MAPPING THE INTELLECTUAL STRUCTURE OF ASSET PRICING: A BIBLIOMETRIC STUDY

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ABSTRACT. This paper presents a bibliometric analysis of research on asset pricing and identifies and highlights the most significant authors, keywords, articles, and journals based on a systematic literature review and Bibliometric analysis of 915 documents published over 33 years (1989-2022), obtained from the web of science database, to discover the noticeable landscape and research horizons in the field of asset pricing theory. This descriptive study demonstrates an upward trend in "asset pricing' papers in business and finance journals. According to the report, the United States is the leading contributor to the "asset pricing" study, followed by the Netherlands, the United Kingdom, Canada, and France. The authors, papers, and citation-based analyses show that Acharya vv; Albuquerque R, Aih, and Acciaio B are the most effective and influential asset pricing researchers, followed by Affleck Graves J and Akdeniz L. In terms of restrictions, our research is limited to the Web of Science database. Investigations from other databases could be used in future studies. We've also limited Bibliometric analysis to a few dimensions. Future research would look at networking from a different perspective. In our analysis, we limited ourselves to simply looking at scientific articles. Despite these flaws, we feel the study has research and management implications.

1. INTRODUCTION

The "asset pricing" idea is concerned with the price of assets that depend on unpredictable reimbursements. The idea assumes that a security's price and its discounted expected payoffs are equal (Cochrane, J. H 2009). The estimated payment must therefore be deducted from the interest rate demanded by buyers to calculate an item's price. It results in a negative correlation between an item's price and the rate of return. A higher (lower) discount rate is implied by a lower (higher) asset price. The most important factor in macroeconomics is the price of a financial asset, especially one that is hazardous. This crucial topic has been responded to by the field of "asset pricing" theory, which is a central theme in financial economics. The most important issue in financial economics is pricing financial assets, particularly determining exactly how much a risky financial asset is priced (Chhapra, I. U., & Kashif, M. (2019). In financial economics, asset pricing models perform a unique function. These can be applied to evaluate asset markets' informational efficacy, manage portfolios, and measure a company's cost of capital, among other scenarios. The basic objective of an asset pricing model is to identify common characteristics that appear to affect returns over a large range of stocks or assets or to describe the distribution of expected stock returns (Lalwani, V., & Chakraborty, M. (2019). "Asset pricing" theories are divided into five categories.

- "Capital asset pricing model"

- "Arbitrage pricing theory"
- "Fama-French three-factor model"
- "Carhart four-factor model"
- "Fama- French five-factor"

The brief descriptions of these models are as follows:

Capital asset pricing model: In this approach, an asset's required rate of return is linearly related to its beta value, i.e. systemic risk (Drobetz and Otto 2021). Only when markets are completely segregated does the asset's local Beta as a risk measure explain the risk-return relationship. It aids investors in understanding the risk-return relationship of securities (Khudoykulov, K.2020)

Arbitrage pricing theory: Using differential pricing theory for the same asset, arbitragers or investors gain a profit under this theory. It's known as the risk-free profit. The main goal of the investors in this case is to increase the return without increasing the amount of money invested (Salameh, H.2020)

"Fama-French Three factor model": The return on a stock in this model is generally dependent on three factors: firm size, value risk (book to market value), and market risk (excess return on the portfolio) (Khan. U.E. & Iqbal, J.2021)

Carhart four four-factor model: In this model, in addition to the three elements mentioned above, a fourth factor, the momentum factor, is included. Momentum is the speed or intensity of price changes in a security, investment, or tradeable instrument (Salameh, H.2020)

Fama French five-factor model: In addition to the three elements (firm size, value risk, and market risk), two more factors, profitability, and investment, are added to assess the return on a stock or asset (Dopke&Tegtmeier, 2018)

Literature Review

The asset pricing model has been the subject of several studies both domestically and overseas over the past few decades, and many models have been suggested and tested for empirical validity. Researchers reviewed several studies, including the following ones:

Kumar Santosh (2023) carried out a bibliometric review study and reexamined the Sharpe-Treynor-Lintner-Mossin capital asset pricing model's (CAPM) existence in the financial literature. A thorough assessment of the literature served as the study's foundation, and a variety of bibliometric approaches were utilized to conclude it. Examining the effects of the CAPM from its launch in 1972 to 2023, the study included several methodologies. To measure production and reputation, the study emphasized changes in publications as well as citations. Based on the study's findings, the financial sector should be the main focus of the CAPM's original, highly qualified empirical research publications. Researchers in a wide range of fields, including risk management, asset pricing, beta, systematic risk, value premium, and cost of capital, are being drawn to this and producing highly qualified research. The research field is still dominated by authors from the US, UK, China, and Australia, despite the growth in citations and global penetration indicated by the Scopus statistics.

Keshari, Aditya, and Gautam Amit (2022) intended to organize and highlight the evolution of asset pricing models in a global setting. According to the author, the United States of America is the nation where the greatest amount of research has been done on the subject. To assess the important aspects of the research, the keyword analysis was also examined. The most often used terms are international asset price, risk, and return. 2020 is the year with the most research articles and citations produced worldwide because of the global impact of COVID-19 and changes in market structure.

Aygoren& Balkan (2020) sought to examine the role of efficiency in capital asset pricing as well as the effects of four-factor models that include the efficiency factor on the return of

NASDAQ technology firms. It was determined that the proposed four-factor model has greater explanatory power than both the CAPM and the fama-french three component models.

Jain & Singla (2021) examined if the five-factor model with leverage and liquidity was superior to the CAPM, Fama-French three-factor model, and leverage four-factor model. The author found that the five-factor model outperformed the other models and had the highest explanatory power.

Lalwani & Chakraborty (2020) sought to assess the effectiveness of several multifactor asset pricing models in emerging and developed markets. In this article, the author used the parameters average adjusted K2 and the GRS metric to assess how well various models performed about one another. For a period of 25 years, from June 1992 to May 2017, the researcher collected data from 5 developing and 5 emerging nations. Because the stock markets in Australia, Canada, China, and the United States are all integrated, it was determined that the French five-factor model enhances pricing performance for stocks in these nations. The three-factor and four-factor models appear to be more appropriate for other nations.

Yildiz, Erzurumlu, and Kurtulus (2020) aimed to investigate which risk parameter produces risk measures that are more successful in forecasting stock returns by comparing the conventional CAPM and downside CAMP risk parameters. When it comes to explaining stock return, downside betas do better than CAPM betas, and for developing markets, both risk measure groupings do better than one another.

As a result, the current work will be of great interest to asset-pricing scholars and students. The primary domains and present dynamics of asset pricing models are identified in this paper, as well as future research prospects. To provide a summary of the study, we will examine publishing trends, prominent journals that disseminate research on the subject, eminent scholars and organizations, and nations that prioritize asset pricing theory research. Furthermore, finding a pattern of shared knowledge (and, if applicable, a network) will assist the researchers in determining where to seek additional financial or research assistance. Using themes to develop a coherent structure will aid in identifying potential research gaps in past studies. It aids in the identification of the prevalent theories, traits, context, and approaches to the theme. Finally, researchers will be able to identify future study goals by grouping and clustering similar tendencies in the literature. As a result, the project will use Bibliometrics to answer the following research questions:

RQ1. From 1989 to 2022, what are the growing trends in asset pricing models?

RQ2: Which countries, writers, publications, and organizations are the most productive?

RQ3: What are the patterns of asset pricing academics' authorship?

RQ4. What are the most common search terms in this study?

RQ5. Which of the studied papers has the highest number of citations?

RQ6. How has the interest of the researchers changed over time concerning the issue under study?

The rest of this paper is structured as follows: The data and techniques used for the current literature review are revealed in Section 2. The Bibliometric results are discussed in Section 3. Section 4 highlights the major themes and brings the study to a close by pointing out different limitations and suggesting future research areas.

2. Research methodology

Bibliometric analysis is a well-established quantitative tool for examining scholarly work publishing patterns, additionally; it is frequently employed in "library and information science" research to examine publishing patterns and trends related to the issues being studied. A systematic, repeatable method for identifying, assessing, and synthesizing extant bodies of information is to review the literature. A literature review provides the researcher with information on previous studies that have been conducted, how the existing body of knowledge is changing, and what areas still require further study. Without a full comprehension of the existing literature, conducting an extensive investigation is challenging. Therefore, a thorough,

systematic literature review is needed in management. Because they are regarded as more obvious or substantial proof, systematic literature reviews are frequently used by researchers and practitioners. To provide a comprehensive understanding of "asset pricing" theory, this research applies empirical studies in the field of "Bibliometric analysis." To determine the present research paths and the scope of future research, this study comprises a comprehensive evaluation of the body of prior literature. In this study, we followed the steps laid out in the subsections below.

Identification of appropriate search terms:

The Web of Science database was used to create a list of publications that were published in the past 33 years (1989-2022). Before using Bibliometric approaches to recognize the newest asset pricing patterns and recommend new areas for future research, we conducted a thorough literature analysis. We employed the open-source R studio for the Bibliometric analysis.

Initial search results:

We used "asset pricing" as the main "title" to search the Web of Science database. Our preliminary findings revealed 2,365 articles. We limited our results to only one document type (Article), yielding a total of 2,207 articles. We further limited our results by picking Business Finance as the subject of our suggested inquiry, and we received 915 articles as a consequence. Finally, the number of articles used for Bibliometric analysis was lowered as a result of this.

Documents:

The total information about publications retrieved from the Web of Science database is presented in Table 1. We found 915 documents, 859 of which are articles, 9 of which are book chapters, 18 of which are early access articles, and 29 of which are proceeding papers. Because business and finance are the focus of our research, these papers were culled from 194 journals in that subject. These studies employ a sum of 1,082 distinctive keywords, with the author's keywords totaling 1,827. The Web of Science database's extended keywords that are linked to the manuscript are known as Keyword Plus (ID). The literature evaluation spans 33 years (from 1989 to 2022), with an average of 40.25 citations per document. There are 1415 distinct writers involved, with 236 single-authored documents and 1179 multi-authored ones. The total number of writers in all documents, i.e.1891, is used to calculate the author's appearance. One document was written by an average of 1.55 authors. 236 of the 1415 unique authors have produced solo articles, while 1179 have collaborated.

An analysis of annual publication growth:

The study of asset pricing has long been important in the field of finance, and there is a wealth of literature on the subject. The emergence of significant theories like the CAPM (Sharpe, 1964), efficient market hypothesis (1970), ICAPM (Merton, 1973), APT (Ross, 1976), and multifactor asset pricing models, as well as the subsequent empirical evaluations, have led to an increase in the number of studies on asset pricing. Figure 1 shows the number of articles published on the subject of "asset pricing" from 1989 to 2022. The vast number of articles that have been published and the continuing rise in publications reflect the complexity and viability of asset pricing research. The current study includes 2365 papers from 194 finance and economics publications. Over the last 33 years, the number of publications has climbed at a consistent annual rate. The number of publications has substantially increased, going from one in 1989 to 58 in 2021. Though there has been an increase in the number of publications over the last decade, a sharp increase in the number (58) in 2021 suggests that asset pricing research has sufficient depth and potential. The numbers in the graph below do not indicate a saturated research stream; rather, they demonstrate an increasing interest in asset pricing research among scholars.

TABLE 1. Descriptive Statistics

Main Information About Data	
Time span	1989:2022
Sources (Journals, Books, etc)	194
Documents	915
Average years from publication	11.9
Average citations per documents	40.25
Average citations per year per doc	2.687
References	1
Document Types	
Article	859
Article; Book Chapter	9
Article; Early Access	18
Article; Proceedings Paper	29
Document Contents	
Keywords Plus (ID)	1082
Author's Keywords (DE)	1827
Authors	
Authors	1415
Author Appearances	1891
Authors of single-authored documents	236
Authors of multi-authored documents	1179
Authors Collaboration	
Single-authored documents	270
Documents per Author	0.647
Authors per Document	1.55
Co-Authors per Documents	2.07
Collaboration Index	1.83

Source: Author's Elaboration Using Biblioshiny

3. Data Analysis

Bibliometric approaches and the open software tool R is used to analyze the data. This section contains bibliometric analysis, which is divided into the following four sections: authors, journals, keywords, and countries.

Bibliometric Evaluation:

For Bibliometric analysis, our research was organized into four groups: authors, journals, keywords, and nations. For clarity, these categories are afterward divided into a large number of subcategories.

Authors
Most productive Authors:

Table 2 lists the 20 most prominent authors in the field of "asset pricing" research. These authors' articles look at asset pricing theory from a variety of angles and provide a complete overview of the field's research. These authors have produced ground-breaking theoretical work as well as empirical tests of old theories, improving asset pricing research and laying the groundwork for future research. Table 2 lists the total number of publications produced by each author, whether as a single author or in partnership, to demonstrate their contribution. The information is presented in the highest to lowest ranking of publications, starting with
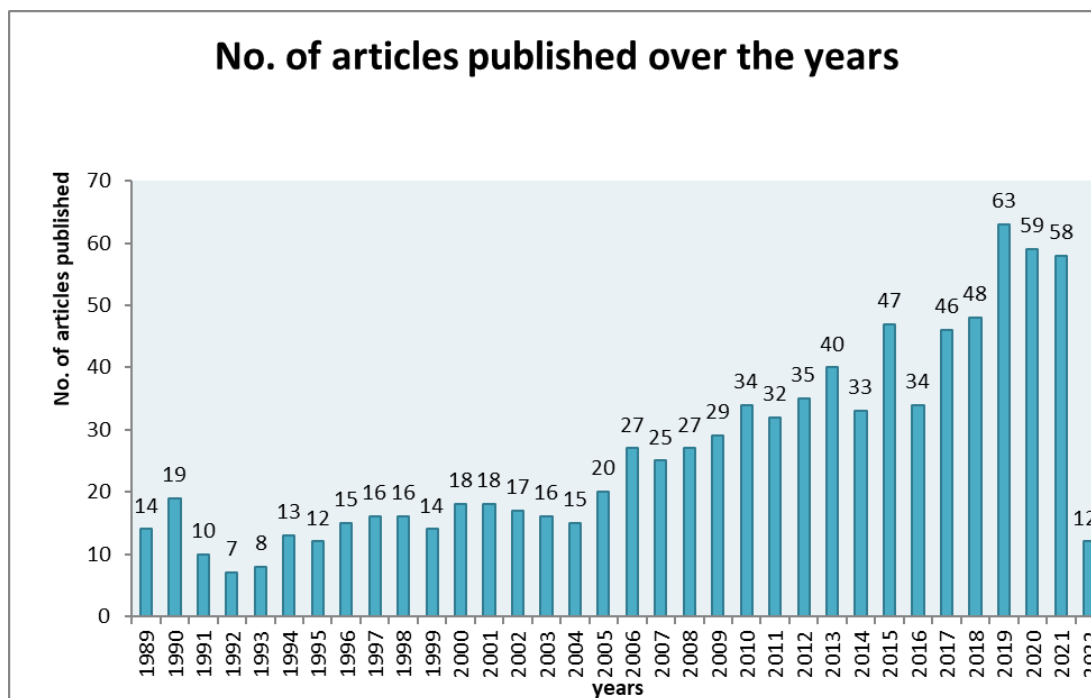
Figure 1

the author who has been published the most. The article fractionalized technique is used to give each author an equal share of the credit for a publication. This is particularly typical when a paper has several authors. A fractional count is given to each author, reflecting their relative contribution to the work. The "fractional counting" and "full counting" approaches are popular techniques that assign a portion of the publication's impact to each author or the complete impact to all writers equally.

LIJ has published the most publications (14.42) between 1989 and 2022, with 9 of them being individually authored and 5.42 being collaborative. With a total of 12.5 papers published (9 individually and 3.5 jointly), KAN R is in second position, while YANG C is in third position with a total of 10.25. (7 individually, 3.25 in jointly). Based on their contribution, the remaining authors are likewise correctly positioned in the table.

Author's Impacts:

The influence of writers in the field may also be measured using various indexes of productivity metrics; The results for the top 20 "asset pricing" study writers are displayed in Table 3. The productivity and citation effect of the authors are evaluated using the h, g, and m indexes. The H-(Hirsch) index considers the number of publications as well as the number of citations per piece. The "G-index" looks at the complete records of citations from higher-cited articles to support lower-cited papers. The H-index is shown by the "M-index", a variation of the "H-index" that has tracked the H-index yearly since its introduction. The writers' total citations are presented, and they are ranked according to highest to lowest ranking with ACHARYA VV being the most influential author, followed by ALBUQUERQUE R, AI H, and ACCIAIO B. In terms of H index ALBUQUERQUE R, AI H, AFFLECKGRAVES J, and AKDENIZ L have the highest h index as compared to the other authors in the list.

Corresponding Authors Countries:

Table 4 shows the writers' affiliations per nation. The total number of published publications, as well as information about their national cooperation, are listed below. The information

TABLE 2. Most Prominent Authors

Authors	Articles	Articles Fractionalized
LI J	9	5.42
KAN R	9	3.58
YANG C	7	3.25
ROBOTTI C	7	2.83
HOMMES C	7	2.33
FAMA EF	6	4.00
DUFFIE D	6	3.33
FRANKE R	5	3.50
HARVEY CR	5	3.00
SUBRAHMANYAM A	5	2.67
EPSTEIN LG	5	2.50
WANG H	5	2.50
YU J	5	2.50
LI B	5	2.33
ZHANG R	5	2.08
GOSPODINOV N	5	1.83
KHALAF L	5	1.83
KELLY B	5	1.70
BASU P	4	3.00
BEAULIEU MC	4	1.33

TABLE 3. Productivity Indexes to Measure the Impacts of Authors

Authors	h_index	g_index	m_index	TC	NP	PY_start
ACHARYA VV	1	1	0.056	970	1	2005
ALBUQUERQUE R	2	2	0.133	134	2	2008
AI H	2	2	0.154	76	2	2010
ACCIAIO B	1	1	0.143	73	1	2016
AFFLECKGRAVES J	2	2	0.059	60	2	1989
AKDENIZ L	2	3	0.1	29	3	2003
AHMAD F	1	1	0.143	25	1	2016
ADESI GB	1	1	0.053	24	1	2004
ADRIAN T	1	1	0.125	15	1	2015
AL JANABI MAM	1	1	0.25	9	1	2019
ALAOUZE CM	1	1	0.05	9	1	2003
AKINOLA LS	1	1	0.333	8	1	2020
AGLIARI A	1	1	0.143	8	1	2016
(LAWRENCE) HE Z	1	1	0.125	6	1	2015
AASE KK	1	1	0.043	5	1	2000
ACKERT LF	1	1	0.083	3	1	2011
AHMADU-BELLO J	1	1	0.2	2	1	2018
AKBAR M	1	1	0.143	2	1	2016
AHN S	1	1	0.125	2	1	2015
ABARA R	1	1	0.059	1	1	2006

Note: Total Citations (TC) and Number of Publications (NP) are acronyms.

in the table aids in comprehending each country's contribution to the overall research and demonstrates the level of international cooperation among experts from various nations. Based

on this, one may ascertain the readiness of the writers to collaborate as well as the nations that publish the most research on a particular topic. The table shows that the United States is the country with the most articles published (406), with 340 items published by a single country and 66 articles published by multiple countries. Only 16.26% of all papers written by American authors have been published in more than one country, which shows there is little cross-border cooperation. China, the United Kingdom, Canada, and Australia are the other leading contributors to the publications; however, their contributions appear insignificant when compared to the volume generated by the United States alone. However, when compared to the United States, the proportion of multi-country collaboration is larger. Furthermore, the data demonstrates that asset pricing research is focused in the United States, with a far higher number of publications than the rest of the world combined.

TABLE 4. Corresponding Author's Countries

Country	Articles	Freq	SCP	MCP	MCP Ratio
USA	406	0.44714	340	66	0.1626
CHINA	83	0.09141	58	25	0.3012
UNITED KINGDOM	71	0.07819	46	25	0.3521
CANADA	46	0.05066	31	15	0.3261
AUSTRALIA	33	0.03634	26	7	0.2121
GERMANY	27	0.02974	23	4	0.1481
SWITZERLAND	26	0.02863	12	14	0.5385
FRANCE	25	0.02753	16	9	0.36
NETHERLANDS	17	0.01872	9	8	0.4706
INDIA	14	0.01542	13	1	0.0714
ITALY	14	0.01542	10	4	0.2857
KOREA	14	0.01542	7	7	0.5
TURKEY	14	0.01542	8	6	0.4286
JAPAN	11	0.01211	10	1	0.0909
DENMARK	10	0.01101	6	4	0.4
SPAIN	10	0.01101	10	0	0
AUSTRIA	7	0.00771	5	2	0.2857
GREECE	6	0.00661	5	1	0.1667
NEW ZEALAND	5	0.00551	2	3	0.6
NORWAY	5	0.00551	3	2	0.4

Source: Author's Elaboration Using Biblioshiny; **Note**: The abbreviations SCP, MCP, and MCP ratio stand for Single Country Publication, Multiple Country Publication, and the proportion of Multi Country Publication in the total number of Articles.

Keywords:

Each domain of a study topic may be investigated further in extra dimensions using several methodologies and frameworks, and each subfield may be investigated further in new dimensions using a variety of methodologies and relevant approaches. As a result, literature creates some pertinent keywords that highlight the importance of field research. As a result, keyword analysis can be used to gauge the depth and scope of the research field. In a nutshell, keyword analysis highlights the importance of studying subfields and develops a connection between them. These various word clouds depict the prevalence of various research terms through time and aid in understanding their transfers to other areas of "asset pricing" research. With the aid of this knowledge, researchers can decide whether or not to pursue that particular study facet during their investigation. Figure 2 depicts the frequency of keyword occurrences; in this graph, Risk has appeared the most (284 times) in comparison to all other keywords. The frequency of all
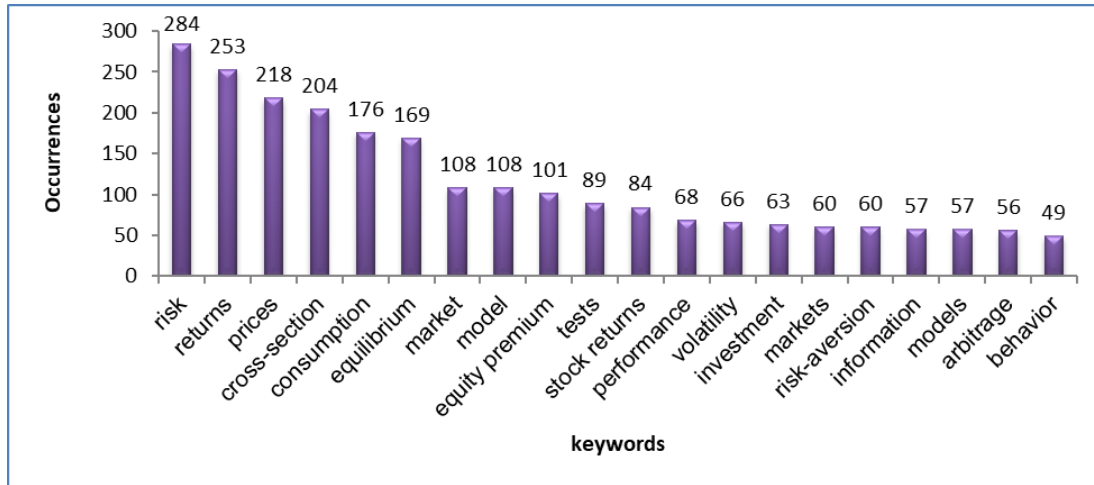
Figure 2. Keywords Occurences

keywords, such as return (253), price (218), cross-section (204), consumption (176), equilibrium (169), market (108), model (108), equity premium (101), tests (89), and stock returns (84) is also presented.

Most Frequent Words:

The following graph illustrates that the majority of the research in this area focuses on various facets of asset pricing while returning to the main issue. The font size of the keyword is displayed in this table based on its relative frequency. The font size increases as the number of occurrences increases. According to their findings, the keyword font size "cross-section" is the most frequently used. After "cross-section" Risk, return, and consumption is most frequently used. As risk is a crucial part of the valuation and in International Asset Pricing, risk acts as one of the most important criteria. The research is being conducted across the theme of risk. Other most common words are also shown in the graph i.e. size. market, stock returns, volatility, volume, momentum, arbitrage, growth, information, liquidity.

An Analysis of Factors:

Using hierarchical clustering of study subareas, a dendrogram illustrates the hierarchical link between concepts. Figure 4 shows the "asset pricing" research dendrogram, which is broken down into five main categories.

1. In the dendrogram, the first grouping of items from the left indicates a CAPM-based study topic. While other keywords, like CAPM, also relate to sub-themes connected to the idea of "single factor asset pricing," Temporal behavior, equity premium, risk aversion, and substitution are some of the variables that are also involved.

2. Uncertainty, expectations, interest rates, consumption, term structure, habit information, and long-term returns make up the second cluster of keywords. This research theme also criticizes previous work in the field for failing to account for idiosyncratic volatility in asset values.

3. The cross-section stock returns, liquidity, and market equilibrium are the third themes of this grouping. The enhanced effectiveness of cross-sectional variance in stock returns was the main area of study in this field.

4. The fourth theme of the study is the possibility of further cross-sectional impacts. The value impact, the effect of size, and the role of behavioral factors (investor attitudes) on asset pricing call into doubt the claims of "single factor asset pricing models" (single factor (Beta) alone can capture complete cross-sectional variation in stock returns).

FIGURE 3. Word Cloud

5. The multifactor analysis of asset prices, which explores premium costs for multiple cross-sectional properties of equities and develops a vulnerability link between firm prices and their many qualities, is the fourth significant problem in "asset pricing" research. It is claimed that "multifactor asset pricing models" can address market inefficiencies brought on by collusion, informational efficiency, transaction costs, and other issues with macroeconomic factors.

Keywords Co-occurrence network:
Every published publication often includes a few keywords below the abstract, exposing essential aspects of the study reported in that piece. Some of the most important keywords are utilized often in the articles. Keyword co-occurrence or the repeated occurrence of keywords together, sends vital meanings to the audience. The most common keywords used together in a study field are identified using keyword co-occurrence analysis. This co-occurrence reveals several closely connected study subareas that are highly correlated and share a common research background. This kind of research thus identifies the connectivity of one research sub-area to another. Figure 5 displays the main terms used in "asset pricing" research that frequently appear together and have existing links with one another.

Journals:
Most productive Journal:
The top 20 journals in the discipline of "Asset pricing" are shown in Table 5. The order of these journals is based on the quantity of articles they have released. To gain an indication of current research in a field, researchers frequently look to publications published in prestigious journals. In our case, we examine the quality of published research in the top journals listed below to determine current asset pricing research trends and prospects (Table 5). This table is
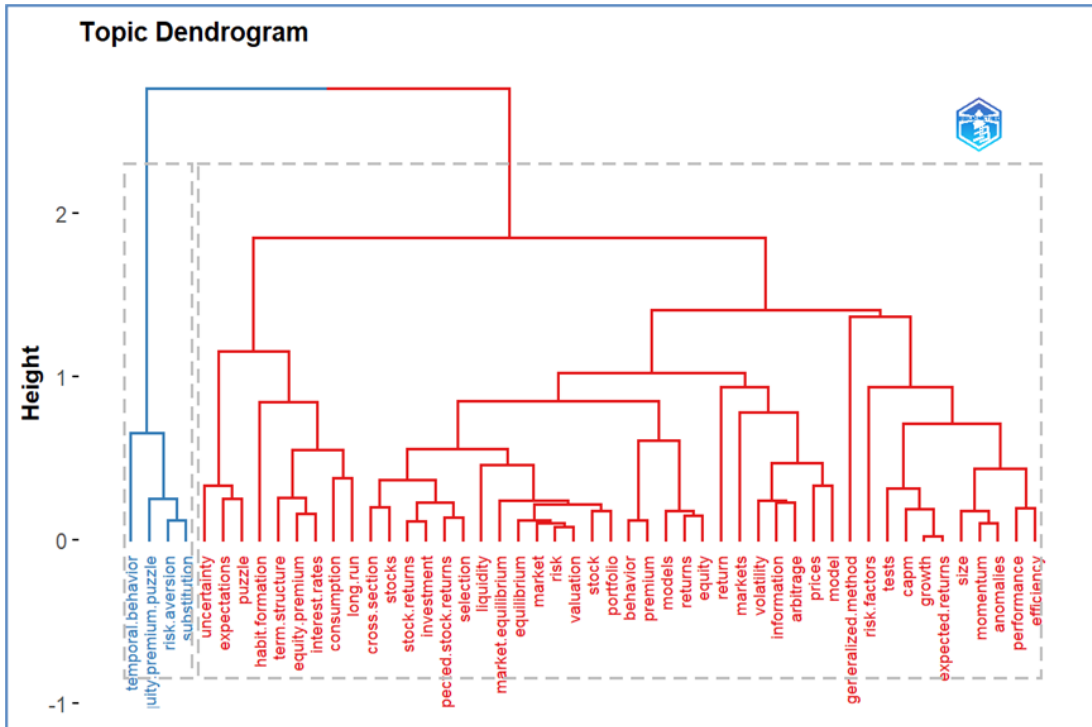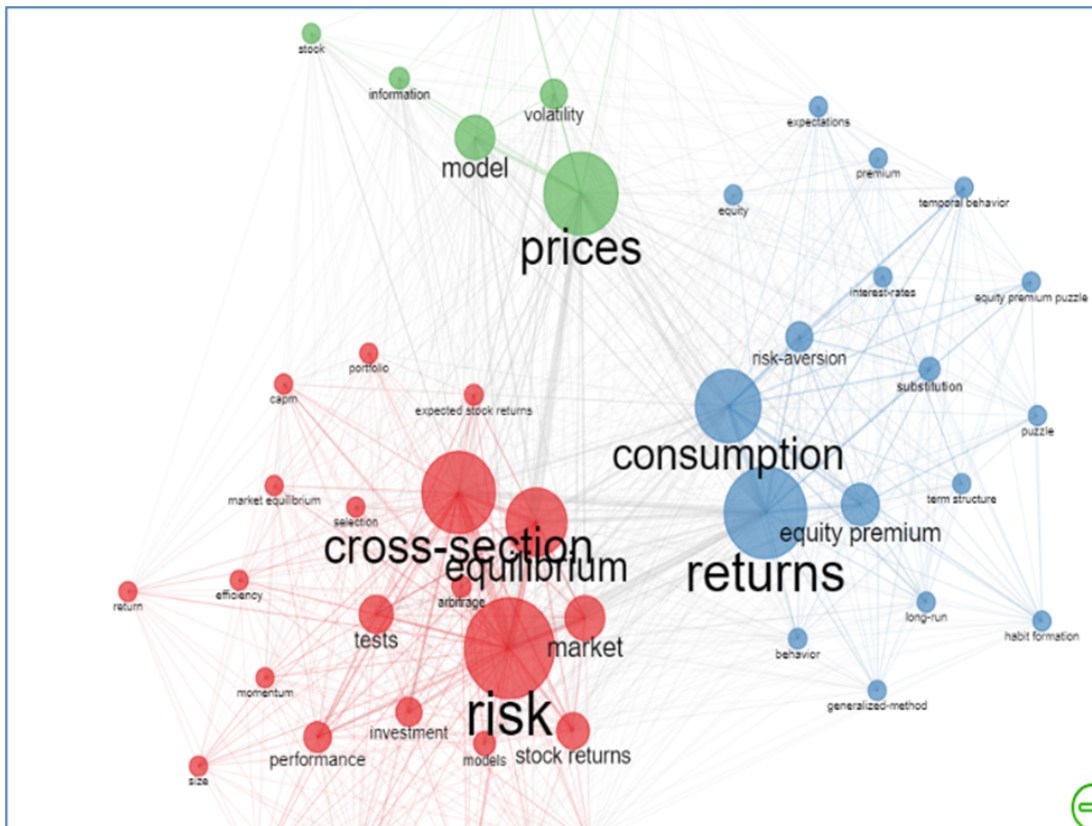
FIGURE 4. Factorial Analysis

FIGURE 5

sorted based on the total number of publications and according to this "Applied Economics" has published the most articles (12) and has received 36 total citations for these publications. "American Economic Review" is the most prestigious in "asset pricing" research, with the highest number of publications and citations. In terms of the number of articles published in this field, "Applied Economic Letters" is in third position. There are 1028 total citations in the Journal of "American Economic Review", 93 total citations in the "American Economic Journal Microeconomics", and 65 total citations in the "Abacus-A Journal of Accounting Finance and Business Studies". Many additional publications have published a large number of "asset pricing" studies and have offered a multidisciplinary perspective to this field's study.

TABLE 5. Most Productive Journals

Journals	h_index	g_index	m_index	TC	NP
APPLIED ECONOMICS	3	5	0.15	36	12
AMERICAN ECONOMIC REVIEW	9	11	0.27273	1028	11
APPLIED ECONOMICS LETTERS	4	6	0.14286	42	8
ABACUS-A JOURNAL OF ACCOUNTING FINANCE AND BUSINESS STUDIES	4	7	0.36364	65	7
ACCOUNTING AND FINANCE	3	5	0.1875	27	5
AMERICAN JOURNAL OF AGRICULTURAL ECONOMICS	2	3	0.06897	62	3
ANNUAL REVIEW OF FINANCIAL ECONOMICS, VOL 7	3	3	0.375	28	3
ANNALS OF FINANCE	2	2	0.5	4	2
ANNALS OF ECONOMICS AND FINANCE	1	1	0.16667	2	2
AMERICAN ECONOMIC JOURNAL-MICROECONOMICS	1	1	0.09091	93	1
ANNUAL REVIEW OF FINANCIAL ECONOMICS, VOL 8	1	1	0.14286	45	1
ANNUAL REVIEW OF FINANCIAL ECONOMICS, VOL 3	1	1	0.08333	38	1
ANNUAL REVIEW OF FINANCIAL ECONOMICS, VOL 4	1	1	0.09091	21	1
ANNUAL REVIEW OF FINANCIAL ECONOMICS, VOL 5	1	1	0.1	21	1
ANNUAL REVIEW OF FINANCIAL ECONOMICS, VOL 10	1	1	0.2	20	1
ANNUAL REVIEW OF FINANCIAL ECONOMICS, VOL 2	1	1	0.07692	19	1
AMERICAN ECONOMIC JOURNAL-MACROECONOMICS	1	1	0.125	11	1
ACCOUNTING RESEARCH JOURNAL	1	1	0.16667	2	1
ARGUMENTA ECONOMIC	1	1	0.25	1	1
ASIA-PACIFIC FINANCIAL MARKETS	1	1	0.2	1	1

Source: Author's Elaboration Using Biblioshiny; Note: Total Citations (TC) and Number of Publications (NP) are acronyms for references.

Three Field Plot:

In terms of asset pricing research, Figure 6 depicts the relationships between top authors, main keywords, and leading publications. As a result, the three-field plot depicts an intriguing link between the three key study sites. The image displays the top authors in the field, their most popular search terms, and the top journals where their papers have appeared. Academics could find notable "asset pricing" authors to collaborate with using the data provided by the three-field plot. Additionally, significant research subfields that merit further study can be
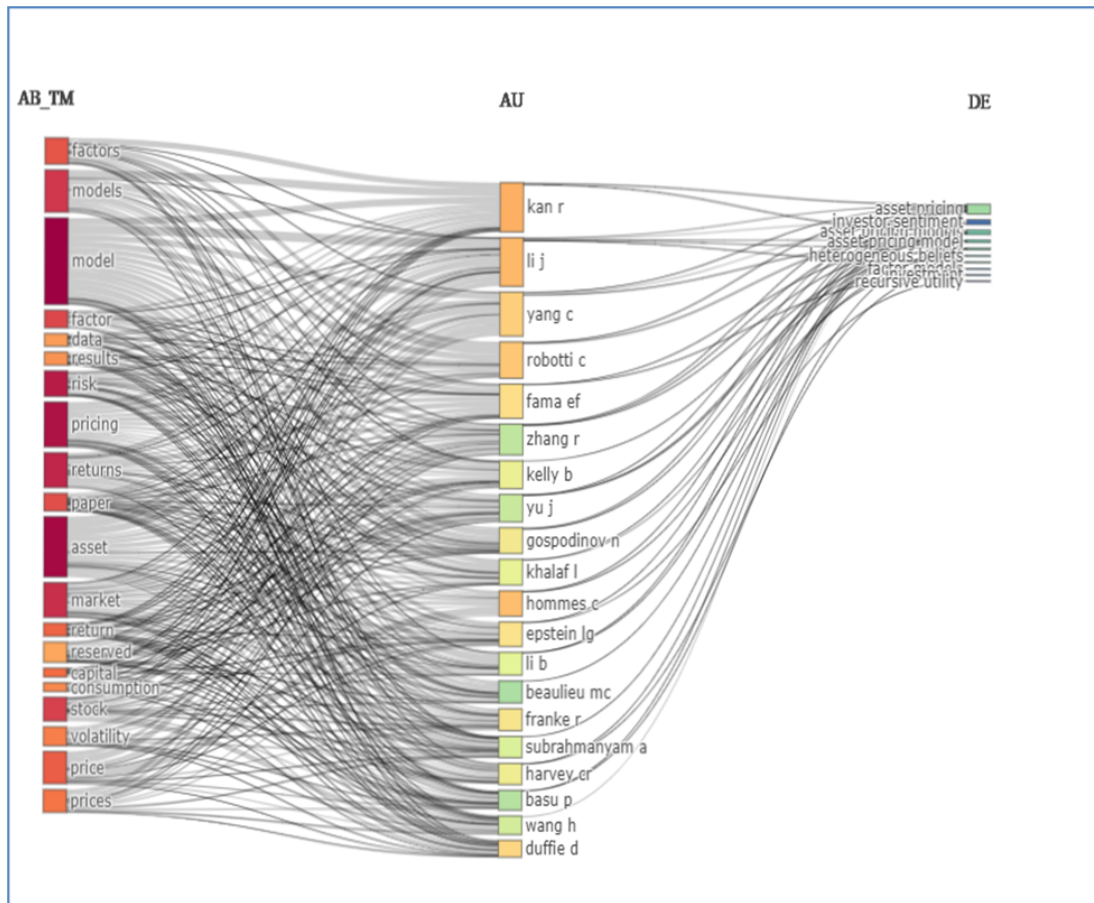
FIGURE 6. Three Field Plot

located. Furthermore, depending on the details related to the acceptability established using the three-field plot, authors can locate or contact more qualified publications for publication.

Countries and Structures:
Most productive Countries:
Across the countries, there is an uneven production of research; some countries actively participate, while others remain passive. As a result, pinpointing the countries where research is focused is critical. The information is summarized in Table 6 along with the nations that publish the most "asset pricing' research and receive the most citations. The intensity of publications, the overall number of citations, and the typical number of article citations are all displayed in this table by country. According to Table 6's statistics, the United States has published more articles than any other nation in the table, with more publications to its credit. US academic publications receive more than three times as many citations as all other articles put together. Additionally, the United States has the highest average in the table for the number of citations per piece. A higher average article citation count suggests that publications are well-written and contribute to the corpus of knowledge. It may be claimed that as a result, the United States is the world's most active and highly-regarded contributor to "asset pricing' research. The Netherlands, the United Kingdom, Canada, and France are the other major providers; however, their research participation is low in comparison to the United States.

TABLE 6. Country Scientific Production

Country	Total Citations	Average Article Citations
USA	28604	70.45
NETHERLANDS	1477	86.88
UNITED KINGDOM	1270	17.89
CANADA	1090	23.70
FRANCE	947	37.88
CHINA	696	8.39
SWITZERLAND	403	15.50
AUSTRALIA	378	11.45
AUSTRIA	276	39.43
GERMANY	270	10.00
MEXICO	207	103.50
NORWAY	178	35.60
SINGAPORE	161	32.20
ITALY	81	5.79
TURKEY	58	4.14
KOREA	47	3.36
IRELAND	36	9.00
JAPAN	35	3.18
BRAZIL	34	8.50
INDIA	32	2.29

4. CONCLUSION, LIMITATIONS AND SUGGESTIONS

The idea of "asset pricing" is a key topic of financial research with applications in numerous facets of finance and investing. Asset pricing theory is a well-studied area with an increasing number of publications, but the recent flurry of studies (2021) indicates its depth and potential. As a result, this study's objectives are to investigate the development of asset pricing theory and to pinpoint potential directions for further study in the subject. The study identifies and highlights the most significant authors, keywords, articles, and journals based on a systematic literature review and Bibliometric analysis of 915 documents published over 33 years (1989-2022), obtained from the Web of Science database, to discover the noticeable landscape and research horizons in the field of asset pricing theory. This descriptive study demonstrates an upward trend in "asset pricing' papers in business and finance journals. According to the report, the United States is the leading contributor to the "asset pricing" study, followed by the Netherlands, the United Kingdom, Canada, and France. The authors, papers, and citation-based analyses show that ACHARYA VV, ALBUQUERQUE R, AI H and ACCIAIO B are the most effective and influential asset pricing researchers, followed by ALBUQUERQUE R, AI H, AFFLECKGRAVES J and AKDENIZ L. Because these academics and the organizations they belong to are from rich countries, the findings imply that contemporary "asset pricing" research is primarily carried out in developed nations. Cross-section, risk, return, consumption, market, stock returns, volatility, volume, momentum, arbitrage, growth, information, liquidity, size, generalized –method, and risk factors are some of the main characteristics of "asset pricing" research, according to a keyword-based analysis. Keyword mapping and co-occurrence networks were also used to identify dominating topics in the literature. Future researchers and scholars will be greatly impacted by these results. It may be possible for them to assess the integrity of "asset pricing research" and find new avenues to follow that are anticipated to emerge by establishing connections between the many subfields found in this study. In the relevant sections of the paper, the study also describes several existing asset pricing studies, which could be useful

to future scholars. The results could also help administrators devise an advantageous plan for allocating resources in industries where the asset price is showing a positive trend. Researchers at various stages of their careers will likely find the information on this page beneficial, from doctoral students (who want a general understanding of "asset pricing" to guide their work) to seasoned academics (who seek out active research opportunities and publish authoritative literature opinions). Our research demonstrates that while wealthier nations have already made significant progress in this area, emerging regions still receive insufficient attention. Studying "asset pricing" research in developing nations will thereby highlight fresh applications of the theory in entirely fresh contexts, contributing to the body of knowledge. In terms of restrictions, our research was limited to the Web of Science database. Investigations from other databases could be used in future studies. We've also limited Bibliometric analysis to a few dimensions. Future research could look at networking from a different perspective. In our analysis, we limited ourselves to simply looking at scientific articles. Despite these flaws, we feel the study has research and management implications and will contribute to the existing literature on the subject.

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