towards the concept of “Green Finance”, “Green Banking”, that can contribute to sustainable development and how that affects the environment. The global banking industry is actively promoting the adoption of environmentally friendly strategies to mitigate the risks associated with climate change. Banks are also redirecting their financial resources towards industries and businesses that are highly vulnerable to the impacts of climate change, as part of their efforts to support restoration and resilience in these climate-sensitive sectors. (Park & Kim, 2020). In today’s world we use the keyword environmental and green banking has the synonym with sustainability. Academic studies related to Green Banking, Green Finance, Green Marketing and Environmental Sustainability is likely to continue as there are several regulatory developments still going on (Karna et al., 2003).

To conclude it is found that, from the above collected sample studies, almost all the papers published under the domain of sustainability in Scopus / WoS category have

been very low since 2000–2010. But there is a remarkable increase in various studies related to sustainable banking during the period of 2007–2008 financial crises and the 2019 pandemic situation. In the practical sense, figuring out the key issues in sustainable banking in exclusive areas results in the improvement of studies to recognise not unusual subjects and one of a kind contexts is a hectic venture. With the view of this more modern studies can be made to cope with the shortage of observation and strengthen know-how inside the unique areas (Purmuno et al., 2020).

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Conflict of Interest

We have no conflicts of interest to disclose.

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