

A Systematic Literature Review on Barriers to Green Financing Participation Worldwide

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Abstract

2015 Paris Agreement was launched to combat environmental emission and pollution, and as a result, there was a growing trend in green financing investment. However, there are still numerous barriers that hinder investors or borrowers' participation in green financing. This paper aims to systematically review the barriers to green financing participation by investors or borrowers worldwide. The review was based on the publication standard, namely PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis). The selected articles using two databases, namely SCOPUS and Web of Sciences. The results via thematic analysis identified seven barrier themes, which are 1) financial institutions incapability; 2) capital constraint; 3) strict policy and guidelines; 4) weak financing structure; 5) political constraints; 6) perceived as high risk and low return on investment, and 7) lack of access. The presented findings further discussed government, financial institutions, investors or borrowers, financing schemes, and solution perspectives. Furthermore, this paper provides two contributions in the later sections.

Keywords: Green Financing, Systematic Literature Review, Barriers, Challenges, Sustainability

Introduction

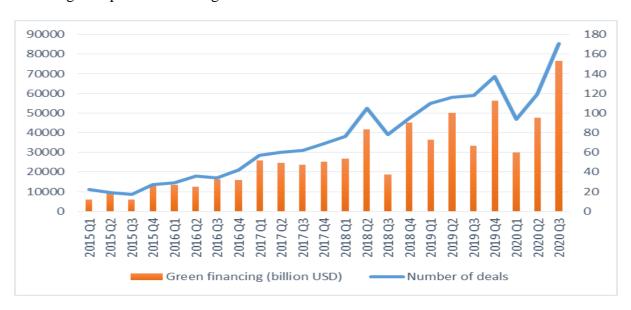
Two decades ago, sustainability was not at the top of many people's to-do lists in the financial industry (Cooper, 2019). Socially responsible investors, some of whom had arisen from philanthropic thrust or religious groups, and others have existed since the 1960s. However, they are such a small part of the financial community that they were non-existent. During the 1980s and 1990s, the expansion of capital markets assisted many corporations in improving their corporate governance, but environmental and social issues remain not a priority. This phenomenon was especially true in Asia – particularly in China, which is undergoing one of the most rapid periods of economic growth in human history (Aller et al., 2018).

Nonetheless, this pertinent area has slowly gained momentum in today's world. Some of the reasons for this notable development are attributed to the economic and political environment changes due to the series of financial crises experienced. However, the most significant change has occurred in people's awareness, and attitudes towards the world's environmental, social, and governance (ESG) concerns in recent years (Nedopil et al., 2021).

ESG factors have already been incorporated into investment decisions, and the use of terminology such as "green finance", "green bond", and "green credit" are now being used interchangeably. Green financing has grown to be a significantly and rapidly expanding segment of the capital markets. As a result, investors have increasingly incorporated ESG practices into their existing portfolios to reduce ESG risks and shift capital from more traditional assets to green assets (Florea and Morales, 2021).



Green finance is currently a popular topic among investors, private users, borrowers, financial institutions, corporations, and governments worldwide (Zhang et al., 2019). Lindenberg (2014) defined green financing as green investment funding, including preparatory and capital costs for government and private green developments. In short, the primary purpose of green financing is to protect and safeguard the natural environment.



Sources: Refinitiv Data Intelligence (2020)

Figure 1: Green financing's global performance from first quarter 2015 to third-quarter 2020

Figure 1 shows an increasing performance pattern from the first quarter in 2015 to the third quarter in 2020. This performance is due to the encouragement of the 2015 Paris Agreement's country members to work cooperatively by developing projects through green financing to combat greenhouse gas (GHG) emissions and environmental pollution. However, some difficulties existed - if the focus should be on adjusting the supply of financing or shifting the demand for borrowing, there is a more critical dilemma (Fisher, 2019). Therefore, there is a need for the study to address the numerous frictions and inefficiencies that can be found in purportedly efficient financial markets when they are examined in detail.

There are single-digit articles related to green financing published between the year 1997 to 2015. However, these figures are escalating since 2016 and are expected to increase further in the coming future. It shows that studies on green financing have started to attract more scholars around the world. There are several studies on green financing via review, such as a review on green finance growth in Russia (Tarkhanova et al., 2020), economics of carbon tax (Ionescu, 2020), role of climate finance and macro-prudential policy to promote green finance (D'Orazio and Popoyan, 2019). However, it is still insufficient and needs a more systematically review of existing studies, particularly in barriers to green financing participation. Hence, this paper foresees the opportunity for the researcher to conduct a systematic literature review related to this area.

This systematic review is guided by the main research question — What are the barriers faced by users from participating in green financing worldwide? Hence, this study will fill the gap by systematically review the barriers to green financing participation by investors or borrowers worldwide. This study provides two contributes explained at the later section.

The remaining part of this paper is being structured as given. Section 2 explains the methodology of question formulation and systematic literature review protocol. Next, section



3 presents thematic results related to the objective of this study. Then, section 4 provides an indepth discussion derived from the presented results. Lastly, section 5 provides the overall conclusions of the study.

Methodology

Review Protocol

Systematic Literature Review (SLR) aims to allow the researchers to form a judgment and draw conclusions about what is known and unknown regarding the response of the review questions, however with different levels of certainty, consistency, and confidence (Briner and Denyer, 2012). It begins with developing and validating the review protocol. The protocol's purpose is to ensure that the review must be systematic, follow the procedure, transparent, and replicable (Briner and Denyer, 2012; Mohamed Shaffril et al., 2020). In this study, the researchers SLR is guided by Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) protocol, developed by Moher et al. (2009) as per figure 2.

Formulation of Research Question

The researchers formulate a research question based on the PICo method. PICo is one of the researches questions tools to assist the researchers in developing appropriate questions for this review. PICo has three main components that must be included in formulating a question, which is population (P), the interest of the study (I), and context (Co). Hence, the researchers have included three main components in formulating a research question, which are green financing users (Population), barriers to participate in green financing (Interest), and worldwide (Context). By combining those three main elements, the research question formulated is – What are the barriers faced by users from participating in green financing worldwide?

Procedures in SLR

Identification

SLR process needs to align with a developed research question. In the first process, known as identification, the researchers identified two main keywords from the research question, which are "green finance" and "barriers". To make the searching technique rigorous and efficient, keyword enrichment is necessary. Gazendam et al. (2010) has suggested using an online thesaurus website to enrich more keywords from synonym results.

Once the keywords have been enriched, the researcher developed a full search string using Boolean operator, phrase searching, truncation, wildcard, and field code functions towards two databases – Scopus and Web of Sciences. There is a requirement to search for more than one database to avoid publication bias, complement one database weakness with another, and encourage transparency in this protocol (Briner and Denyer, 2012; Kraus et al., 2020; Xiao and Watson, 2019).

Table 1 shows how the researchers developed search strings on Scopus and the Web of Sciences. The field code search is based on title, abstract, and keyword. As a result, Scopus identified 110 articles and Web of Science identified 96 articles. The following protocol is screening.



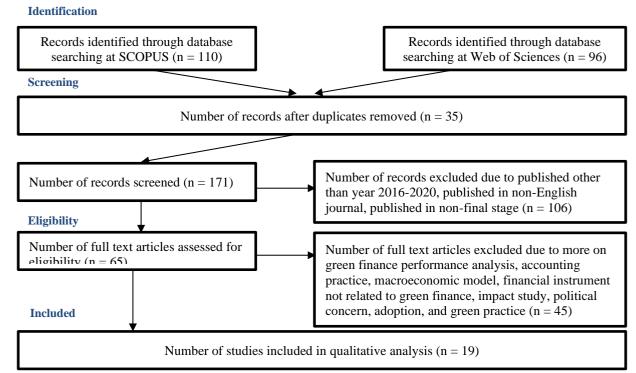


Figure 2: PRISMA flow diagram. Guided from Moher et al. (2009)

Table 1: The search string

Database	Search String
SCOPUS	TITLE-ABS-KEY (("green financ*" OR "green banking" OR "green credit") AND
	("constraint*" OR "barrier*" OR "obstacle*" OR "challenge*"))
Web of Sciences	TS=(("green financ*" OR "green banking" OR "green credit") AND ("constraint*" OR
	"barrier*" OR "obstacle*" OR "challenge*"))

Screening

The second process of PRISMA protocol in this study is screening. This screening process entails the researchers include or exclude the articles to be reviewed. This process is assisted automatically by the database using a filter system. The advantage of the screening process is it will help the researchers ensure the selection criteria from the database is adequate, not too narrow or not too broad (Kraus et al., 2020; Meline, 2006).

The researcher removed the duplicate article with records in both the Scopus and Web of Sciences databases (Shamseer et al., 2015). This process is necessary to avoid double review, resulting in 35 duplications detected. After that, the researchers made exclusion based on the timeline of the study (the year 2016 to 2020), article language (English), document type (journal or article), and publication stage (final). As a result, there are 106 articles to be excluded and did not match the desired criteria.

Eligibility

The third process in PRISMA protocol is eligibility. This process is challenging because it is a manual process, apart from identification and screening (Mohamed Shaffril et al., 2020). Therefore it is a thorough process conducted by the researchers. There are 65 articles available for the eligibility process. The researcher applied the suggestion by Kraus et al. (2020), whereby the researchers start reading the articles through the title and abstract. Then, the



researchers can reveal whether the article is eligible and match the research question in this study. As a result, 44 articles are not eligible because they do not match the desired research question. After the eligibility process, the researchers can perform the following process called inclusion.

Inclusion and Data Extraction

After the eligibility process is completed, the researchers agreed to take 19 articles to be reviewed. Then, the researchers performed data extraction by preparing an extraction sheet at the beginning. Thus, data extraction helps assist the researchers in answering the research question. In addition, the matrix table is a helpful support tool to create transparency and enlighten the process of ongoing synthesis (Kraus et al., 2020; Mohamed Shaffril et al., 2020).

Analysis

In this study, the researchers analysed the data through conducting data synthesis. The synthesis is critical in performing analysis by disseminating the findings from the matrix table amongst 19 articles to be reviewed. Hence, the result of the synthesis will be analysed and presented in qualitative method – thematic analysis. The purpose of thematic analysis is to identify, analyse, and interpret meanings (themes) within the qualitative data (Clarke and Braun, 2014). There are several themes identified by the researcher in this study based on the selected article's key findings to be discussed in the later section.

Results

Background on the selected articles

The researcher identified and selected 19 articles to be reviewed. Out of 19 articles, ten articles were published in the year 2020, two articles were published in 2019, four articles were published in 2018, and the remaining one article each for 2017 and 2016. As far as the region is concerned, five articles were focused on the combination of more than one country. For single country articles, China has the most article by six studies, followed by Bangladesh by two studies. One article each from United Kingdom, Indonesia, India, Italy, Vietnam, and Germany. There are mixed numbers within the research design whereby it has seven quantitative articles, eight qualitative articles, and four mixed-method articles.

The themes

There are seven themes related to barriers to green financing participation presented based on 19 selected articles.

Financial Institutions Incapability

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

Financial institutions also faced challenges in terms of operations capability. The operation efficiency cannot match the high demand from green industry players craving credit assistance from financial institutions. Moreover, not many human capitals are competent in making green financing smooth in the process (Guild, 2020).

In addition, financial institutions were also facing the incapability of possessing enough



knowledge in green financing. Bankers or financiers struggle to understand the taxonomy (Lee, 2020) of green finance terminology and lack expertise in this field (Falcone and Sica, 2018). That is why they have limited knowledge and feel complicated in getting the understanding and technical terms (Falcone and Sica, 2018; Zhixia et al., 2018). They were also facing some difficulties evaluating and approving the green financing application that matched the technical standards (Linh and Anh, 2017).

Hence, those financial institution capability issues become questionable and need to address for immediate solutions.

Capital Constraints

The second challenge that makes green financing challenging to participate in is due to capital constraints. Two possibilities lead towards this issue. The first is that financial institutions do not want to risk having a large portion of investment since green financing is still underdeveloped (Batrancea et al., 2020; Wang et al., 2019).

The second cause of capital constraint is the limited budget allocated to offer green financing to potential borrowers (Wang et al., 2020). This constraint occurred because the perception of green financing is quite expensive and risky due to more on the project and technology-based approach (Taghizadeh-Hesary and Yoshino, 2020). Therefore, if financial institutions still struggle to deal with capital constraints, this financing activity will not generate profit compared to conventional financing.

Strict policy and guidelines in green financing

The third difficulties that hinder the participation of green financing are policy uncertainty and strict guidelines. Different countries have different green financing policy's strictness and uncertainty levels (Lee, 2020). The essence of green financing policy is to ensure the rational allocation of green financial funds (Liu et al., 2019). Therefore, green financing participation is stuck at the beginning stage, at the policy level (Zhang et al., 2020). There are two policies in green financing: fiscal policy – financial allocation and tax preferences, and regulatory policy – administrative and legal matters.

Fiscal policy is related to financial allocation and tax preferences. Different financial institutions in different countries have different fiscal policies, either high funds allocation or lower funds allocation. In any circumstances, banks must follow green banking policy and guidelines provided by Central Banks (Julia and Kassim, 2020). If the financial institution has lower funds allocation set by Central Banks, it will force them to restrict lending and approval policies (Wang et al., 2019; Zhixia et al., 2018).

By looking at green financing regulatory policy, there are three shortcomings. First, the government display weaknesses in administration, vague regulations, and monitoring the social environment from the projects developed by green industry players (Linh and Anh, 2017). Second, the government and related authorities perceived a lack of direction and long-term vision (Bergman and Foxon, 2020), with notable examples in the United Kingdom. Third, the uncertainty on government decisions and the scarce policy support in commercialising green projects (Falcone and Sica, 2018). As a result, it will prevent the efficiency and the development of green financing participation.

Weak financing structure

The financing structure also hinders participation in green financing. There is a dilemma whereby the financing amount required is aligned with the long term. The higher the financing amount, the longer the time borrowers require to pay an instalment. However, the green financing objective is to sustain the environment, which requires an immediate solution. Thus,



it can be said that green financing is short term solution, but the instrument is more than long term (Falcone and Sica, 2018; Lee, 2020; Taghizadeh-Hesary and Yoshino, 2020; Wang et al., 2019)

Political constraints

Earlier, the researcher mentioned that one of the policies related to green financing is regulatory policy. Hence, regulatory policy is administered and monitored by the government. However, there was a political sentiment that prevents the participation of green financing.

The government has total control over green financing administration and monitoring decisions. Hence, there was a possibility of excessive bureaucracy (Falcone and Sica, 2018), which means that there will be an abuse of power. Apart from that, there was a possibility of funds misallocation, whereby government or related authorities allocated green financing funds and deviated to different purposes (Aller et al., 2018). Therefore, it will hinder users from participating in green financing due to political motives by the government associated with ruthlessness, greed, profit maximisation, and unethical conduct (Guild, 2020; Janicka, 2016; Jones et al., 2020).

Perceived as high risk and low return on investment

Green financing is deemed as high-risk financing. The financing amount is based on projects. Therefore, financial institutions need to ensure that the financing amount can match the return on investment. Unfortunately, it did not happen. One of the risks in green financing is the uncertainty of the project viability (Clark et al., 2018; Guild, 2020). Financial institutions are sceptical and worry that if they grant financing amounts to the users, there is a risk of project delay or abandonment, leading to a negative return on investment. Another risk is that commercial banks are unaware of the dangers they are taking on by investing in environmentally hazardous projects (Linh and Anh, 2017). This risk will create the dilemma between the expected return of financial institutions that differs from the company's business goals (Falcone and Sica, 2018). In addition, green financing is considered high risk because green projects or green technologies are expensive (Taghizadeh-Hesary and Yoshino, 2020). Therefore financial institutions can have a low return on investment (D'Orazio and Löwenstein, 2020).

Lack of access

Since green financing is still in an underdeveloped stage, indeed, the level of accessibility is still low in terms of information access. There is a lack or limited efficient system or database if the government, financial institutions, or users requires technical assistance (Aller et al., 2018; Taghizadeh-Hesary and Yoshino, 2020; Zhixia et al., 2018). From the users' perspective, neither all companies are entitled to have access, nor simply have good access to enter to green financing market (Clark et al., 2018; D'Orazio and Löwenstein, 2020). Therefore, the lack of green data and green databases prevent the projects from developing.

Discussion

This section presents a further discussion of the seven developed themes. A green financing system is comprised of three related parties, namely government or related authorities, financial institutions, and borrowers or users. The government or related authorities are responsible for administering and monitoring the development of green financing. The financial institution is responsible for providing financial assistance and evaluating risk-return related to green financing. At the same time, borrowers or users are responsible for green projects or green technology development. All three interconnected parties have a common goal: to sustain the



environment and improve the human's quality of life. The discussion will be divided into five sections, shown in Figure 3.

Green financing barriers at the government's level

It is necessary to address the underlying obstacles such as inadequate infrastructure, bureaucracy, corruption, legislative framework, and limited access to green financing (Sameer, 2016). Those barriers exist at the government level. The government is responsible for two policies – notably in administrative and fiscal policy. Private users and financial institutions will not get support from the government if this weakness is not managing correctly. As far as the administrative issue is concerned, some countries, such as Vietnam, United Kingdom and Italy, still display weaknesses in administration and vague regulations (Bergman and Foxon, 2020; Falcone and Sica, 2018; Linh and Anh, 2017). Vague regulations under national legislation leave out banks' social and environmental responsibility.

Apart from vague regulations, the government also has political constraints, which they perceive as lacking leadership, direction, and long-term vision. This issue happened because the policy direction and agenda keep revising and shifting, which affects the green sector since investment in skills is not rewarded. It will take confidence in the political decreases, not continuous. In the United Kingdom, the lack of leadership came from the neoliberal political economy due to disregard green financing as a priority to sustain the environment.

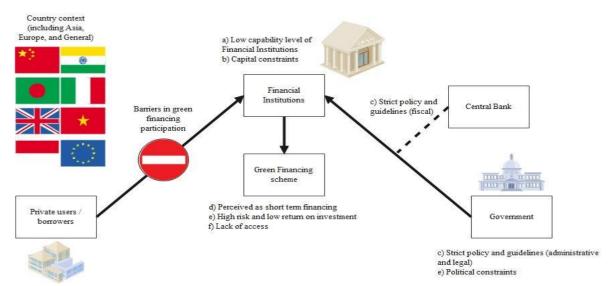


Figure 3: Graphical illustration on barriers in green financing participation

There is a possibility that leads to leadership issues. With the lack of leadership, there is a risk of the government making uncertain decisions, even worse decisions that make green financing collapse. It is because the government has complete authority over the administration of green financing and monitoring decisions. There is a possibility of power abuse whereby politicians who have the authority intend to have corruption, bribery, or funds misallocation by deviating into different purposes. Users will find it challenging to participate in green financing since they do not have support from the government.

Another area of government's level that needs to look at is Central Bank's perspective, which they have the control in fiscal policy. The issue that led towards barriers for users in participating in green financing is whereby the Central Banks limits fiscal policy. The central banks will set the lower total financing allocation that force banks to strict lending and approval policies (Wang et al., 2019; Zhixia et al., 2018). Therefore, investors or private users find it



challenging to obtain funds from financial institutions to implement the sustainability project.

Green financing barriers at financial institutions' level

The financial institution plays a vital role in green financing growth. As a result of the financing role, banks bear a great deal of responsibility and accountability. If banks fail to implement rigorous verification measures regarding the negative environmental impacts of those industries and businesses before financing, this may directly result in environmental pollution (Shaumya and Arulrajah, 2016). Hence, there was a doubt about banks' capability and capital constraints that blocked green financing participation.

Green financing is more technical compare with conventional financing. Therefore, banks struggle and take long years to adapt and compete in this area (Lee, 2020). In addition, bankers feel uncomfortable working in green financing due to the level of taxonomy and knowledge (Falcone and Sica, 2018; Lee, 2020; Linh and Anh, 2017; Zhixia et al., 2018). Furthermore, bankers struggle to evaluate green project applications due to the project's visibility in standard procedure, technical aspects and effectiveness in delivering environmental sustainability.

Private users are struggling to obtain a source of funds to commence the green project. Banks have capital constraints, which means the financing amount allocated was limited due to the fiscal policy set by Central Banks (Wang et al., 2020). Some banks do not have the capability, so they do not want to risk implementing green financing (Taghizadeh-Hesary and Yoshino, 2020). Banks perceived that green financing is more costly than conventional financing, which they believed is not worth it.

Green financing barriers at private users/borrower's level

Private users or borrowers are the most affected group apart from Financial Institutions and Government. They are the project initiates, and they run the project that ensures environmental sustainability. Green projects have procedures and its technicality because it is more on science and technology-oriented. However, there is a lack of integration between private users or borrowers, financial institutions, and the government.

Since they are considered the most vulnerable group, they have to follow the strict policies and guidelines of financial institutions and the government. For example, regarding fiscal policy and capital constraint, they have to accept whatever financing amount approved by the financial institution, even though it is less than project value. As far as the government's regulatory policy is concerned, they need to adapt whatever changes or decisions the government makes related to the environment and sustainability.

In addition, the barriers existed due to the inability to meet the high expectations of financial institutions and the government. Due to green financing is deemed high risk, they were expected to deliver the project success beyond the expected timeline. Therefore, the project may be long term, the financing applied is long term, but the results are more quick and short term.

Issues with a green financing scheme

The barriers to green financing have existed at the scheme itself. Financial institution prefers green financing to be more on the long term since this is project-oriented. However, the scheme is perceived to be short-term because the short-term orientation of financial tools does not match investors' long-term investment objectives, mainly due to adverse selection in financial markets (Falcone and Sica, 2018). It will give implications to borrowers or investors, whereby this considerably raises investment risks because the project is compelled to shut down if they did not secure the next loan (Lee, 2020). In the case of China, the average period of the loan is two years. Hence, if the project period is ten years, the investors must raise funds five times.



There will be the risk of the loan not being approved after a successful first time application. Therefore, green projects will be wasted and unable to continue, which hampers green development (Taghizadeh-Hesary and Yoshino, 2020). However, Wang et al. (2020) pointed out that short-term green financing will enhance the supervision of management investment efficiency. Still, the later issue is the investment behaviour will be limited among investors. In addition, the green financing scheme issue also existed because it is deemed high-risk financing (D'Orazio and Löwenstein, 2020). Since the financing amount is based on project value, financial institutions must guarantee that the financing amount they provide corresponds to the amount of return on investment they expect, which did not transpire in the end. Moreover, high-risk financing is also associated with a project's viability, which even good bankers cannot determine whether the project is successful (Clark et al., 2018; Guild, 2020). Hence, it will result in a low return on investment because financial institutions are wary and concerned about channelling funds to investors or borrowers. As a result, there will be a danger of project delay or abandonment (Linh and Anh, 2017).

Another issue is due to lack of access. The green financing scheme lacks information and lacks consciousness for an appropriate risk assessment of green projects such as climate indicators and energy services risk assessment (Zhang et al., 2020). Moreover, it lacks information and lack of access to capital because of investors' limited liquidity (Soundarrajan and Vivek, 2016). Thus, it will lead hinder them in green financing participation.

Green financing participation barriers' solution

There are several recommended solutions to reduce the barriers to green financing participation. The investor or borrowers' categories are the most needed since they are the project implementer, while the support comes from financial institutions and the government. First, the policymaker can encourage to loosen or widen the green financing regulatory policy to allow more participation by the investor or borrowers (Batrancea et al., 2020). Concerning the construction of legal systems, Liu et al. (2019) and Pek et al. (2019) suggested that some countries should gradually enhance legislation, comply with state laws, take this as their benchmark, combine it with the situation in hand, formulate the relevant promotional rules under the local conditions, and promote green finance development in the region.

Second, the government can also improve green financing monetary policy to ensure capital adequacy for green credit and make investors or borrowers convenient. Assouli et al. (2018) recommended coming out with a liquidity management solution. This solution relieves the maturity mismatch between investment and funding in green projects and encourages green sustainable industrial growth (Cao et al., 2021). Monetary policy also can be improved by introducing tax incentives, especially for early stages in green investment implementation (Tran et al., 2020).

Third, since green financing is perceived as high risk, there is a mitigation action to encourage more participation. Taghizadeh-Hesary and Yoshino (2020) provide two recommendations. The financial institution can develop a suitable Green Credit Guarantee Scheme. The scheme will provide a government guarantee to help investors or borrowers cover their debt obligation in the event of credit default. Another action is via financial de-risking. It can occur when a majority percentage of risk is transferred to another party.

Forth, to improve the accessibility of green financing, Zhang et al. (2020) suggested that green financing systems need to be revised by financial institutions and government together. The guidelines' purpose is to support environmental improvement, quick access and response to climate change, and conserving and efficient resource management. In addition, investors and borrowers are also encouraged to provide input to financial institutions and the government regarding the project's technicality and viability.



Finally, since green financing is still under the developing stage, green financing scheme is unfamiliar with some investors or borrowers, and they wish they could learn more about it. Therefore, it is suggested by Pek et al. (2019) that financial institutions run more publicity on green financing to raise awareness among the industries in the country. Banks also can provide additional awareness campaigns and marketing promotions. With all recommended solutions, the green financing participation barriers is expected to reduce in the future.

Conclusion

The study's main objective is to systematically review the barriers to green financing participation by investors or borrowers worldwide. Based on 19 selected articles through PRISMA protocol, seven themes have been identified and presented. The seven barriers are financial institutions' incapability, capital constraints, strict policies and guidelines in green financing, weak financing structure, political constraints, perceived as high risk and low return on investment, and lack of access. All seven barriers have been explained through five critical discussions based on government, financial institutions, private users, financing scheme, and solution's perspective.

This study also provides two significant contributions. First, the review results will provide a clear idea to other researchers on green financing in the big picture. The barriers are presented and highlighted for other scholars for further work in the future. Second, with the solutions recommended, it will assist government and financial institutions as policymakers and investors or borrowers to reduce barriers and excel in green financing participation.

This study also provides several recommendations for future research direction. First, this study focuses on barriers to green financing participation. Hence, it is recommended to conduct review research on factors influencing green financing's adoption or utilisation. It is guided by Figure 1 due to the growth trends in global green financing performance. Second, the barriers are presented and explained in discussion. Hence the future research suggested examining each issue at any level. Third, the researchers' point of view hinted that the main barriers in green financing participation are financial institutions' incapability. Hence, it is recommended that further investigation required to examine the factors that influence bankers' difficulties in adapting to the green financing process. Forth, so far there are seven individual countries have conducted a study on barriers to green financing participation. Hence, there is an opportunity for other researchers to expand the study to other countries as well.

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