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Portfolio Management And Investment Performance (Communication Performance, Corporate Social Responsibility (CSR) And Stock Performance) Based On Bibliometric Analysis Of Scopus Data (1971-2022)

Manajemen Portofolio dan Kinerja Investasi (kinerja komunikasi, tanggung jawab social perusahaan (CSR) dan kinerja saham) berdasarkan analisis bibliometrik Data Scopus (1971-2022)

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ABSTRACT
The aim of this paper is to determine the relationship between portfolio management and investment performance (communication performance, corporate social responsibility (CSR) and stock performance). Design/methodology/approach – To do this, Vosviewer and bibliometric analysis were used. The search was carried out in the Scopus database using different keywords, namely portfolio management and investment performance. Total documents 1774 and search keywords focus on portfolio management and investment performance (performance communication, corporate social responsibility (CSR) and stock performance). Descriptive analysis includes network visualization, overlay visualization, density visualization, relevant information, influential authors, annual scientific production, and the most popular words used, using the Biblioshiny application, followed by content analysis on the topic of portfolio management and investment performance. Findings: most influential studies were conducted by only a few researchers. Publications in the field began to increase during 1971–2023. Content analysis revealed several aspects that highlight the topic of portfolio management and investment performance (communication performance, corporate social responsibility (CSR), stock performance, financial performance). Research limitations/implications – This paper discusses portfolio management and investment performance with dynamic analysis to help understand the evolution of portfolio management in relation to investment performance. However, this study has several limitations. First, data is collected from Scopus, covering all journals, so papers may cover general themes. Furthermore, this research needs to be processed through documents so that documents are filtered according to the specific theme to be researched. Practical implications – This research has an important role for managers and companies, and also contributes to increasing understanding of the role of portfolio management and investment performance. Originality/value – This paper provides a significant contribution for scholars, especially for those interested in issues in the field of management, and for managers it can be enlightening to be able to concentrate on improving portfolio management to improve investment performance (performance communication, responsibility corporate social responsibility (CSR) and stock performance) in their companies.

Keywords: *Portfolio Management, Investment Performance, Communication Performance, Corporate Social Responsibility (CSR), , Scopus, bibliometric analysis, content analysis, network analysis.*

ABSTRAK
Tujuan dari penelitian ini adalah untuk mengetahui hubungan antara manajemen portofolio dan kinerja investasi (kinerja komunikasi, tanggung jawab sosial perusahaan (CSR) dan kinerja saham). Desain/metodologi/pendekatan - Untuk melakukan hal ini, Vosviewer dan analisis bibliometrik digunakan. Pencarian dilakukan di database Scopus dengan menggunakan kata kunci yang berbeda, yaitu manajemen portofolio dan kinerja investasi. Total dokumen yang ditemukan sebanyak 1774 dan kata kunci pencarian berfokus pada manajemen portofolio dan kinerja investasi (komunikasi kinerja, tanggung jawab sosial perusahaan (CSR) dan kinerja saham). Analisis deskriptif meliputi visualisasi jaringan, visualisasi overlay, visualisasi densitas, informasi yang relevan, penulis yang berpengaruh, produksi ilmiah tahunan, dan kata-kata yang paling populer digunakan, dengan menggunakan aplikasi Biblioshiny, diikuti dengan analisis konten dengan topik manajemen portofolio dan kinerja investasi. Temuan: sebagian besar studi berpengaruh dilakukan oleh hanya beberapa peneliti. Publikasi di bidang ini mulai meningkat selama tahun 1971-2023. Analisis konten mengungkapkan beberapa aspek yang menyoroti topik manajemen portofolio dan kinerja investasi (kinerja komunikasi, tanggung jawab sosial perusahaan (CSR), kinerja saham, kinerja keuangan). Keterbatasan/implikasi penelitian - Penelitian ini membahas manajemen portofolio dan kinerja investasi dengan analisis dinamis untuk membantu memahami evolusi manajemen

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portofolio dalam kaitannya dengan kinerja investasi. Namun, penelitian ini memiliki beberapa keterbatasan. Pertama, data dikumpulkan dari Scopus, yang mencakup semua jurnal, sehingga makalah dapat mencakup tema-tema umum. Lebih lanjut, penelitian ini perlu diproses melalui dokumen sehingga dokumen disaring sesuai dengan tema spesifik yang akan diteliti. Implikasi praktis - Penelitian ini memiliki peran penting bagi para manajer dan perusahaan, dan juga berkontribusi dalam meningkatkan pemahaman tentang peran manajemen portofolio dan kinerja investasi. Orisinalitas/nilai - Penelitian ini memberikan kontribusi yang signifikan bagi para akademisi, terutama bagi mereka yang tertarik dengan isu-isu di bidang manajemen, dan bagi para manajer dapat memberikan pencerahan untuk dapat berkonsentrasi dalam meningkatkan manajemen portofolio untuk meningkatkan kinerja investasi (komunikasi kinerja, tanggung jawab tanggung jawab sosial perusahaan (CSR) dan kinerja saham) di perusahaan mereka.
Kata Kunci: Manajemen Portofolio, Kinerja Investasi, Kinerja Komunikasi, Tanggung Jawab Sosial Perusahaan (CSR), Scopus, Analisis Bibliometrik, Analisis Isi, Analisis Jaringan.

1. Introduction

Portfolio management theory describes the risks and returns resulting from combinations of individual assets. The main goal of this theory is to identify efficient combinations of assets. Here, efficiency means the highest expected rate of return on investment for a given level of risk. The main starting point for portfolio theory requires the assumption that investors are risk averse. This means that they will not consider a portfolio with more risk unless it is accompanied by a higher expected rate of return.

Modern portfolio theory is largely defined by the work of Harry Markowitz (1927) in a series of articles published in the late 1950s. Portfolio theory integrates the process of efficient portfolio formation with the pricing of individual assets. This explains that some sources of risk associated with individual assets can be eliminated, or diversified, by holding the right combination of assets.

Several expert surveys show that a company's success indicators have a strong positive correlation with portfolio management. Success is closely related to portfolio management maturity. In forming a portfolio, there are many possible portfolios that are unlimited, so investors must be able to determine which portfolio to choose. Basically, portfolio investment is capital investment made by investors through the capital market, either in the form of shares or debt securities such as bonds. Investment management is professional management that manages various securities or securities such as shares, bonds and other assets such as property with the aim of achieving profitable investment targets for investors. For this reason, investors try to maximize expected returns with a certain level of risk. But not only that, various stakeholders react to corporate social responsibility (CSR) communication companies in various ways, not only by purchasing (or rejecting) products or services (Becker-Olsen et al., 2006) and looking for work but also investing, called Socially Responsible Investment (SRI) or ethical investment.

Given the growing importance of SRI Investments for portfolio managers, academic and non-academic researchers are expanding their attention to the following questions: Is there a difference between the return/risk of SRI and non-SRI portfolios, and what is the return/risk of SRI and non-SRI portfolios? The SRI? portfolio varies in the short term and long term? These empirical questions have been vigorously researched, and there is a lack of consensus that empirical studies continue to draw. Despite inconclusive evidence on the question: Can companies do well while doing good? there is an unprecedented increase in demand from companies to be socially, morally and environmentally responsible. Eduardo et al., (2014) found that SRI portfolios are less risky than conventional investments due to lower environmental risks, disasters, recovery costs, or penalties associated with violating environmental regulations, among others. Edmans (2011) examines the relationship

between employee satisfaction and long-term stock returns using the "100 Best Companies to Work For in America" and reports an alpha value of 3.5% and Statman and Glushkov (2009) also find that stocks with high KLD scores significantly outperform stocks with low KLD scores using several model factors.

Derwall et al. (2005) report that the most environmentally friendly companies significantly outperform their least environmentally friendly counterparts by about 6% per year after controlling for differences in risk, investment style, and sector exposure. Empirical evidence also seems to suggest that CSR performance is more likely to influence corporate financial performance in countries that are more stakeholder oriented (Dhaliwal et al., 2012; Van by Laan Smith et al., 2005; Lee, 2007). Our main motivation is to examine the impact of CSR communication on stock returns for the first time. We argue that CSR communication will influence stock returns due to the scope of social and environmental issues, and the level of stakeholder inclusivity, that is, how stakeholders are informed, responded to, and involved in strategic CSR management. We hypothesize that firms assigned to SRI portfolios characterized as using a defensive CSR communication approach have higher positive excess (lower) stock returns than firms assigned to SRI portfolios characterized as using a proactive CSR communication approach. As we explain below, CSR reporting rates lag behind their advanced counterparts, and it is possible that this lagged national-level effect will also emerge in the time-varying relationship between CSR performance and firm ratings.

Our study is valuable in addition to knowing the extent of research in the field of portfolio management and investment performance, this research can also be used for scholars in conducting further research. Additionally, we examine markets that, although small, are developed economies and have findings that differ from developed markets that have been studied at length such as the US. CSR reporting in New Zealand is extraordinarily low and lags behind other countries (SBC, 2013; Collins et al., 2010). KPMG's (2011) international survey on corporate responsibility reports that companies in New Zealand are 'starting behind' many of their peers in OECD countries. CSR reporting practices are too expensive for NZ businesses, most of which are smaller, lagging behind other international best practices in CSR reporting (Orlitzky, 2007). In March 2014, the New Zealand government introduced the Environmental Reporting Bill in its parliament with the aim of creating a national environmental reporting system. Empirical evidence shows that companies with high CSR ratings attract more institutional investors than companies with low CSR ratings. Institutional investors are willing to invest much higher amounts than otherwise in companies that undertake CSR reporting. Thus, our research will be especially useful for institutional investors looking for smaller developed markets to include in their SRI portfolios. We believe that our findings will fill a significant gap in our knowledge about SRI portfolio management in smaller economies.

Using a robust multi-factor analytical framework, we find that relatively under-analyzed SRI landscapes increase the likelihood of discovering unexploited information defensive CSR communication strategies of small firms. Interestingly, stakeholder inclusivity embedded in proactive CSR communication strategies does not result in differences in performance advantages to investors. We find that portfolios referred to as SRS portfolios composed of stocks that exhibit a relatively less proactive approach to social and environmental concern outperform portfolios of stocks composed of companies that have a relatively proactive approach to stakeholder engagement referred to as SVS portfolios.

2. Literature Review

Jagd (2015) claims that CSR can ensure more stable stock prices because CSR reporting creates a form of "insurance," such that any negative impact on stock prices. CSR reports give

investors greater insight into a company's risk profile, causing investors to respond less strongly to negative events.

A positive impact can be explained by the fact that the integration of legitimate stakeholder interests can create sustainable growth and generate higher long-term returns for investors. They examine firm CSR strength and attention separately, and report that analyst following does not significantly influence a firm's CSR strength, but CSR awareness activities decrease as firms have more analyst following. The KLD ranking criteria also use most of these categories to determine CSR strengths, weaknesses, both, or none. As identified by empirical studies all social and environmental objectives are not always aligned with the financial objectives of a particular company social and environmental screens have an impact on stock returns than others, some positive and some negative. Therefore, we also expect that the dimensions will have different impacts on the ex-post performance of SRI portfolios.

Stakeholder agency refers to the number and breadth of stakeholder groups whose interests a company has taken action on as documented in their reports. Themes and stakeholder groups were coded using content analysis to clearly distinguish low, medium and high levels of stakeholder involvement and stakeholder agency.

The stakeholder response strategy (hereinafter referred to as SRS), is based on a two-way asymmetric communication model. As per this strategy, companies ask stakeholders questions within a framework that primarily invites the answers they want to hear. The main idea is to keep stakeholders assured that the company is ethical and socially responsible and responds to their needs. Due to the heterogeneous utility functions of market participants, CSR communication reduces asymmetric information for investors and their ability to evaluate new CSR information tends to reflect their current perceptions of the company. SRS is also a kind of evaluation tool to measure whether a particular communications initiative has improved the perception of shareholders and potential investors. This creates some form of “insurance” effect, that is, doing the right thing, improves the company's reputation and strengthens legitimacy. Such an “insurance effect” reduces the dampening effect of any bad news affecting the entire industry but protects high CSR performers, i.e., avoids the company going wrong. Thus, we argue that the SRS strategy will provide investors with higher returns than SIS.

Consequently, an increase in optimistic recommendations leads to an increase in investor demand, and thus a high rating of CSR activities will lead to higher stock returns. However, when a company achieves a higher CSR ranking, there may be only a very marginal effect from taking further CSR initiatives.

A large proportion of quantitative research uses three investment performances, namely communication performance, corporate social responsibility (CSR), and stock performance to form a competing value framework (for example, communication performance, corporate social responsibility (CSR), and stock performance). With this trend, the field has witnessed an evolving framework. Through this research, we suggest that this relationship can be better understood by conducting a bibliometric analysis that applies portfolio management to investment performance. Additionally, our work is motivated by the dearth of bibliometric reviews that expand on the topic and correlate investment performance at the portfolio management level. This paper contributes to the existing literature by answering the following research questions:

1. RQ1. How is the literature on portfolio management and investment performance (communication performance, corporate social responsibility (CSR), and stock performance) structured?

2. RQ2. How has the relationship between Portfolio Management - Investment Performance (communication performance, corporate social responsibility (CSR) and stock performance) developed over time with each other in the literature?

To answer the stated research questions, we used the Bibliometrix R package. For the first research question, we used bibliometric citation analysis that will help scholars to follow up on emerging research related to top contributing journals, key research topics, and most influential authors. As for the second research question, we rely on mapping techniques to obtain a structured picture that shows how the researchers have built.

Our research is structured as follows. In Section 3, we present the methodological approach followed and the bibliometric tools used. Then, based on the findings, we detail a critical analysis using the Bibliometrix R tool. Section 4 provides a content analysis to address the area. At the end of the study, conclusions and future research directions are presented.

3. Research Methods

This research aims to determine research trends in portfolio management and investment perfomance that have been searched for on Scopus and then analyze the data on Vosviewer and bibliometrics. In fact, there are indeed many types of literature review techniques carried out in the field of sustainability, namely systematic literature reviews, meta-analysis, bibliometric analysis, etc. (Maditati et al., 2018). Scholars' reasons for conducting bibliometric analysis are to identify the knowledge base in a particular topic, to examine its research front and to map and generate a network structure of the scientific community interested in the topic (Aria and Cuccurullo, 2017). Applying bibliometric techniques and network analysis to 46 documents published over the last 19 years through five phases presented in Figure 1 inspired by Aria and Cuccurullo (2017).

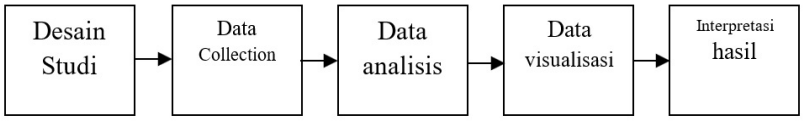

Figure 1 Science mapping workflow

Sumber : Aria dan Cuccurullo (2017)

Data collection

Data collection is carried out by determining the database that contains the input data. Our sources are bibliographic records from the Scopus database, which have been considered reliable previously, for example Fahimnia et al., 2015, Seuring and Muller, 2008; Tseng et al., 2019. Scopus developed by Elsevier BV Company, USA is the largest database of scientific literature containing more than 22,000 high-impact scientific titles and studies from international publishers (Elsevier.Com). It was chosen for this research because it includes consistent document storage and further features such as countries of all authors, citations per document and further information relevant in terms of quality and quantity for the research.

To query a database, we must select appropriate search terms. Our intended contribution describes portfolio management and investment performance that have been found relevant in previous literature. To collect these articles, we used a combination of keywords such as combined with the search terms “management” and “portfolio” or “performance” and “investment”. After collecting the data, filtering of the results was considered. Scopus is a large database covering thousands of journals, which requires filtering of results.

Data Analysis

After the Scopus data was obtained, the data was analyzed using Vosviewer. The next analysis uses bibliometric analysis, which according to Ellegaard and Wallin (2015) "provides quantitative analysis of written publications". This analysis benefits from a number of statistical software tools, which make bibliometric studies easier to carry out, for example SciMAT (2011), BibExcel (Persson et al., 2009), CiteSpace (2004), HistCite (2004), Publish or Perish (2010), etc. processing publication data. The bibliometrix package is “an open source tool for carrying out comprehensive science mapping analyzes of scientific literature” (Aria and Cuccurullo, 2017), which allows conducting comprehensive quantitative research in Scientometrics and Bibliometrics. Using Rstudio v.3.6.1 software programmed in R and accurate to import bibliographic data from several sources including WoS Scopus and Clarivate Analytics. The relevant role of R and its packages has been tested in a wide scientific field. R is distributed and archived by the CRAN network project (https://cran.r-project.org/). The Biblioshiny Web Application included in the bibliometrix package is exploited in this paper due to its ease of use following the instructions provided on the website (www.bibliometrix.org/biblioshiny/). The software used in this research is freely accessible and can be used by anyone (especially prospective undergraduates) to determine current trends and gaps in published literature and databases. The advantage of using free access tools such as Mendeley and VOSviewer is that it allows grouping publications without advanced computer skills or in-depth knowledge of grouping techniques. The Biblioshiny application is designed with an easy-to-handle interface, first of all helping to display bibliographic data frames and main data in tables. Second, to perform analytics and graphs for three-level metrics: these are source, author, and document. It is also organized into three knowledge structures: Conceptual structure using network analysis, factorial analysis and thematic mapping techniques, etc., Intellectual structure using network analysis techniques and histographic techniques and social structure using collaboration network techniques. The tool has recently been used by other scholars in the field of humanitarian supply chains, for example Fosso Wamba (2020) and sustainable land use and management, for example Xie et al. (2020).

4. Results

Section 4 presents the results obtained from the analysis on Vosviewer and bibliometrics segmented into two parts. Descriptive analysis which includes network visualization, overlay visualization, density visualization, main information about portfolio management journals and investment performance, influential authors, journal productivity from the start to the present, leading journals , document sources, most cited documents, most popular words used, and content analysis based on keyword groupings. Preliminary descriptive analysis was carried out by showing research in the field at an early stage. Descriptive analysis aims to discuss network visualization, overlay visualization, density visualization, main information regarding portfolio management and investment performance journals, influential authors, journal productivity from the beginning to the present, leading journals , source documents, most cited documents, most popular words used in titles and keywords, contents and bibliography. Part of the aim of this project was to conduct a broad review of the entire discipline. To do this, we need to include all types of documents.

Network Visualization

Data analysis with Vosviewer was carried out using the co-occurrence analysis type and full calculation method, the unit data which was analyzed for all keywords (with a minimum

number of occurrences of a keyword: 10) obtained the following results: In Figure 4.1 items are represented by their labels and by default also by circles. The size of an item's label and circle is determined by how often the item appears in the study, the more frequently, the larger the label and circle. For some items, labels may not be displayed. This is done to avoid overlapping labels. The color of an item is determined by the cluster to which the item belongs. Lines between items represent links. By default, at most 1000 rows are displayed, representing the 1000 strongest links between items. In general, the closer two journals are located to each other, the stronger their association. From Figure 4.1 it is known that the processed data produces 6 clusters, namely: the first cluster is red with a total of 65 items, the second cluster is green with total of 50 items, the third cluster is blue with total of 42 items, the fourth cluster is yellow with total of 40 items, the fifth cluster is purple with total of 13 items, and the sixth cluster is light blue with a total of 13 items. Portfolio management is in the 4th yellow cluster with a fairly visible (large) circle, indicating that portfolio management often appears in research, while investment performance is in the 1st cluster and rarely appears in research, but is present (in network visualization it is not visible because of the label and small circle).

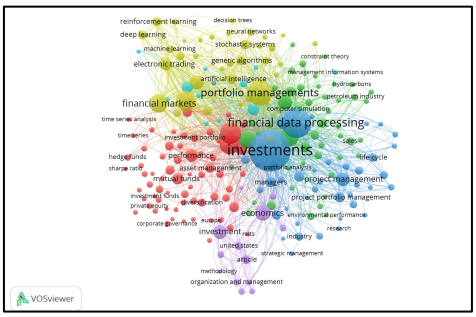

Figure 2. Network Visualization

Overlay Visualization

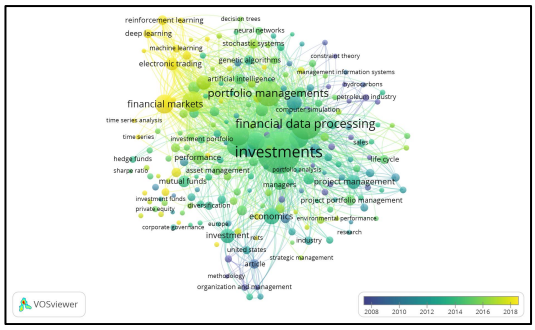

Figure 3. Overlay Visualization

In Figure 3, the overlay visualization is identical to the network visualization, but the difference is in color, namely according to the year the item appeared in the research. We can see that the color of the item is dark blue indicating that the item was researched in 2008, while the most recent research, namely 2018, is marked with yellow. In this research, portfolio management was mostly researched in 2016, and investment performance was mostly researched in 2012.

Density visualization

In Figure 4 there are two variants of density visualization. We refer to Van Eck and

Waltman (2010) for a technical discussion of implementing density visualization. In density visualization, items are displayed by their labels in a similar form, as in network visualization and overlay visualization. Each point in the density visualization has a color that indicates the density of the item at that point. By default, colors range from blue to green to yellow. The more frequently an item appears in the study, the closer the dot color is to yellow. The less frequently the item appears in the study, the closer the dot color is to blue. In the figure, it is known that management portfolio is an item that appears quite often in research, as seen in the item density close to green to yellow, while the investment performance item is not visible, indicating that this item rarely appears in research.

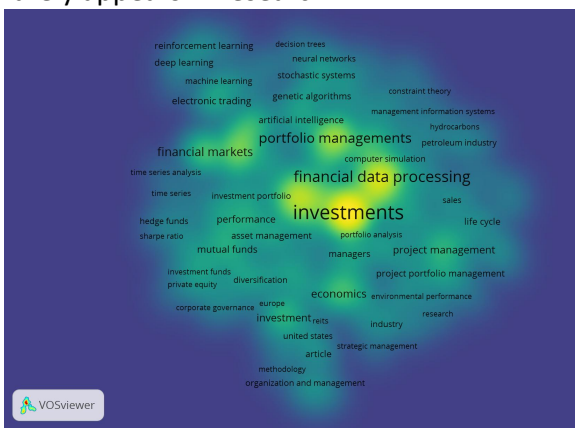

Figure 4. Density Visualization

Main Information

Next, data analysis was carried out using bibliometrics based on the Scopus data that had been obtained. The main information obtained is as follows:

Table 1. Main Information

Keterangan	Hasil
INFORMASI UTAMA TENTANG DATA	
Rentang waktu	**1971:2023**
Sumber (Jurnal, Buku, dll)	**990**
Dokumen	**1774**
% Tingkat Pertumbuhan Tahunan	**0**
Usia Rata-Rata Dokumen	**8.36**
Kutipan rata-rata per dokumen	**13.74**
Referensi	**60171**
ISI DOKUMEN	
Kata Kunci Ditambah (ID)	**5956**
Kata Kunci Penulis (DE)	**4034**
PENULIS	
Penulis	**3854**
Penulis dokumen dengan satu penulis	**318**
KERJASAMA PENULIS	
Dokumen dengan satu penulis	**374**
Rekan Penulis per Dokumen	**2.56**

% kepenulisan bersama internasional	**0**
JENIS DOKUMEN	
Artikel	**1175**
Buku	**30**
Bab buku	**99**
konferensi makalah	**390**
konferensi bab buku	**24**
tajuk rencana	**1**
Cetakan	**1**
Catatan	**2**
Kesimpulan	**1**
Tinjauan	**48**
survey singkat	**3**

This main information table explains the development of portfolio management and investment performance as reviewed from scientific publications on scopus.id. In the table below, it is explained that there is main information about data, document type, document content, author, and author collaboration. The main information regarding data on the development of portfolio management in scientific publications is contained in the time period 1971 – 2023 which produces 1774 documents, the average age of documents is 8.36, the average citation of documents is 13.74, and there are 60,171 references. and has two document contents such as plus keywords (ID) and author keywords (DE). There are two types of authors and 3 types of collaborative authors. This data comes from 10 types of documents, namely articles, books, book chapters, conference papers, conference book chapters, editorials, printouts, notes, conclusions, reviews and short surveys.

Annual Scientific Production

The paper on portfolio management – investment performance was first published in 1971, then in 1972 and 1973 respectively, 1 journal was published. Until 1980, no journals were found. In short, the first period of the graph which ranges between 2001 and 2003 shows steady progress, there are 32 papers published, and continues to grow until 2021 with 171 papers, recorded in 2022 there are 153 papers published, and for 2023 1 paper has been registered which will be published regarding portfolio management on stock performance, namely share price volatility.

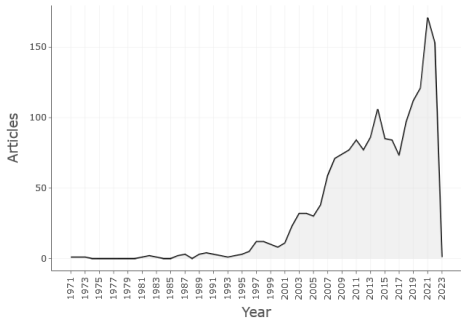

Figure 5. Annual Scientific Production

Most Relevan Source

In this section it is explained that there is the most relevant source regarding scientific

publications on portfolio management - investment performance. Researchers took data from 29 sources that were most relevant to the data that had been analyzed by the biblioshiny web interface. It was explained that the most relevant source which had the most articles was the Journal of Portfolio Management and Managerial Finance with 29 articles. Then followed by the European Journal of Operational Research with a total of 27 articles.

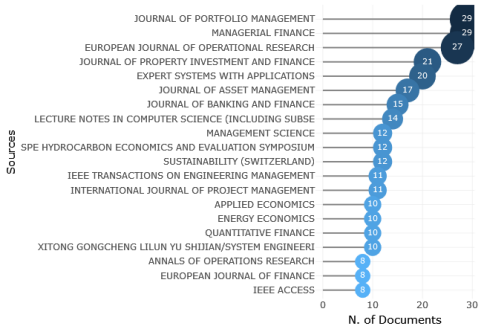

Figure 6. Most Relevant Sources

Most Relevant Authors

It is explained in Figure 7 that the most relevant author who was ranked first was that the author's name was not available with 34 articles. Next was Gallagher DR with 12 articles, Wang X with 10 articles, Li J and Wang J with 8 articles, Lee S and Li Z with 7 articles, Kock A, Su J, and Zhang W with 6 articles.

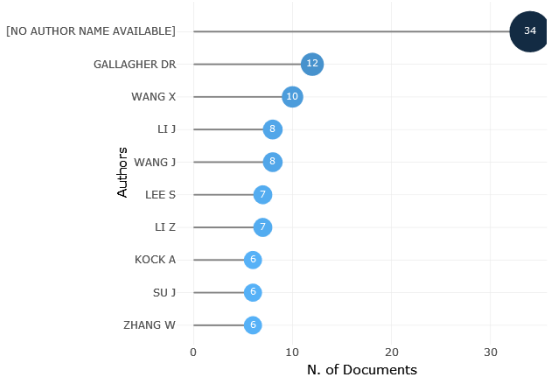

Figure 7. Most Relevant Authors

Most Global Cited Documents

In Figure 8 it is known that the most cited document in the world is Klassen RD, 1999, Academy Of Management Journal in first place with a total of 856 citations, second place is Berk JB, 2004, Journal of Political Economy with a total of 835 citations, Wiig KM, 1997, Long Range Planning with 362 citations in third place.

Figure 8. Quotes The Most Cited Documents In The World

Conceptual Structure

Factorial analysis. By exploiting other R solutions, bibliometrix also performs factorial analysis. This option allows us to create conceptual structures and factorial maps. Conceptual structure is based on concepts and words. Many previous studies evaluated field topics based on words, for example keywords, author words, title words or abstract words. The proximity between words indicates whether these words are used together in the majority of documents, or a small number of documents.

Word Cloud

The occurrence of words in the textual corpus is evaluated from the abstract article, finds support in Zipf's law (1949), and clouds words and similarity analysis was performed. The word cloud consists of figures which presents the words that occur in the text, in various size. The size of words corresponds to their importance in the corpus textual: Those written in a larger font are more important. The most important words are portfolio of 3,459, performance of 2,960, management of 2,361, investment of 2,252 and risk of 1,606.

Figure 9. Analysis of word occurrence

TreeMap

In Figure 10 TreeMap uses the words in the abstract. After processing it produces 3,459 portfolio words, 2960 performance, 2361 management, 2,252 investment, and 1,606 risk.

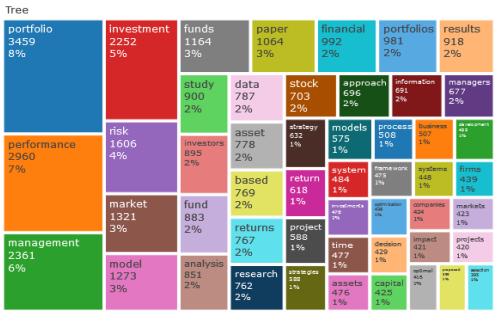

Figure 10. Tree Map (TreeMap)

Thematic Map

To derive distinct themes within our subject area, we used a thematic map by applying a clustering algorithm to the keyword network. It can be seen in Figure 4.11 that there are five groups. Bubble names are words with higher frequency values. The higher the word frequency, the larger the bubble size. These bubbles are positioned according to cluster centrality and density. Choice centrality refers to the importance of a theme within the overall field, while density can be understood as a measure of the development of a theme. The themes economics, performance assessment and industry (red cluster) are in four themes, namely special themes, emerging and declining themes, special themes and motor themes. Themes articles, organization and managements, financial management (green cluster), investment, united states, europe (purple cluster) are emerging and decreasing themes. The themes of investments, financial data processing, portfolio management (blue cluster), commerce, financial markets, electronic trading (orange cluster) are in the motor theme.

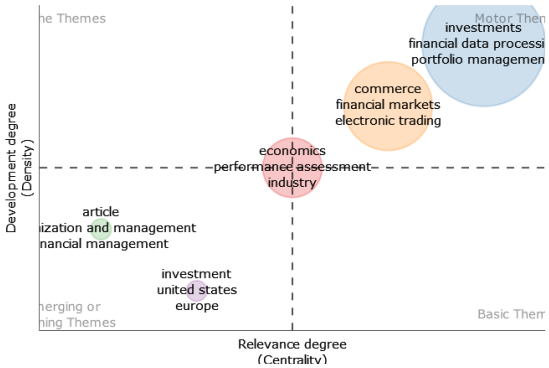

Figure 11. Thematic Map (Thematic Map)

Content Analysis

This section extends the descriptive analysis to present a content analysis of the retrieved papers selected from the Scopus database. The current study adds to the growing literature on the relationship between Portfolio management and Investment Performance. The statistical results presented in the previous section can provide a first-level understanding of content analysis. Text mining using keywords, authors with the largest publications, and the presence or absence of terms in the collected articles corresponds to the first step towards content analysis. Our review used previous descriptive results to categorize articles into the following groups as a basis.

Based on management science literature and various analytical models, Korlak P.D (1971) conducted system analysis and operations research and described simulation model experiments to review investor performance. Then, Levy Haim (1972) conducted empirical research in evaluating portfolio management performance, where attention must be paid to horizontal investment selection, because the magnitude and direction of systematic bias is a function of this factor. In the following year Korlak P.D (1973) experimented with a robot investor designed to receive information about the current state of the stock market and existing investor portfolios to translate the information into actions that would provide a reasonable rate of return, the robot predicted future price behavior, estimated risk each share. Advanced models based on these studies have significantly improved the performance of investment clubs. Gallagher (2002) examines the investment performance of active Australian bond funds and the impact of investor cash flows on portfolio returns. Overall, the results of this paper are consistent with US and international evidence,

documenting performance consistent with efficient markets. While actively managed institutional funds perform broadly in line with the index before expenses, this paper documents significant underperformance for Australian retail bond funds after expenses. This study also documents that retail fund flows have a negative impact on the market timing coefficient. Wang Byrne P., Lee S (2011) reexamine the portfolio risk/return performance of "conventional" sector/regional classifications with those based on socio-economic criteria.

Findings In line with previous research, sectors dominate the region, however defined, and should be the first level of analysis when developing an optimal portfolio diversification strategy. When the performance of functional groups is compared with the results of "conventional" administrative areas it is shown that such groupings can provide greater risk reduction. The underlying characteristics of these functional groups may be more insightful and acceptable to real estate portfolio managers in considering the assets that may be contained in the portfolio.

The results show that a SRS portfolio consisting of stocks that exhibit a relatively less proactive approach to social and environmental concerns outperforms a stock portfolio consisting of companies that have a relatively proactive approach to stakeholder engagement referred to as the SVS portfolio. positive relationship between social performance and market valuation. This suggests that the market values more stakeholder involvement when it comes to social issues than environmental issues.

5. Conclusion

This paper is a bibliometric literature analysis of portfolio management - investment performance (communication performance, corporate social responsibility (CSR) and stock performance), which was carried out by analyzing 1774 scientific documents taken from the Scopus database. The field of study was chosen because of its increasing interest among undergraduates. Papers were not commonly published in the area of investment performance (communication performance, corporate social responsibility (CSR) and stock performance) and bibliometric studies were not detected during our research. To fill this gap, we performed a structured review consisting of bibliometric and content analysis via the R bibliometrix package tool. Our interest in working on this project was driven by many reasons. First, this paper seeks to objectively analyze the literature that focuses on investment performance, namely communication performance, corporate social responsibility (CSR) and stock performance, to advance understanding of investment performance (communication performance, corporate social responsibility (CSR) and stock performance) as taken from previous bibliometric work (Fahimnia et al., 2015; Mishra et al., 2017; Maditati et al., 2018, Jamal et al., 2021). Second, understanding in depth the conceptual structure of the field and its evolution will allow better identification of gaps, ultimately allowing us to position investment performance factors (communication performance, corporate social responsibility (CSR) and stock performance) within it for those interested in carry out regional research.

This paper presents a dynamic analysis to help understand the evolution of portfolio management in relation to investment performance. However, this study has several limitations. First, data is collected from Scopus, covering all journals, so papers may cover general themes. Overall, these findings provide additional evidence to the literature review regarding portfolio management and investment performance. Although this study is based on a large sample, the implications of the study will serve as a basis for future research. Hopefully, the current literature will be substantiated by additional papers in the future. For example, it would be interesting to assess portfolio management and investment performance within the same research area. More broadly, researchers may also need to explore various databases rather than just focusing on the

Scopus database in the case of this paper, using a variety of keywords. Thus, this study serves as a starting point for further research.

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