Bibliometric Analysis of Published Literature on Repayment Behaviour in Microfinance

Mohamad Hanif Abu Hassan, Azim Izzuddin Muhamad, Roseamilda Mansor

Faculty of Business and Management, Universiti Teknologi MARA Kedah Branch, 08400 Merbok, Kedah, Malaysia.
Email: hanifab@uitm.edu.my, azim03@uitm.edu.my, rosea303@uitm.edu.my

Abstract
This study identifies the main areas and current dynamics of repayment behaviour with regards to microfinance and suggests future research directions. We explored a selection of 258 papers from the Scopus database using bibliometric analysis to find research on repayment behaviour in terms of microfinance between 1996 and early 2022. Based on various citations and publications, as well as their location and relevance within the network, we identified the most influential articles and authors. We also analysed topics, seek for impediments to expansion in the literature, and recommend study topics for the future. The data was incorporated by using the Publish or Perish software, while for data visualised was used VOSviewer. For data analysis, SPSS and Microsoft Excel were employed. Standard bibliometric analysis is presented based on the growth trend of publications, research output, and citation analysis. Based on the search, a total of 258 documents were retrieved. In the years 2019 to 2021, studies on repayment behaviour show an increasing trend. The majority of the research works have been written in English and published in journals and conference proceedings. Most of the research related to repayment behaviour is in the area of finance. 'Microfinance' and 'repayment' are the most frequent keywords used and represent the main areas of research on microfinance repayment behaviour. This research is on the development of studies on repayment behaviour in relation to microfinance and identifies both areas of current research interest and potential directions for future research.
Keywords: Microfinance, Repayment, Default, Non-performing Loan (NPL).

Introduction
Over the last several decades, an increasing number of financial institutions have established alternative lending mechanisms, such as microfinance, to help improve economic and social standards (Al-Azzam et al., 2012). Microfinance provides financing and other financial services to small economic units and micro-enterprises in order to allow them to unleash their potential and generate revenue (Shrestha & Thapa, 2021). Microfinance institutions are

specialised institutions that promote income-generating activities for the poor by providing banking and financial services (Correa & Montero, 2013).

Research on microfinance began in 1996. Since then, this term has been widely used among researchers to further study the development of the microfinance programme in relation to repayment. The aim of this study is to analyse the empirical literature on repayment behaviour in terms of microfinance using bibliometric analyses. Bibliometric analysis which is based on the quantitative method, encompasses examining the structure of knowledge and the development of research fields through relevant publications (IGI Global, 2018). According to Glanzel (2003), bibliometrics involves applying mathematics and statistical methods to books and other types of communication media. The first part of this paper discusses the purpose of conducting bibliometric analysis, while the second part outlines the literature review, followed by methods used. The findings of the relevant bibliometric indicators are presented in the third part. The last part summarises the findings, recommends future research topics, and discusses the study's shortcomings.

Literature Review
This section provides a review of the extant literature related to microfinance repayment performance and discusses the various views of scholars on all key issues relating to the variables of repayment behaviour. Nor et al (2021) examined the impact of microfinance criteria on micro-enterprise growth in Malaysia. Critical issues on the ability of MFIs and other financial corporations to allow businesses to expand and fully utilise sources, remain unclear. Further, this study highlights six independent variables, i.e., loan size, loan term, loan repayment, loan utilisation, lender contact, and training. The results indicate that the microfinance criteria meet the significance level and contribute to the growth of SMEs. Therefore, the study recommends that SMEs should be allowed to avail larger sources of finance, such as from the SME bank and non-governmental agencies, for financial support.

Mohammed and Wobe (2019) examined the factors affecting the loan repayment performance of microfinance borrowers in Wondo Genet Woreda, Ethiopia. They found that 44.9% of borrowers failed to make payments according to their loan schedules. The authors stated that the main factors affecting borrowers' loan repayment performance are gender, family size, education level, credit experience, repayment duration, loan tenure, and counselling visit. Fianto et al (2019) examined the determinants of non-performing loans in Indonesian MFIs. This study used logistic regression with a sample of 140 customers, with 90 customers having good financial status while the remaining 50 had poor financial status. The results show that age, gender, occupation, and contract type, influence non-compliance by clients of Islamic MFIs in Indonesia.

Selvaraj et al (2019) examined the determinants of microcredit performance in Malaysia, as measured by microcredit arrears. In addition, this study advances the understanding of microcredit performance, by capturing the intensity of the delinquency rate. It also measures the delinquency of microcredit organisations (MOs). The study used static panel technique for 13 states and three federal territories in Malaysia from 2011 to 2015. This study finds that female clients of the MOs have a significantly negative impact on microcredit quality. However, the average number of loans per sector and households with lower income, has a clearly positive impact on the performance of MOs.

Shu-Teng et al (2015) argued that non-performing loans in Malaysia have resulted in a negative percentage and continues to be prevalent. The authors examined the determinants of the loan repayment performance of SMEs. The variables used in the study are gender, age, education level, total sales, number of years in business, credit age, follow-up, and training. Four variables are found to have a significant impact on SME loan repayment, namely the borrower's educational level, business experience, loan size, and repayment time. Shaharudin et al (2016) discussed the factors influencing payment behaviour with a focus on Islamic retail financing, using two independent variables, namely the level of income and the percentage of savings. They found that income level and savings have a significantly positive effect on financing repayment behaviour. Among other things, the higher level of education, age and gender, were measured. The authors found that women have better payment behaviour when it comes to financing compared to men. In addition, the study indicates that default risk can be mitigated through improved client scanning, hedging funding risk with Islamic insurance, and accepting collateral in the form of portfolio assets.

Mekonnen (2015) examined the determinants of loan repayment performance among borrowers from rural credit unions in Dire Dawa, Ethiopia. Variables examined include livestock, credit monitoring, level of education, loan amount, income from credit-financed activities, timing of loan release, adequacy of loan repayment period, credit, income from other activities, age, partying and attending social functions. Results are mixed, with both significantly positive and negative results.

Mokhtar et al (2012) extended extant studies to identify the causes of repayment problems involving microfinance borrowers of TEKUN Nasional (TEKUN) and Yayasan Usahawan Malaysia (YUM). They found that loan repayment performance is affected by the characteristics of the borrowers, the businesses, and the loans. In a related study, Nawai and Shariff (2013) evaluated repayment performance based on individual-based lending under microfinance programmes in Malaysia. Individual/borrower factors, firm/business factors, loan factors, and institutional/lender factors, were included as independent variables in the study, while the dependent variables were payment on time, and delinquency or default. Age, gender, number of years in business, religious education, household income, sales, distance to the lender's office, bureaucracy, time needed for loan approval, and recovery, are the contributing factors of repayment performance.

Roslan and Abd (2009) investigated the factors affecting loan repayment among microcredit borrowers of Bank Pertanian Malaysia Berhad (Agrobank). Three categories of variables were identified, namely borrowers' characteristics, project or business characteristics, and loan characteristics. They reported a higher prevalence of default among male borrowers and borrowers with longer repayment duration. Chong et al (2010) investigated whether or not demographic factors can influence loan repayment among borrowers of non-bank financial institutions in Kuching, Sarawak. The sample in this study comprised borrowers who took housing and personal loans. The variables were gender, respondents' age, level of education, occupation, and the distance between the customer's place and the non-bank financial institution. They found a non-significant correlation between gender, age, education, and occupation, and loan repayment performance. However, time constraints affected repayment behaviour in the cases involving a longer distance.

Most prior studies have mentioned that the problem of loan repayment mostly occurs among those involved in agricultural activities. Kohansal and Mansoori (2009) identified the determinants of repayment behaviour among farmers who obtained financing from an agriculture bank in the Khorasan-Razavi Province of Iran. They revealed that the major determinant for repayment of agricultural loans is the interest rate. Other crucial factors are experience in farming and total application cost. In contrast, the agricultural loans in Malawi have achieved a high repayment rate (Chirwa, 1997). However, due to a collapse in the political system, the repayment rate fell in 1992/93. Malawi's economic performance is mostly determined by political performance. In order to determine the probable factors influencing repayment behaviour, the study examined several factors influencing repayment, such as demographics, household size, crop sales and income transfers, the size of the club, the degree of diversification, the club's experience, and the quality of information.

Zeller (1996) investigated the determinants of microfinance repayment performance in group-based lending in Madagascar. However, this observe looked at a exclusive factor from the previous study. The researcher focused on the consequences of programme layout in addition to network and organization traits as determinants of compensation overall performance for organization lending. The sample was based on six exclusive lending programmes in Madagascar. The study finds that to mitigate the risk of group lending, the diversification of the members' asset portfolio must be applied in order that the compensation fee will be enhanced despite the fact that the groups are going through high-risk exposure.

Okorie (1986) studied the determinants of loan repayment among smallholders who are customer farmers of an agricultural enterprise in Nigeria. The author listed three main factors affecting repayment: withdrawal problems, credit tracking, and the profitability of the company in which the credit funds were invested. it was found that borrowers who received a non-cash loan had better loan repayment performance than borrowers who received a cash loan. Abuse of received cash proceeds is one of the reasons for this phenomenon. Other factors that contributed to better loan repayment performance are better monitoring system and higher profits for borrowers.

Materials and Methods
This research collected all data from Scopus database as at 6 March 2022, based on two criteria: "biggest single abstract and indexing database ever developed" (Burnham, 2006); and "largest searchable citation and abstract source of searching literature" (Aghaei Chadegani et al., 2013). Some of the analysis results were obtained from the collected documents, such as Document Type, Affiliation, Author, Year, Type of Access, Name, Subject, Title, Keywords, Country, and Language. For this study, we focused on all documents related to microfinance and repayment was based on the title of the document. Therefore, the following query was asked: (TITLE "Microfinance" OR "Microcredit" AND "Default" OR "NPL" OR "Delay"). The query produced a total of 258 documents. After data cleansing, no document was removed because all topics and study areas were relevant to microfinance and payment behaviour. The details of the search method is shown in figure 1:
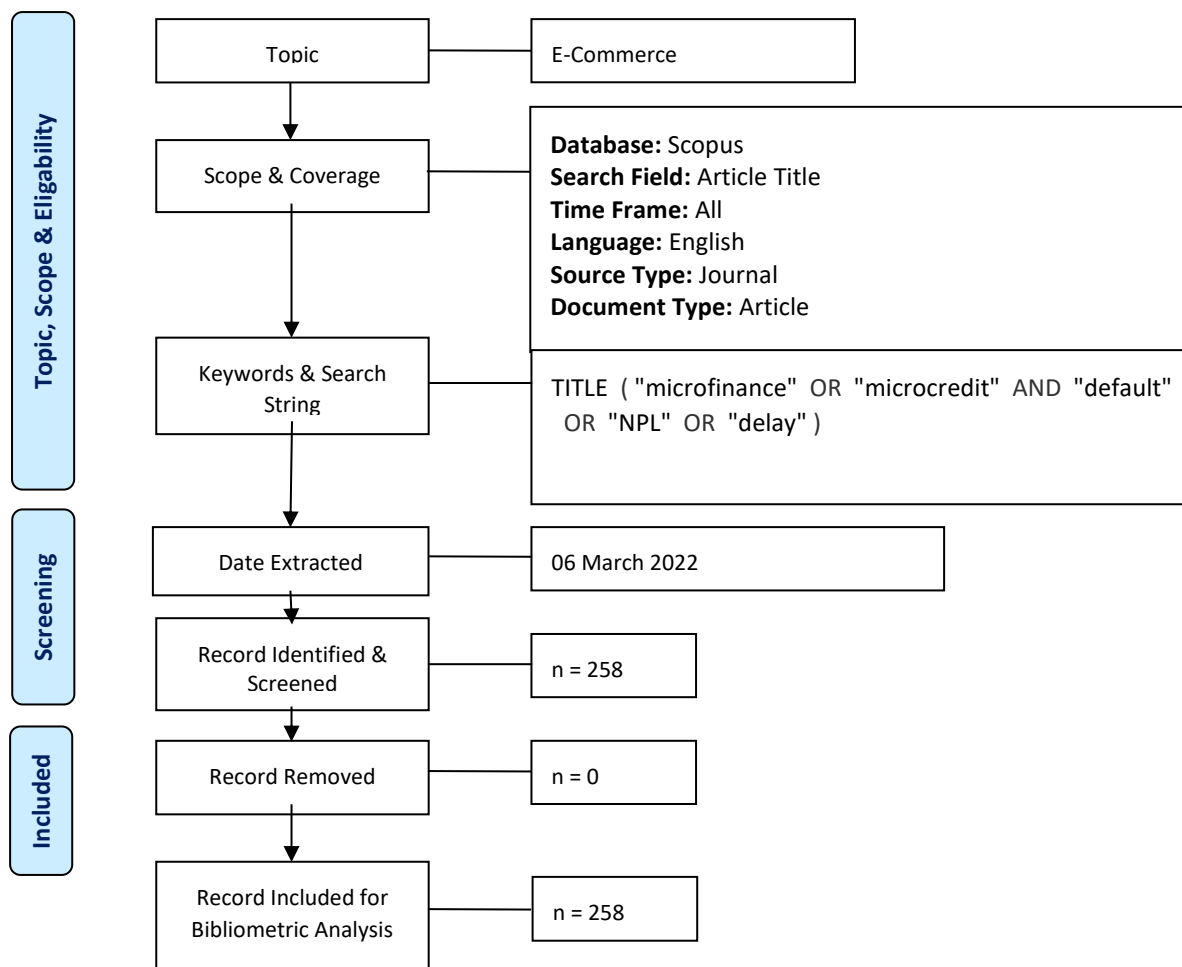
Topic, Scope & Eligability	Topic → E-Commerce	
	Scope & Coverage	**Database:** Scopus **Search Field:** Article Title **Time Frame:** All **Language:** English **Source Type:** Journal **Document Type:** Article
	Keywords & Search String	TITLE ("microfinance" OR "microcredit" AND "default" OR "NPL" OR "delay")
Screening	Date Extracted	06 March 2022
	Record Identified & Screened	n = 258
Included	Record Removed	n = 0
	Record Included for Bibliometric Analysis	n = 258

Figure 1. Flow diagram of the search strategy
Source: Zakaria et al (2020)

Analysis and Results
Descriptive Analysis
Document and Source Types
The process of data analysis was based on identifying document type and source type. Document type consists of articles, conference papers, book chapters, reviews, and books; while source type refers to journals, conference proceedings, books, book series, and trade journals. Sweileh et al (2017) mentioned that conference papers appear differently depending on document type and source type. Under document type, conference papers refer to papers that have been presented at conferences and are most likely to be published as full journal articles. Some of the conference papers are also published as conference proceedings or as book chapters under source type, although the conference contribution was created in the document type. This study found five types of publications related to microfinance and repayment, in the form of articles, conference papers, book chapters, reviews, and books. In Table I, most publications are articles, constituting 82.95%, followed by conference papers at 11.24%. The other types of documents collectively make up almost 15%, where each type is in the range of 5% - 10% of the total documents. The least types are reviews and books, at less than 4% each.

Table 1
Document Type

DOCUMENT TYPE	Total Publication (TP)	Percentage
Article	214	82.95
Conference Paper	29	11.24
Book Chapter	10	3.88
Review	4	1.55
Book	1	0.39
Total	**258**	**100.00**

Table 2
Source Type

Source Type	Total Publication (Tp)	Percentage
Journal	216	83.72
Conference Proceeding	26	10.08
Book	10	3.88
Book Series	5	1.94
Trade Journal	1	0.39
Total	**258**	**100.00**

The first research on microfinance was published in 1996 by Kane (1996) with his article titled 'MicroEnterprise'. As presented in Figure 2,, the publications shows increasing trend throughout twenty five years period. However, from 2012 until 2021 the publications fluctuate between minimum of 10 and 33 publications. Thenumber of publications is expected to continue to increase in 2021, even to the highest number of publications since 2020.

Figure 2. Total Number of Publications by Year

Language of Documents
Table 4 shows that most of the documents retrieved at more than 90%, are published in English (95.34%). However, some documents are published in two languages, i.e., English and French (2) and English and Spanish (2); while some articles are published in Portuguese, Russian, and Spanish.

Table 4
Languages Used for Publication

LANGUAGE	Total Publication (TP)	Percentage
English	246	95.35
French	6	2.33
Spanish	4	1.55
Portuguese	1	0.39
Russian	1	0.39
Total	258	100.00

Subject Area

In terms of subject areas area, most of the studies on repayment behaviour in terms of microfinance are in the area of finance (31.07%), followed by business, management and accounting (14.99%), computer science (7.37%), and decision sciences (3.19%). The details of subject area on microfinance repayment behaviour research are as in Table IV.

Table 5
Subject Area

SUBJECT AREA	Total Publication (TP)	Percentage
Agricultural and Biological Sciences	8	1.97
Arts and Humanities	6	1.47
Business, Management and Accounting	61	14.99
Computer Science	30	7.37
Decision Sciences	13	3.19
Earth and Planetary Sciences	1	0.25
Economics, Econometrics and Finance	129	31.70
Energy	5	1.23
Engineering	12	2.95
Environmental Science	8	1.97
Materials Science	2	0.49
Mathematics	11	2.70
Medicine	6	1.47
Multidisciplinary	4	0.98
Physics and Astronomy	3	0.74
Psychology	3	0.74
Social Sciences	105	25.80

Publishing Activity by Journal

The 258 articles under review in this research appeared in 162 sources of publication. Table 2 lists the publications with the top 10 articles on repayment under the microfinance programme. The highest number of publications are in the Journal of Development Economics, followed by Enterprise Development and Microfinance, Agriculture Finance Review, Savings and Development, World Development, Journal of Development Studies, Journal of International Development, Aip Conference Proceedings, Annals of Public and Cooperative Economics, and Review of Development Economics.
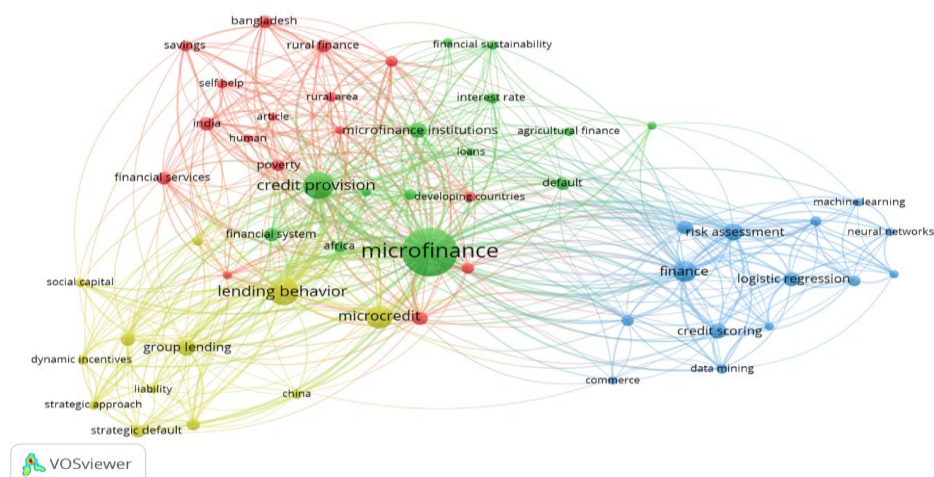
Publication by Journal	No. of Publication	Percentage
Journal Of Development Economics	15.00	28.30
Enterprise Development And Microfinance	6.00	11.32
Agricultural Finance Review	5.00	9.43
Savings And Development	5.00	9.43
World Development	5.00	9.43
Journal Of Development Studies	4.00	7.55
Journal Of International Development	4.00	7.55
Aip Conference Proceedings	3.00	5.66
Annals Of Public And Cooperative Economics	3.00	5.66
Review Of Development Economics	3.00	5.66

Keywords Analysis

This study began by generating a word cloud for the authors' keywords using WordSift (https://wordsift.org). Figure 3 shows the outcome of the word cloud generation with a maximum of 100 words and a n scale setting. Figure 3 displays the top 100 terms (or parts of keywords) used in the published papers on microfinance repayment behaviour. The magnitude of each word denotes the total number of times the keywords appear. Aside from the keyword used to search for the document's title, the word cloud depicts additional emerging keywords, such as financial, default, credit, rural, lending, repayment, loan, microfinance, economic, and responsibility. Other keywords, despite their tiny size, are the words that have been utilised to accommodate the issue of microfinance research. It is vital to note that the terms created in Figure 3 are the trending words utilised in combination with microfinance research. As a result, we may anticipate that future microfinance research will be focused on these themes.

Figure 3. Word cloud of the authors' keywords

The authors' keyword analysis was mapped with VOSviewer, a software tool for visualizing and constructing bibliometric networks. There are six groups in XBRL Research based on the authors' keywords. Figure 2 shows the network visualization of authors' keywords, in which font size, square size, colour, and connecting line thickness, represent relationships to other keywords. For example, keywords with the same colour are commonly listed together. Therefore, in this study, microfinance, financial system, lending, microfinance institution, and loan, show a similar colour (green).

Figure 4. Co-occurrence analysis of the authors' keywords

Citation Analysis

Table 10 summarises the citation metrics for articles retrieved as of 6 March 2022. As indicated, over the 26 years (1996–2022) of publications, 3,268 citations are reported. This citation metrics was generated using Harzing's Publish and Perish software by importing a RIS format file from the Scopus database into Harzing to represent the raw citation metrics.

Table 10
Citation Metrics

Metrics	Data
Publication Years	1996 -2022
Papers	258
Citations	3268
Years	26
Cites_Year	125.69
Cites_Paper	12.67
Cites_Author	1644.31
Papers_Author	136.39
Authors_Paper	2.43
h_index	28
g_index	50

Table 11 below shows the top 20 most cited articles (based on the number of times the document is cited) according to the Scopus database. The document titled "Creating and Using Semantically Rich Accounting Reports on the Internet: XML and XBRL" by Gine & Yang (2007) has the highest number of citations at 123 citations or an average of 18.92 citations per year.

Table 11
Highly-Cited Articles

Author	Title	Year	CitesPerYear	CitesPerAuthor
GinÃ© & Yang	Insurance, credit, and technology adoption: Field experimental evidence from Malawi	2009	18.92	123
Ahlin et al	Where does microfinance flourish? Microfinance institution performance in macroeconomic context	2011	19.64	72
Karlan & Zinman	Observing unobservables: Identifying information asymmetries with a consumer credit field experiment	2009	11.77	77
Serrano-Cinca et al	The use of profit scoring as an alternative to credit scoring systems in peer-to-peer (P2P) lending	2016	22	66
Feigenberg & Pande	The economic returns to social interaction: Experimental evidence from microfinance	2013	11.89	54
Amin et al	NGO-promoted microcredit programs and women's empowerment in rural Bangladesh: quantitative and qualitative evidence	1998	4.21	34
Field et al	Does the classic microfinance model discourage entrepreneurship among the poor? Experimental evidence from India	2013	10.78	24
GinÃ© & Karlan	Group versus individual liability: Short and long term evidence from Philippine microcredit lending groups	2014	11.5	46
Field & Pande	Repayment frequency and default in microfinance: Evidence from India	2008	6.57	46
Vogelgesang	Microfinance in times of crisis: The effects of competition, rising indebtedness, and economic crisis on repayment behavior	2003	4.68	89
Abbink et al	Group size and social ties in microfinance institutions	2006	4.75	25
Kaboski & Townsend	Policies and impact: An analysis of village-level microfinance institutions	2005	4.18	36
Chemin	The benefits and costs of microfinance: Evidence from Bangladesh	2008	4.21	59

Bhatt & Tang	Determinants of repayment in microcredit: Evidence from programs in the United States	2002	2.8	28
Alexander	Here today, gone tomorrow: Can dynamic incentives make microfinance more flexible?	2006	3.44	55
Mild et al	How low can you go? - Overcoming the inability of lenders to set proper interest rates on unsecured peer-to-peer lending markets	2015	7.71	18
Bhole & Ogden	Group lending and individual lending with strategic default	2010	4.42	27
Dixon et al	Loan officers and loan 'delinquency' in Microfinance: A Zambian case	2007	3.07	15
Chakrabarty & Bass	Encouraging entrepreneurship: Microfinance, knowledge support, and the costs of operating in institutional voids	2013	4.11	19

Discussion

The trend on research on microfinance and repayment behaviour is analysed in this study by applying a bibliometric analysis method. Through bibliometric analysis, publication and research trends in a specific area can be assessed. Bibliometric analysis can also give an idea and guide researchers, directors and policymakers, in making significant decisions before embarking on the specific field as the results. According to Ellegaard and Wallin (2015), bibliometric analysis can help to analyse the impact of the research area and reveal the performance. Furthermore, the result from the bibliometric analysis can assist academicians to conduct more relevant research, update extant research, and highlight the important areas that need to be addressed (Ellegaard & Wallin, 2015).

This research gathered data on microfinance and repayment behaviour publications from the Scopus database. The search shows a significant growth in the number of publications since year 1996. In addition, this study reveals that annually, scholars from various countries have been working together to recommend the importance of studying in-depth microfinance and repayment capability. The outcomes highlight that the English language is the main language used at 95.34%. In addition, 83.72% of these papers have been published in academic journals, with the remaining papers in conference proceeding at 10.08%, books at 3.88%, book series at 1.94% and trade journals at 0.39%. Furthermore, the results indicate that microfinance and repayment research publications are spread over many disciplines such as economics, econometrics and finance, business, management and accounting, computer science, etc. The findings suggest that the topic of microfinance and repayment is an important subject that needs further investigation, and more importantly, when the current economic, political and financial scenarios show a downward trend, with the situation worsening during the COVID-19 pandemic.

Table 11 shows the citation metrics which was evaluated based on publication impact. From 1996 – 2022, a total of 258 papers have been published around the world with 3,268 citations. On average, the topic generated 136 citations and each paper is cited 2.43 times. Despite the insightful results collected from the bibliometric analysis, the quality of analysis still needs to be improved in future research with other techniques. The first technique is in the context of keywords selected in the search process. In this paper, the results are based on the keywords.
("microfinance" OR "microcredit" AND "default" OR "NPL" OR "delay"), which is in turn, based on the title of the paper. As microfinance is a general term, some scholars may have used a more specific keyword . The advantage of using more keywords is that it can contribute to more comprehensive search results, thus improving the quality of the findings.

Additionally, no search query is completely precise for capturing all the published research work in this area. Hence, some unexpected negative results can be obtained. Although the Scopus database is considered as the most comprehensive database, with many disciplines and indices, other databases can be included in the search query, such as Web of Science and Google Scholar; this may avail richer findings and more insights. Despite the limitations of the search database, the results of the current search at least present an interesting trend on microfinance and repayment research from 1996 to 2022. In addition, utilising the bibliometric approach has contributed to the extension of the body of knowledge on microfinance and repayment behaviour.

Conclusion
This paper presents all major aspects of academic research on microfinance and repayment behavior on 258 papers for the period between 1996 and 2021. The finding based on key word search "microfinance" OR "microcredit" AND "default" OR "NPL" OR "delay" shown the limited of paper found under the key word. This study also reveals that the areas mostly covered in the topic related with microfinance and repayment performance, borrower behavior, lending characteristic and loan default. Additionally, number of publication shows increasing trend throughout the period under reviewed.

Furthermore, there have several suggestions for future research related on this field. First suggestion is to be continuing explore research related with repayment behavior since the studies on repayment behavior show an increasing trend. Previous researchers have reported various results regarding the effectiveness of microfinance in reducing poverty. Therefore, the high non-performing loans (NPL) of microfinance institutions are one of the factors that contributes to the failure of poverty alleviation. The loan repayment issues getting worse due to weak global growth effected from covid-19 pandemic, issues of economic reforms in the domestic economy, fluctuating commodity price, the increased-on inflation rate and increasing the number of winding up companies.

Second suggestion, to proposes that the research on microfinance and repayment behavior should be conducted in other developing and developed countries since the impact on the economy were globally affected. Finally, this study has a few restrictions that are inherent to the database used. Consequently, it should be emphasized that even though Scopus is one of the larges databases, there are still other journals and unindexed journal not properly explore, and therefore publications in these journals might have been ignored.

Therefore, the results of this bibliometrics search may contribute to providing a comprehensive analysis of trends related to microfinance publications in the Scopus database, provide information for future research, present knowledge to the policy maker and improving social economies respectively.

References

Chadegani, A. A., Salehi, H., Yunus, M. M., Farhadi, H., Fooladi, M., Farhadi, M., & Ale Ebrahim, N. (2013). A comparison between two main academic literature collections: Web of science and scopus databases. *Asian Social Science*, *9*(5), 18–26. https://doi.org/10.5539/ass.v9n5p18

Al-Azzam, M., Hill, C. R., & Sarangi, S. (2012). Repayment performance in group lending: Evidence from Jordan. *Journal of Development Economics*, *97*(2), 404–414. https://doi.org/10.1016/j.jdeveco.2011.06.006

Burnham, J. F. (2006). Scopus database: A review. *Biomedical Digital Libraries*, *3*, 1–8. https://doi.org/10.1186/1742-5581-3-1

Chirwa, E. W. (1997). AN ECONOMETRIC ANALYSIS OF THE DETERMINANTS OF AGRICULTURAL CREDIT REPAYMENT IN MALAWI. *African Review of Money Finance and Banking*, *1/2*, 107–122.

Chong, F., Morni, F., & Suhaimi, R. (2010). Demographic factors and repayment performance of NBFI customers in Kuching. *CSSR 2010 - 2010 International Conference on Science and Social Research*, *Cssr*, 1340–1345. https://doi.org/10.1109/CSSR.2010.5773748

Correa, G., & Montero, A. V. (2013). *"Regulation and Supervision of Microfinance Institutions (MFIs) in SAARC Region." March*, 1–10.

Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production : How great is the impact ? The bibliometric analysis of scholarly production : How great is the impact ? *Scientometrics*, *November*. https://doi.org/10.1007/s11192-015-1645-z

Fianto, B. A., Maulida, H., & Laila, N. (2019). Determining factors of non-performing financing in Islamic microfinance institutions. *Heliyon*, *5*(8). https://doi.org/10.1016/j.heliyon.2019.e02301

Gine, X., & Yang, D. (2007). Insurance, Credit, and Technology Adoption: Field Experimental Evidence from Malawi. *World Bank Policy Research Working Paper*, *December*, 34. papers3://publication/uuid/1AB540AF-C851-4C75-BDD7-9A2035EB7671

Glänzel, W. (2003). Bibliometrics as a research field: A course on Theory and Application of Bibliometric Indicators. *Researchgate*, *May*, 115. https://www.researchgate.net/publication/242406991_Bibliometrics_as_a_research_field_A_course_on_theory_and_application_of_bibliometric_indicators

IGI Global. (2018). *"What is Bibliometric Analysis."* https://www.igi-global.com/dictionary/bibliometric-analysis/2406.

Kane, H. (1996). Micro-enterprise. *World Watch*, *2*(9), 10–19.

Kohansal, M. R., & Mansoori, H. (2009). Factors Affecting on loan Repayment Performance of Farmers in Khorasan-Razavi Province of Iran. *Conference on International Research on Food Security, Natural Resources Management and Rural Development*, 1–4.

http://www.tropentag.de/2009/abstracts/full/264.pdf

Mekonnen, M. (2015). *DETERMINANTS OF LOAN REPAYMENT PERFORMANCE OF RURAL WOMEN BASED SAVING AND CREDIT COOPERATIVES' MEMBERS: THE CASE OF DIRE DAWA ADMINISTRATION*.

Mohammed, A. F., & Wobe, M. H. (2019). Factors Affecting Loan Repayment Performance of Microfinance Institution Borrowers. *International Journal of Applied Behavioral Economics*, *8*(2), 27–43. https://doi.org/10.4018/ijabe.2019040103

Nawai, N. B. M. N. B. M. S. (2013). Determinants of Repayment Performance in Microfinance Programmers in Malaysia. *Proceedings of the 2nd Applied International Business Conference (AIBC2013)*, *11*(December), 7–8.

Nor, M. M., Awang@faudzi, R., & Yahaya, T. A. H. (2021). THE IMPACT OF MICROFINANCE ON GROWTH OF MICROENTERPRISES (MEs) IN MALAYSIA. *International Journal of Humanities Technology and Civilization (IJHTC*, *10*(10), 135–150. http://journal.ump.edu.my/

Okorie, A. (1986). Major determinants of agricultural smallholder loan repayment in a developing economy: Empirical evidence from Ondo State, Nigeria. *Agricultural Administration*, *21*(4), 223–234. https://doi.org/10.1016/0309-586X(86)90040-3

Roslan, A. H. K., & Abd, M. Z. (2009). Determinants of Microcredit Repayment in Malaysia : The Case of Agrobank. In *Humanity & Social Sciences Journal* (Vol. 4, pp. 45–52).

Selvaraj, T., Karim, Z. A., Abdul-Rahman, A., & Chamhuri, N. (2019). The determinants of microcredit quality in Malaysia: A panel evidence. *International Journal of Business and Society*, *20*(2), 642–656.

Shaharudin, Z., Basri, M. N. A., & Isa, M. Y. B. M. (2016). Factors Influencing Payments Behavior among Customers of Islamic Retail Financing. *Journal of Islamic Banking and Finance*, *4*(2), 34–37. https://doi.org/10.15640/jibf.v4n2a5

Shrestha, S., & Thapa, B. S. (2021). Determinants of repayment behaviour of MFI clients in the context of COVID-19: a case study of Lalitpur District, Nepal. *Nepalese Journal of Insurance and Social Security*, *4*(1), 19–33. https://doi.org/10.3126/njiss.v4i1.42349

Shu-Teng, L., Zariyawati, M. A., Suraya-Hanim, M., & Annuar, M. N. (2015). Determinants of Microfinance Repayment Performance: Evidence from Small Medium Enterprises in Malaysia. *International Journal of Economics and Finance*, *7*(11), 110. https://doi.org/10.5539/ijef.v7n11p110

Mokhtar, S. H. G., & Gan, N. C. (2012). Determinants of microcredit loans repayment problem among microfinance borrowers in Malaysia. *International Journal of Business and Social Research (IJBSR)*, *2*, 33–45.

Sweileh, W. M., Al-Jabi, S. W., AbuTaha, A. S., Zyoud, S. H., Anayah, F. M. A., & Sawalha, A. F. (2017). Bibliometric analysis of worldwide scientific literature in mobile - health: 2006-2016. *BMC Medical Informatics and Decision Making*, *17*(1), 1–12. https://doi.org/10.1186/s12911-017-0476-7

Zeller, M. (1996). Determinants of loan repayment in group lending: The role of program design, intra-group risk pooling and social cohesion. *Economic Development and Cultural Change (Forthcoming)*.