



# An Overview of Entrepreneurial Risk - A Bibliometric Analysis

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The entrepreneurship literature is giving more and more attention to risk aspects. However, in literature, only a fragmented comprehension is known about the contextual influence of risk aspects of entrepreneurship. In our article, we contribute by finding the relationship between Entrepreneurship and Risk by analysing the production and visualising the themes and evolution in this field. In our research approach bibliometric technique has been used to analyse 10 years of publications in Web of Science (WoS) database and present a comprehensive contextual picture of risks in entrepreneurial research. We analysed 1595 publications by identifying the most prominent journals, authors, articles, countries and collaboration among authors and countries. Also, a co-occurrence analysis among keywords, authors and the sources were done along with cluster analysis, and thematic analysis was also performed to find the evolutionary trends. Our analysis showed that risk taking is the evolving theme and its occurrence is increasing and becoming more prominent in the domain of entrepreneurship.

**Key words:** *Entrepreneurship, Entrepreneurs, Risk, Risk Taking, h-index, Co-Occurrence Analysis, Thematic Analysis*

## Introduction

Entrepreneurship is defined as the process of planning, constructing, starting and running a new business, which normally starts with a small company and can be described as the "capacity and willingness to develop, organise and manage a business venture along with any of its risks to make a profit". In simple words entrepreneurship is all about believing in himself or herself and motivating others to join in their journey. The entrepreneurs take risks and initiative, attempts to make profits by creating their businesses. An entrepreneur is a person who accepts and manages the risks of a business or enterprise. Entrepreneurship is the process



of uncovering new ways of finding business resources and we can call an entrepreneur an agent of change. The word “entrepreneur” has roots from a thirteenth-century French verb, “entreprendre”, meaning “to do something” or “to undertake.” By the sixteenth century, the noun form, entrepreneur, is a person who starts a business venture by taking certain risks.

In today’s world of entrepreneurship context there is also a discussion of entrepreneurial risk. Risk taking is synonymous with the concept of entrepreneurship. To start and support entrepreneurs must put their career, personal finances and even their mental health at stake. Most of the entrepreneurs are risk takers by nature. For entrepreneurs, there is no secure monthly income and they take several business risks. There is a propensity among entrepreneurs to take risky decisions which are dependent on many factors or variables. Also, entrepreneurs find less time to spend with their family or with friends or relatives and they must also sacrifice their personal life and personal health. It means along with business risks that they are also exposed to social risks. The major business risks include: financial risk, market risk, technology risk, strategy risk, reputational risk, political and economic risk etc. The level of all these risks for various entrepreneurs is different and there is no way to avoid these risks but by recognising them, entrepreneurs can prepare for and mitigate them. Taking risks, some of them that do not even pay off, provides valuable and learning experiences for them.

Though being an entrepreneur involves risks, it is not considered as a constraint. With enough knowledge of an industry, market trends, economy, competitors and technology, entrepreneurs need to take certain risks without endangering their efforts. Young entrepreneurs face challenge of confidence problems even if the credentials and preparation are in evidence.

Broadus (1987) discussed that bibliometric is a discipline that explores the bibliographic material by doing quantitative analysis. Bibliometric studies in the domain of entrepreneurship have been done by many authors (J. J. Ferreira, Fernandes & Kraus, 2019; Landström, Harirchi & Åström, 2012; Santos & Teixeira, 2009; Servantie, Cabrol, Guieu & Boissin, 2016; Teixeira & Ferreira, 2013). Authors used various bibliometric procedures to investigate specific areas of entrepreneurship like technological entrepreneurship (J. J. M. Ferreira, Fernandes & Ratten, 2016), social entrepreneurship (Kraus, Filser, O’Dwyer & Shaw, 2014; Sassmannshausen & Volkmann, 2013) and family (López-Fernández, Serrano-Bedia & Pérez-Pérez, 2016).

As mentioned, many empirical studies have attempted to analyse the relation between entrepreneurship and its associated fields by doing bibliometric analysis, but their focus does not allow for an autonomous viewpoint about inclusion of risk within domain of entrepreneurship. In this study we gain a better understanding of the entrepreneurial risks as this domain of entrepreneurial risk is gaining more popularity among researchers all over the world in recent times. This research work will contribute to academic literature by shedding light on the domain of entrepreneurial risk and finding the major trends in this domain by



visualising and interpreting. As per author's knowledge, there is no bibliometric analysis done on entrepreneurial risk and this will be the novel study to analysis this domain in detail and will close this gap.

### **Data and methodology**

Bibliometric studies can be done by using several techniques and the method involving the number of publications and analysing the citations is the most popular. Web of Science (WoS) database is used for our analysis. WoS is considered as the main and best academic databases for examining research contributions and contains more than 15,000 journals and 50,000,000 articles. The adherence to key quality criteria by WoS can be generalised to any revision process that covers some type of topic or section of a particular knowledge (Torraco, 2005). Merigó, Mas-Tur, Roig-Tierno & Ribeiro-Soriano (2015) proposed bibliometric procedures and mapping techniques and we base our analysis on their work and it is comprised of the most prominent indicators in the analysis. For this paper, the data exploration was limited to the WoS main collection.

The keyword "Entrepreneurial" and "Risk" of "Entrepreneurial Risk" has been used in this research. Similar bibliometric approaches were performed by other scholars in the domain of management and entrepreneurship (Diez-Vial & Montoro-Sanchez, 2017; Kraus et al., 2014; Merigó, Gil-Lafuente & Yager, 2015; Vogel & Güttel, 2013). Our data set for this study consists of articles, conference proceedings and books as well as other document types such as editorial material and meeting abstracts. By using this procedure from year 2010 until 2020, 1,595 results were observed among seven various categories: articles (1,222); reviews (38); proceedings papers (337); editorial materials (9); and early access (37). The results are included from 6 WoS categories as follows: Business (803); Management (731); Economics (426); Education Educational Research (131); Business Finance (91); Social Sciences Interdisciplinary (74). All remaining categories are excluded as they are not relevant to this study.

The academic community appreciated the bibliometric instrument h-index developed by Hirsch (2005) which is used to measure or quantify the impact of scientific research output. The number of publications having at least the same number of citations is used in its calculation. Alonso, Cabrerizo, Herrera-Viedma and Herrera (2009) discussed many h-related indexes that have been developed and discussed their advantages and characteristics along with original h-index. The authors argued that h-index has an issue that it does not allow direct comparison of scientists from different disciplines and its results are insensitive to citation changes counts of the most cited papers of a researcher.

Small (1980) developed co-citation analysis which measures the citation relationships and the frequency with which any two documents are cited together by another document. Two



documents are said to be co-cited if these are cited together by another document. The co-citation strength increases if more co-citations are received by two documents and the more chances that they are semantically related. Voeth, Gawantka and Chatzopoulou (2006) discussed that citation is aimed at identifying the importance of different authors/journals which is ultimately based on the number of times they are cited. On the other hand, internal structure information of the research field is called co-citation which is founded on the authors' relationship and their publications. The quantification is based on content similarity of the publications and the number of occasions they are cited together (Kraus et al., 2012). Co-citation analysis is widely used in literature management and organisation domain (Zupic & Čater, 2015).

Quantitative approach for citations and co-citations are used in bibliometric analysis. Kraus et al., (2012) mentioned that interaction indication between the researchers and the research institutions is done by citation analysis and it describes the central structure of a scientific domain based on the set of the most influential publications. Small (1980) also confirmed that identification of paradigms can be done using the techniques of citation analysis and is considered as a mutually agreed structure of concepts in the scientific domain and the importance and impact of author, publication or source can be determined by citation analysis.

The present study used Biblioshiny app (Bibliometrix R tool) to analyse the results of bibliometric analysis for entrepreneurial finance. Ekundayo and Okoh (2018) used the Biblioshiny app to do the bibliometric analysis of Plesiomonas related global research papers and the data was analysed, tabulated and dynamically visualised through the Bibliometrix R package. Anglada-Tort, Sanfilippo & Science (2019) used R package Bibliometrix tool to analyse the most productive authors, countries, keywords, top cited articles, author dominance, h-index, and Lotka's law for psychology of music. Similarly, Bibliometrix and Biblioshiny is used by many other recent researches for bibliometric analysis in other domains (Arfaoui, Ibrahim & Trabelsi, 2019; Hafeez, Jalal & Khosa, 2019; Mishra & Muhuri, 2020; Xie, Zhang, Wu & Lv, 2020).

## **Analysis and results**

This section presents the main bibliometric results for “entrepreneurial risk” (RE) found in WoS for the articles dating between 2010 and 2020.

Table 1 shows the main information of data analysis and that the total number of documents analysed are 1595 which are extracted from 674 sources. A high number of documents show a large number of sources, including journals and books, are dedicated to the domain of RE which shows its importance and relevance. The average citation per document is 10.55 which is also quite high.



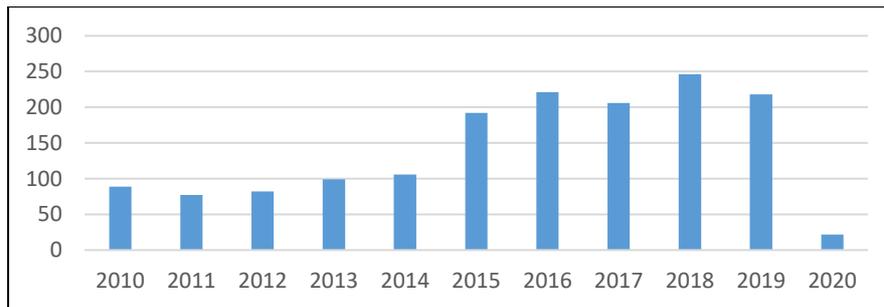
<b>Description</b>	<b>Results</b>	<b>Forms of Publications</b>	<b>No. of Documents</b>
Documents	1595	Article	1173
Sources (Journals, Books, etc.)	674	Article, Book Chapter	2
Keywords Plus (ID)	2191	Article, Early Access	36
Author's Keywords (DE)	3737	Article, Proceedings Paper	11
Period	2010 - 2020	Editorial Material	9
Average citations per documents	10.55	Proceedings Paper	326
Authors	3453	Review	37
Author Appearances	4107	Review, Early Access	1
Authors of single-authored documents	287	<b>Total</b>	<b>1595</b>
Authors of multi-authored documents	3166		
Single-authored documents	304		
Documents per Author	0.462		
Authors per Document	2.16		
Co-Authors per Documents	2.57		
Collaboration Index	2.45		

### ***Growth of Publications***

Table 2 and Figure 1 describe and show the intellectual production distribution of ER over time. The number of publications in the domain of ER has gradually but consistently increased during the last ten years. They increased to 219 publications in 2019 from 89 in 2010 as shown in Figure 1.

<b>Year</b>	<b>No of Publications</b>	<b>Mean TC per Article</b>	<b>Mean TC per Year</b>
2010	89	30.169	3.017
2011	77	24.312	2.701
2012	82	35.244	4.405
2013	99	20.758	2.965
2014	106	17.443	2.907
2015	192	11.615	2.323
2016	221	6.679	1.670
2017	206	4.063	1.354
2018	246	3.004	1.502
2019	218	0.830	0.830
2020	22	0.364	
TC-Total Citations			

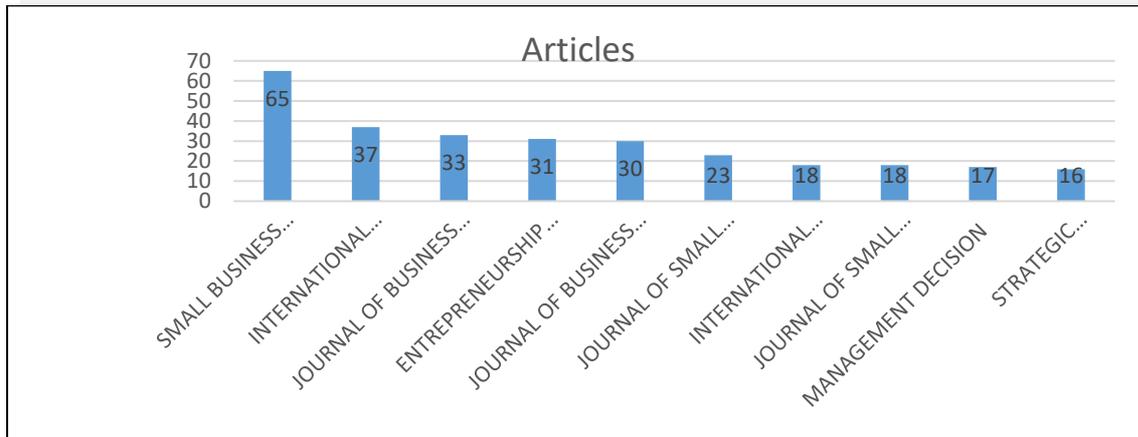
The increase of publications in 10 years is almost 145% or almost 14.5% annually which reflects the significance of the concept of ER among the scholars. Also, Merigó, Mas-Tur, et al., (2015) argued that increasing the pool of researchers globally and the recent WoS database expansion also had a positive impact on the increased number of publications. A slightly decreasing number of publications are observed in 2019 as compared to number of publications in 2018.



**Figure 1: Publications per Year**

### *10 Most Productive Sources*

An exploration of the most relevant and prominent journals that publish articles discussing ER was done. Figure 2 shows the ranking of the 10 most productive sources in the ER domain indexed in the core collection of the WoS database. Figure 2 shows that the most important productive journals in domain of ER are Small Business Economics, International Entrepreneurship and Management Journal and Journal of Business Venturing; with highest number of published documents. Table 3 shows a list of most important sources arranged in the decreasing order of h-index having a value of h-index > 5. The journal of Small Economics has the highest h-index of 21 while Journal of Business Venturing has h-index of 20 and Journal of Entrepreneurship Practice and Theory has h-index of 16. Table 3 also shows that Journal of Business Venturing has the highest total number of citations (1612) while Journal of Small Business Economics has 1310 total number of citations. This shows that although Journal of Business Venturing has almost half of the total number of publications, its total citations is more than Journal of Small Business Economics and is a more influential journal.



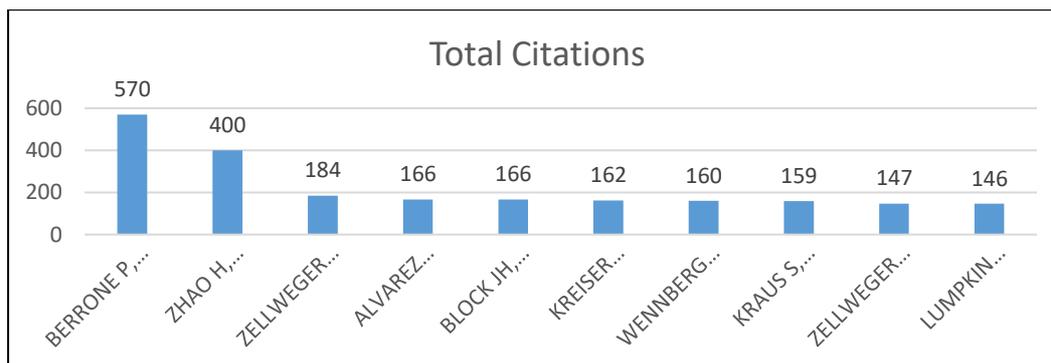
**Figure 2: 10 Most Productive Sources**

Egghe (2006) described g-index as an improvement of the h-index and calculates the global citation performance of a set of articles. Costas & Bordons (2008) argued that for assessment of selective scientists the g-index is more sensitive because the type of scientist are shown in average a higher g-index/h-index ratio and shows better g-index rankings than in the h-index ones.

### ***10 Most Global Cited Documents***

Figure 3 shows a list of the 10 most cited documents based on the number of total citations. The document by Berrone, Cruz & Gomez-Mejia (2012) is the most cited document in the domain of RE while an article by Zhao, Seibert & Lumpkin (2010) is the second most cited article. The individual citation of these documents is more than 400 for each of these two articles while all the remaining articles have relatively small number of citations and are quite uniform at around 180-150 citations per article. As published in comparable domain of studies, a criterion of minimum number of citations is used to define the most influential publications. As per Leonidou, Katsikeas & Coudounaris (2010) the minimum limit is 25 citations while Prevot, Branchet, Boissin, Castagnos & Guieu (2010) and Gast, Filser, Gundolf, Kraus & Business (2015) mentioned the limit to be 20 while Voeth et al., (2006) mentioned this limit as top ten of most cited publication.

S. No.	Source	h-index	g-index	M index	TC	NP	PY start
1	Small Business Economics	21	35	1.90	1310	61	2010
2	Journal of Business Venturing	20	33	1.818	1612	33	2010
3	Entrepreneurship Theory and Practice	16	31	1.454	1013	31	2010
4	International Entrepreneurship and Management Journal	13	22	1.181	526	35	2010
5	Journal of Business Research	10	18	1.25	354	30	2013
6	Journal of Small Business Management	10	20	1.111	408	23	2012
7	Entrepreneurship and Regional Development	10	15	0.909	564	15	2010
8	International Small Business Journal- Researching Entrepreneurship	9	15	1.125	275	15	2013
9	Strategic Management Journal	9	11	0.818	486	11	2010
10	Strategic Entrepreneurship Journal	8	15	0.727	436	15	2010
11	Research Policy	8	9	0.727	313	9	2010
12	Family Business Review	7	11	0.636	922	11	2010
13	Organization Science	7	8	0.636	326	8	2010
14	Management Decision	6	12	0.545	159	16	2010
15	Entrepreneurship Research Journal	6	8	0.6	83	14	2011
16	Technological Forecasting and Social Change	6	9	0.545	127	9	2010
17	Journal of Economic Behaviour \& Organisation	6	8	0.545	193	8	2010
18	Journal of Product Innovation Management	6	7	0.545	169	7	2010
19	Review of Managerial Science	6	7	0.666	226	7	2012
20	Journal of Management	6	6	0.545	639	6	2010
TC- Total Citations NP- No of Publications (h > 5), h= h-index value							



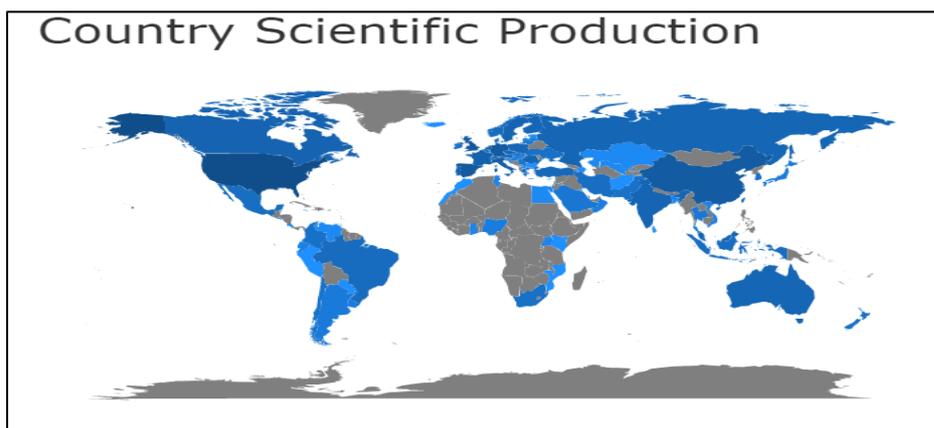
**Figure 3: 10 Most Global Cited Documents**

### **10 Most Productive Countries**

Table 10 shows a list of the top 10 countries who contributed most to the domain of RE. Out of 10 countries 9 countries are developed countries including USA, China and European countries. The only developing country in the list is Malaysia. He, Lu & Qian (2019) discussed

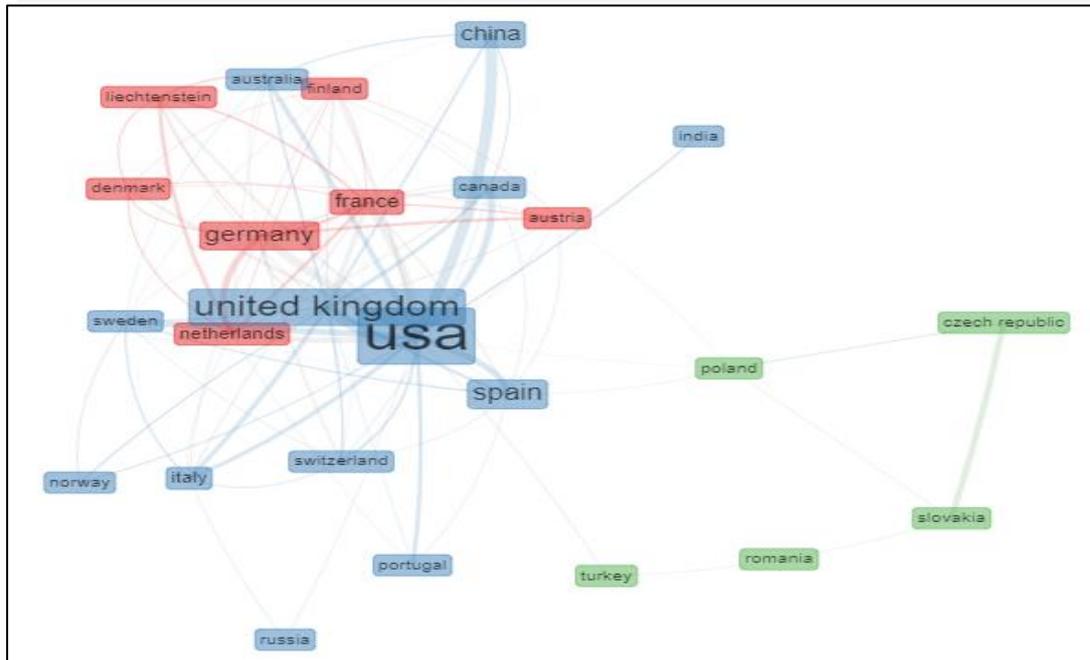
that identification of entrepreneurship by China is one of the key driving forces of economic development and is doing huge efforts to promote and accelerate entrepreneurial activity. This may be explained by the fact that these countries are leader countries and their institutions are strong and actively engage in education, skills development and technology. Desai (2011) argued that a research approach for developing countries should be to find the relationship between economic development of the country, its institutions and entrepreneurship while Fischer, Queiroz, Vonortas & Development (2018) mentioned that there is a challenge of the usability of concepts of entrepreneurial ecosystems from advanced economies in developing countries. Monitor (2018) showed higher levels of early-stage entrepreneurship than established business ownerships in most of the economies.

<b>S. No.</b>	<b>Country</b>	<b>Freq</b>
1	USA	675
2	UK	258
3	Spain	205
4	Germany	191
5	China	163
6	Italy	133
7	Netherlands	103
8	France	99
9	Malaysia	78
10	Canada	75



**Figure 4: Country Specific Production**

Figure 4 shows the collaboration of various countries in the domain of RE. The figure shows that almost all countries of Western Europe and the US collaborate.



**Figure 5: Collaborative Network of Countries**

### *Author Impact*

Focusing on the authors, the selection criterion is to select the top 10 authors having the highest number of publications as well as the highest h-index. The author with the largest number of published articles is Kraus, Sascha followed by Belas, Jaroslav and Eggers, Fabian. Table 5 shows the author's impact in a descending order of h-index and g-index. There is a big difference of total citations between the rank 1 and rank 2 authors.

S. No.	Author	h_index	g_index	m_index	TC	NP	PY_start
1	Kraus S	8	16	0.888	386	16	2012
2	Belas J	5	11	0.714	132	11	2014
3	Eggers F	7	7	0.875	153	7	2013
4	Lumpkin GT	6	7	0.545	777	7	2010
5	Al Mamun A	2	4	0.5	19	6	2017
6	Filser M	5	6	0.714	59	6	2014
7	Kuratko DF	6	6	0.6	305	6	2011
8	Thurik R	5	6	0.454	207	6	2010
9	Chirico F	4	5	0.4	206	5	2011
10	Fossen FM	4	5	0.444	66	5	2012

TC-Total Citations, NP-No of Publications

### Most Frequent Author Keywords

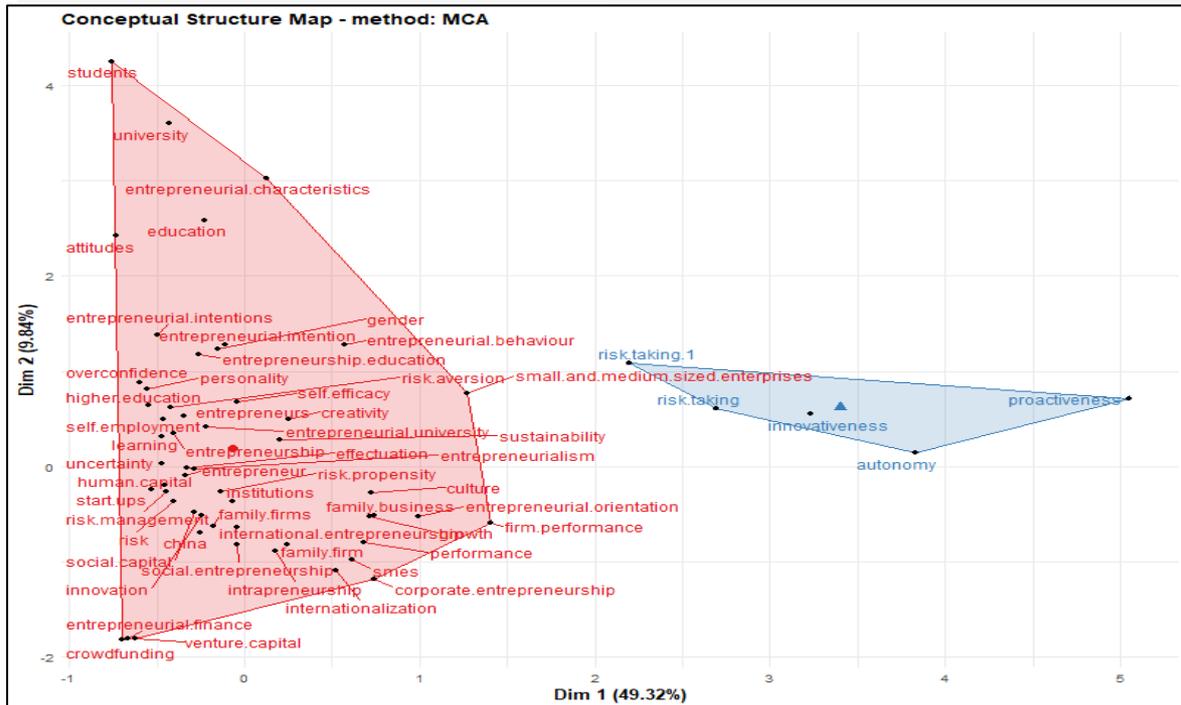
The Word Cloud is generated by selecting author keywords. The selection of author keywords provides insight into main topics and research trends of the entrepreneurial finance domain. Table 6 shows the list of most frequent author keywords having a frequency of more than 199. Table 7 shows that there are 12 keywords which have a frequency of more than 100. The keyword “performance” is the most frequent keyword following by “risk taking”. Figure 5 shows a visualisation of the most frequent keywords.

S. No.	Terms	Frequency
1	Performance	303
2	Risk Taking	198
3	Innovation	157
4	Risk	155
5	Management	136
6	Firm Performance	127
7	Model	124
8	Entrepreneurial Orientation	118
9	Impact	114
10	Moderating Role	114
11	Growth	113
12	Business Performance	105
N ≥ 100. N = Word Frequency		



Figure 6: Most Frequent Keywords

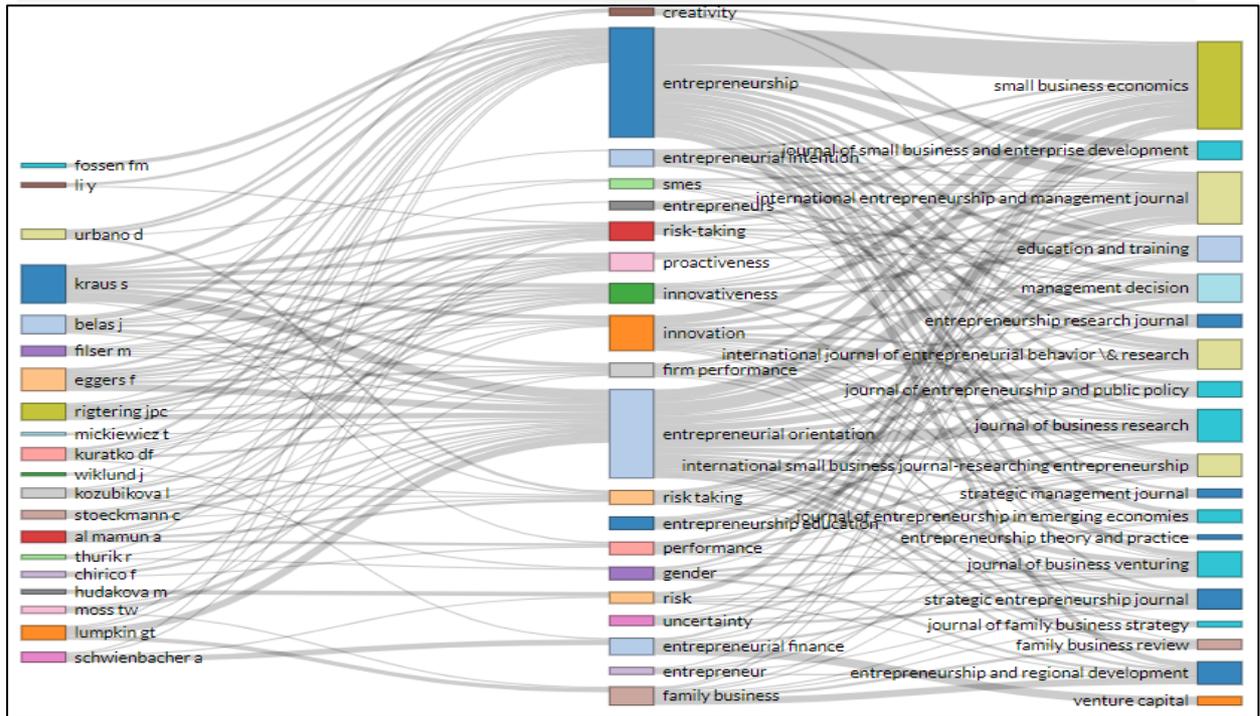




**Figure 8: Cluster Analysis**

**Three Plots Field**

In Figure 10 we can visualise the main items of three fields ( i.e. authors, keywords and journals), and how they are related through a Sankey diagram. A three plots field is formed for top 20 authors, keywords and the sources.

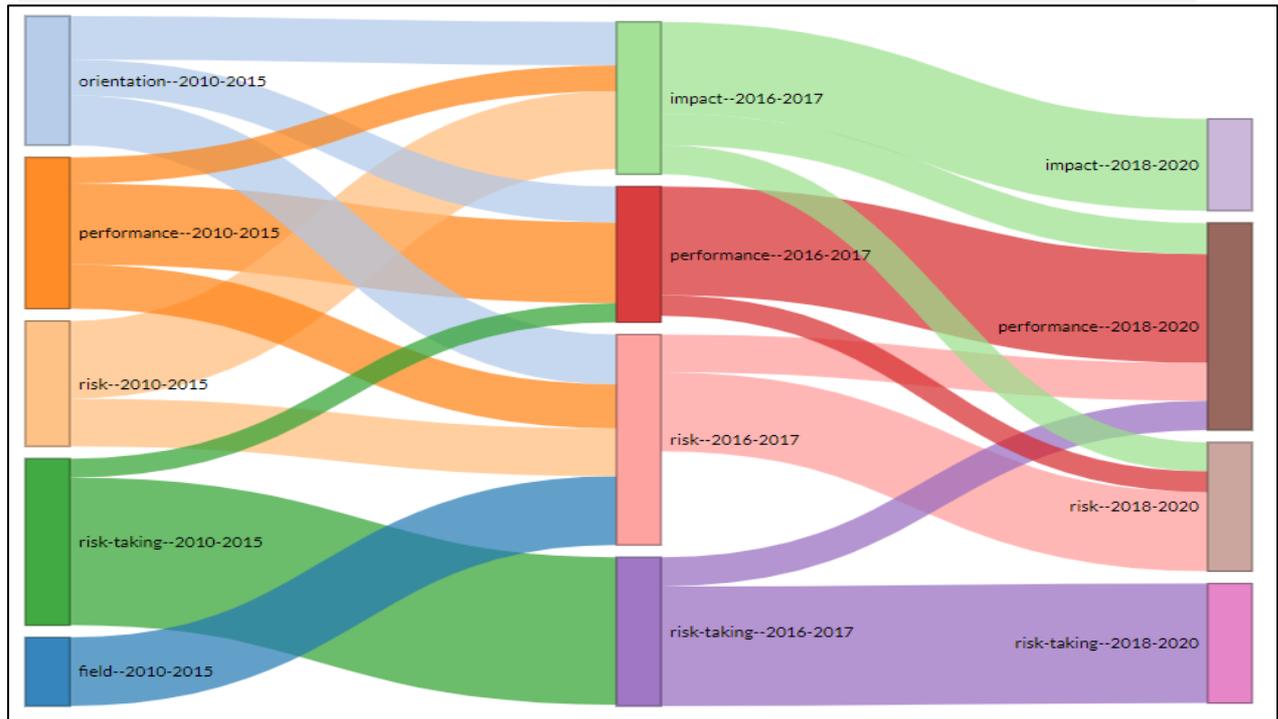


**Figure 9: Three Plots Field**

### *Thematic Analysis*

Figure 10 shows the thematic analysis from 2010 to 2020. The theme refers to the phenomena often demographical, social, cultural or economic and thematic maps are formed by stacking layers, in which data per each layer is plotted to one or more aesthetics (Tennekes, 2018). The thematic evolution analysis finds the evolutionary relationships, various evolution paths and evolutionary trends of the thematic content over a period. The thematic analysis used inclusion index weightage by word occurrence having minimum cluster frequency of 5 while minimum weight index is 0.1. It also shows various structures that form over a period and the strength of those structures.

In Figure 10, each node represents a topic and the size of node is proportional to the number of keywords which are a part of the theme. It shows that performance, risk and risk taking are major themes evolving from 2010 to 2020. The number of studies on the theme of performance of entrepreneurship has evolved gradually and thematic evolution has taken place.



**Figure 10: Thematic Analysis**

## Conclusion

A bibliometric analysis of entrepreneurship risk in the Web of Science Core Collection has been done in this study. This study gives an overall summary of the studies appearing in the domain of entrepreneurship risk with the main purpose to discuss and highlight: the most frequent keywords; high impact authors and the sources; most cited authors and articles; co-citation; co-authorship; and the thematic analysis since 2010. The global exploration of this study recognises both contributions and the key contributors in developing expertise about the concept of entrepreneurship risk over the decade. Although bibliometric analysis on entrepreneurship has been carried out in previous research, no study analysed the co-occurrence and thematic analysis for entrepreneurship risk.

The Three most important authors in the field of ER are Kraus Sascha, Belas Jaroslav and Eggers Fabian which are found by h-index and the number of publications. Our results also indicated that the USA and UK are the two most productive countries of the world while performance and risk taking are the two most frequently keywords used in domain of ER.

The results showed that the number of publications in entrepreneurship risk have increased over the last ten years. The cluster analysis showed that there exist two clusters in ER and thematic analysis shows the major themes evolving over the last 10 years.



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Our first limitation is that the information presented in this research is restricted to the WoS database only and other databases are not considered. Another limitation of our paper is that we used h-index for the prominence of authors and citation explorations and clustering approach for co-citations and other indexes are not used.



## REFERENCES

- Alonso, S., Cabrerizo, F. J., Herrera-Viedma, E., & Herrera, F. J. J. o. i. (2009). h-Index: A review focused in its variants, computation and standardization for different scientific fields. *3*(4), 273-289.
- Anglada-Tort, M., Sanfilippo, K. R. M. J. M., & Science. (2019). Visualizing Music Psychology: A Bibliometric Analysis of Psychology of Music, Music Perception, and Musicae Scientiae from 1973 to 2017. *2*, 2059204318811786.
- Arfaoui, A., Ibrahimi, K., & Trabelsi, F. J. A. J. o. G. (2019). Biochar application to soil under arid conditions: a bibliometric study of research status and trends. *12*(2), 45.
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. J. F. B. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *25*(3), 258-279.
- Bornmann, L., Haunschild, R., & Hug, S. E. J. S. (2018). Visualizing the context of citations referencing papers published by Eugene Garfield: a new type of keyword co-occurrence analysis. *114*(2), 427-437.
- Broadus, R. J. S. (1987). Toward a definition of "bibliometrics". *12*(5-6), 373-379.
- Cancino, C., Merigó, J. M., Coronado, F., Dessouky, Y., Dessouky, M. J. C., & Engineering, I. (2017). Forty years of Computers & Industrial Engineering: A bibliometric analysis. *113*, 614-629.
- Costas, R., & Bordons, M. J. S. (2008). Is g-index better than h-index? An exploratory study at the individual level. *77*(2), 267-288.
- Desai, S. (2011). Measuring entrepreneurship in developing countries. In *Entrepreneurship and economic development* (pp. 94-107): Springer.
- Diez-Vial, I., & Montoro-Sanchez, A. J. S. (2017). Research evolution in science parks and incubators: foundations and new trends. *110*(3), 1243-1272.
- Egghe, L. J. S. (2006). Theory and practise of the g-index. *69*(1), 131-152.



- Ekundayo, T. C., & Okoh, A. I. J. P. o. (2018). A global bibliometric analysis of Plesiomonas-related research (1990–2017). *13*(11).
- Ferreira, J. J., Fernandes, C. I., & Kraus, S. J. R. o. M. S. (2019). Entrepreneurship research: mapping intellectual structures and research trends. *13*(1), 181-205.
- Ferreira, J. J. M., Fernandes, C. I., & Ratten, V. J. S. (2016). A co-citation bibliometric analysis of strategic management research. *109*(1), 1-32.
- Fischer, B. B., Queiroz, S., Vonortas, N. S. J. E., & Development, R. (2018). On the location of knowledge-intensive entrepreneurship in developing countries: lessons from São Paulo, Brazil. *30*(5-6), 612-638.
- Gast, J., Filser, M., Gundolf, K., Kraus, S. J. I. J. o. E., & Business, S. (2015). Coopetition research: towards a better understanding of past trends and future directions. *24*(4), 492-521.
- Greenacre, M., & Blasius, J. (2006). *Multiple correspondence analysis and related methods*: CRC press.
- Hafeez, D. M., Jalal, S., & Khosa, F. J. J. o. p. r. (2019). Bibliometric analysis of manuscript characteristics that influence citations: A comparison of six major psychiatry journals. *108*, 90-94.
- He, C., Lu, J., & Qian, H. J. S. B. E. (2019). Entrepreneurship in China. *52*(3), 563-572.
- Hirsch, J. E. J. P. o. t. N. a. o. S. (2005). An index to quantify an individual's scientific research output. *102*(46), 16569-16572.
- Kraus, S., Filser, M., Eggers, F., Hills, G. E., Hultman, C. M. J. J. o. R. i. M., & Entrepreneurship. (2012). The entrepreneurial marketing domain: a citation and co-citation analysis.
- Kraus, S., Filser, M., O'Dwyer, M., & Shaw, E. J. R. o. M. S. (2014). Social entrepreneurship: an exploratory citation analysis. *8*(2), 275-292.



- Laengle, S., Merigó, J. M., Miranda, J., Słowiński, R., Bomze, I., Borgonovo, E., . . . Teunter, R. J. E. J. o. O. R. (2017). Forty years of the European Journal of Operational Research: A bibliometric overview. *262*(3), 803-816.
- Landström, H., Harirchi, G., & Åström, F. J. R. P. (2012). Entrepreneurship: Exploring the knowledge base. *41*(7), 1154-1181.
- Leonidou, L. C., Katsikeas, C. S., & Coudounaris, D. N. J. J. o. I. M. (2010). Five decades of business research into exporting: A bibliographic analysis. *16*(1), 78-91.
- López-Fernández, M. C., Serrano-Bedia, A. M., & Pérez-Pérez, M. J. J. o. S. B. M. (2016). Entrepreneurship and family firm research: A bibliometric analysis of an emerging field. *54*(2), 622-639.
- Merigó, J. M., Gil-Lafuente, A. M., & Yager, R. R. J. A. S. C. (2015). An overview of fuzzy research with bibliometric indicators. *27*, 420-433.
- Merigó, J. M., Mas-Tur, A., Roig-Tierno, N., & Ribeiro-Soriano, D. J. J. o. B. R. (2015). A bibliometric overview of the Journal of Business Research between 1973 and 2014. *68*(12), 2645-2653.
- Mishra, P. S., & Muhuri, S. (2020). A Review of Evaluation Methods of Architectural Heritage with the help of Bibliometric Analysis.
- Monitor, G. E. (2018). GEM 2018/2019 Global Report. In.
- Prevot, F., Branchet, B., Boissin, J., Castagnos, J., & Guieu, G. J. R. i. C.-B. M. (2010). The intellectual structure of the competence-based management. *5*, 231-258.
- Santos, C., & Teixeira, A. A. (2009). *The evolution of the literature on entrepreneurship. Uncovering some under researched themes*. Retrieved from
- Sassmannshausen, S. P., & Volkmann, C. (2013). *A bibliometric based review on social entrepreneurship and its establishment as a field of research*. Retrieved from
- Servantie, V., Cabrol, M., Guieu, G., & Boissin, J.-P. J. J. o. I. E. (2016). Is international entrepreneurship a field? A bibliometric analysis of the literature (1989–2015). *14*(2), 168-212.



- 
- Small, H. J. J. o. d. (1980). Co-citation context analysis and the structure of paradigms.
- Teixeira, A. A., & Ferreira, E. J. J. o. I. M. (2013). Intellectual structure of the entrepreneurship field: a tale based on three core journals. *1*(2), 21-66.
- Tennekes, M. J. J. o. S. S. (2018). tmap: Thematic Maps in R. *84*(6), 1-39.
- Torraco, R. J. J. H. r. d. r. (2005). Writing integrative literature reviews: Guidelines and examples. *4*(3), 356-367.
- Voeth, M., Gawantka, A., & Chatzopoulou, G. J. M. Z. (2006). Impact auf die deutschsprachige Marketingforschung. *28*(1), 7-20.
- Vogel, R., & Güttel, W. H. J. I. J. o. M. R. (2013). The dynamic capability view in strategic management: A bibliometric review. *15*(4), 426-446.
- Xie, H., Zhang, Y., Wu, Z., & Lv, T. J. L. (2020). A Bibliometric Analysis on Land Degradation: Current Status, Development, and Future Directions. *9*(1), 28.
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. J. J. o. m. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *36*(2), 381-404.
- Zupic, I., & Čater, T. J. O. R. M. (2015). Bibliometric methods in management and organization. *18*(3), 429-472.