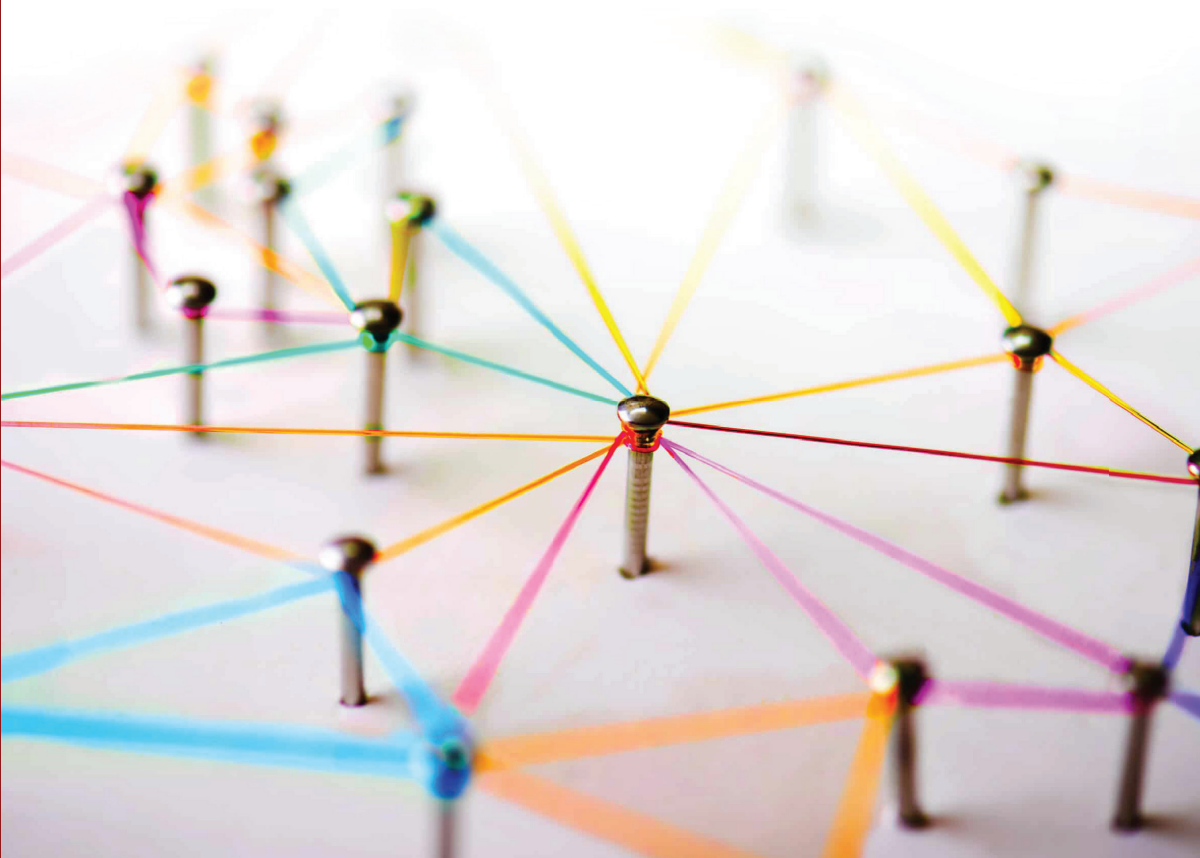


Volume 4 • Issue 2
December 2023



bsp.bimtech.ac.in
ISSN: 2581-9542
e-ISSN: 2582-3965

BIMTECH Business Perspectives



BIMTECH Business Perspectives is published biannually in June and December by Birla Institute of Management Technology (BIMTECH), Greater Noida, Uttar Pradesh.

BIMTECH Business Perspectives is hosted on our web-based online submission and peer review system. Please read the manuscript submission guidelines on the journal website, and then visit <https://peerreview.sagepub.com/bsp> to login and submit your article online. Manuscripts should be prepared in accordance with the 7th edition of the *Publication Manual of the American Psychological Association*.

Copyright © 2023 Birla Institute of Management Technology, Greater Noida, Uttar Pradesh. All rights reserved. The views expressed in the articles and other material published in *BIMTECH Business Perspectives* do not reflect the opinions of the Institute.

Annual Subscription: Individual rate (print only) ₹1,580; institutional rate (print only) ₹2,760. For orders from Pakistan, Bangladesh, Sri Lanka and Maldives, SAARC rates apply: individuals \$35; institutional rate \$50. Prices include postage. Print subscriptions are available for institutions at a discounted rate. For subscriptions, please write to: customerservicejournals@sagepub.in

Abstracting and Indexing: *BIMTECH Business Perspectives* is indexed in:

- UlrichWeb (Proquest)
- J-Gate
- India Citation Index
- Google Scholar

Change of Address: Four weeks' advance notice must be given when notifying change of address. Please send the old address label to ensure proper identification. Please specify the name of the journal and send change of address notification to customerservicejournals@sagepub.in

Printed and published by Registrar, BIMTECH, on behalf of Birla Institute of Management Technology (BIMTECH), Plot No. 5, Knowledge Park II, Institutional Area, Greater Noida (NCR), Uttar Pradesh 201 306, India. Printed at Sai Printo Pack Pvt Ltd, A 102/4 Phase II, Okhla Industrial Area, New Delhi, Delhi 110020.

Editor: Khanindra Ch. Das

RNI No: UPENG/2018/76514

About the Journal

BIMTECH Business Perspectives is a scholarly Open Access journal of Birla Institute of Management Technology, India. The journal publishes original contribution in the functional areas of business management (see Aims and Scope). Furthermore, the journal is a platform for interdisciplinary studies that provide both empirical evidence and nuanced perspectives on business management in the national, regional, and global contexts. The contexts include, but not limited to, the contemporary economic, political, social, technological, and environmental challenges facing business stakeholders.

The journal brings out two issues per year, and it follows a double-anonymized peer-review process. All contributions should be well written in English. Submission to the journal should be relevant to one or more business and allied disciplines and backed by suitable methodology, sound analysis, practical perspectives, and managerial or policy implications.

To this end, *BIMTECH Business Perspectives* invites contributions from both the academic community and business practitioners. The journal publishes and disseminates original articles, review essays, perspectives, book reviews, interviews and invited pieces. Special theme-focused and/or guest-edited issues are also planned.

Aims and Scope

The objectives of *BIMTECH Business Perspectives*, the journal, are to encourage and publish research in the field of business management. The terms business and management are both broadly defined. While the former encompasses both discipline and business problem-based research, the latter includes the management of firms, groups, industries, regulatory bodies, government, and other institutions. The journal has a special focus on emerging and functional areas of business management. Consistent with the policy, the journal publishes peer-reviewed research in financial markets, emerging economies, entrepreneurship and start-ups, emerging technology and innovation in business functions, consumer behaviour, human behaviour in management decisions, risk management, supply chain management, business strategy, and other domains having a direct or indirect bearing on business management. The journal encourages both quantitative and qualitative research methods to unearth relevant findings. The journal aims to nurture a debate among individuals and groups, which have keen interest in business and managerial processes. The journal encourages inter-disciplinary studies that may lead to new understanding of business and management functions. The journal welcomes research papers examining dynamics of business management in the backdrop of changes in the global business environment. The journal serves as a platform that connects thought-leaders and researchers from diverse fields to address crucial business and management issues. Published twice a year (June and December), *BIMTECH Business Perspectives* is an official publication of Birla Institute of Management Technology (BIMTECH), Greater Noida, India. The journal has been publishing in its current form since 2019. Prior to 2019, the journal was known as *Business Perspectives*, which had a publication history of more than a decade.

If you wish to contact the editors of the journal *BIMTECH Business Perspectives*, please email at editor@bimtech.ac.in

Editorial Board

Chief Editorial Advisor

H. Chaturvedi, *BIMTECH, Greater Noida, Uttar Pradesh, India*

Editor-in-Chief

Arunaditya Sahay, *BIMTECH, Greater Noida, Uttar Pradesh, India*

Editor

Khanindra Ch. Das, *BIMTECH, Greater Noida, Uttar Pradesh, India*

Associate Editors

S. M. Fatah Uddin, *BIMTECH, Greater Noida, Uttar Pradesh, India*

Dharen Kumar Pandey, *Magadh University, Bodhgaya, Bihar, India*

Ngoc Cindy Pham, *City University of New York, Brooklyn College and the Graduate Center, New York, USA*

Saloni Sinha, *BIMTECH, Greater Noida, Uttar Pradesh, India*

Rahul Sindhwani, *IIM Sambalpur, Odisha, India*

Editorial Advisory Board

Arindam Banerjee, *Shiv Nadar University Chennai, Rajiv Gandhi Salai (OMR), Kalavakkam, Chengalpattu (Dt), TN, India*

Abhishek Behl, *Management Development Institute, Gurgaon, India*

Amandeep Dhir, *University of Agder, Norway*

Nadia Doytch, *City University of New York, Brooklyn College, Koppelman School of Business, Department of Economics, Brooklyn, NY, USA*

Gulay Gunluk-Senesen, *Faculty of Political Sciences, Istanbul University, Beyazit-Fatih, Istanbul, Turkiye*

Pradeep Kautish, *Department of Marketing, Institute of Management, Nirma University, Ahmedabad, Gujarat, India*

Sunil Luthra, *All India Council for Technical Education, India*

D. K. Malhotra, *School of Business, Thomas Jefferson University, Philadelphia, USA*

Sunil Mithas, *Muma College of Business, University of South Florida, Tampa, FL, USA*

Olawale Emmanuel Olayide, *University of Ibadan, Ibadan, Nigeria*

David R. Perkins, *Missouri State University, Springfield, USA*

Shameem Shagirbasha, *XLRI Jamshedpur, India*

Gagan Deep Sharma, *University School of Management Studies, Guru Gobind Singh Indraprastha University, New Delhi, India*

Amit Shukla, *Industrial and Management Engineering Department, IIT Kanpur, India*

Anand Suryanarayana, *Director, Postgraduate Studies, Research and Innovation Department, College of Banking and Financial Studies, Muscat, Sultanate of Oman*

Sebastian Thomas, *Curtin University, Australia*

Thijs ten Raa, *Utrecht University, Amsterdam, The Netherlands*

Naotoshi Umeno, *Osaka University of Commerce, Mikuria Sakemachi, Higashi Osaka, Japan*

Contents

Research Articles

- Examining the Effect of COVID-19 on Consumer Health Perception and Decision-Making Towards Organic Foods 83
C. M. Ezhilvani, A. Jayakumar and P. Mahesh
- Capital Structure Decisions: A Scientometric Assessment and Future Research Lines 102
Umra Rashid, Javaid Akhter and Asif Akhtar
- Mapping the Structure of Luxury Consumption Behavior: A Bibliometric Assessment 120
Sabara Soyafuddin Ahmed and Bilal Mustafa Khan
- Past, Present and Future of Brand Attachment Research: A Review and Research Agenda 149
Waseem Saeed Khan, Mohammad Khalid Azam and Fateh Mohd Khan
- Analyzing the Interplay of Incentive Pay and Governance in the Boeing 737 MAX Incident: Implications for Corporate Structure and Ethics 168
Ngoc Cindy Pham, Darlene Augustine and Dov Fischer

Book Review

- Srinath Sridharan and Arun Ganesh, *Time for Bharat: A Researched Conversation on Governance* 194
Manoj Pareek

Visit <https://www.bsp.bimtech.ac.in/>

Examining the Effect of COVID-19 on Consumer Health Perception and Decision-Making Towards Organic Foods

BIMTECH Business Perspectives
4(2) 83–101, 2023
© 2023 Birla Institute of Management
Technology
DOI: 10.1177/25819542231205435
bsp.bimtech.ac.in



C. M. Ezhilvani¹ , A. Jayakumar¹ and P. Mahesh²

Abstract

Currently, a number of industries are concentrating on spreading the word about nature's goodness in order to save our ecosystem. One of the most significant among them is the organic industry because it not only concerns the protection of human health but also the health of the environment. The COVID-19 pandemic had a significant effect on public health awareness, which made it evident that the organic food industry would dominate. For anyone involved in the organic food industry, such as marketers, producers and politicians, understanding their viewpoints is essential. The goal of this review is to provide a thorough grasp of the subject by synthesising the existing research on consumer opinions about organic foods. The purpose of this article is to examine the effects of the coronavirus on such a thriving industry by evaluating the theories and opinions advanced by many writers in a number of significant research studies on customers' perceptions of the healthfulness of organic foods following COVID-19. A conceptual model has been framed based on the factors scrutinised from the works of literature reviewed in this article. This review research also provides tactics to marketers and producers of organic foods and suggestions that were made to the government in taking measures to improve the organic food sector based on the consumers health perception.

¹ Department of Commerce, Periyar University, Salem, Tamil Nadu, India

² Institute of Public Enterprise, Hyderabad, Telangana, India

Corresponding author:

C. M. Ezhilvani, Department of Commerce, Periyar University, Salem, Tamil Nadu 636011, India.

E-mail: ezhilvani12phd@gmail.com



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed.

Keywords

Buying behaviour, consumers perception, COVID-19, health perception, organic food, organic purchasing behaviour

Introduction

Since organic foods are healthier and less polluted than conventional foods, more and more people are choosing them. This buying behaviour can significantly influence consumers' attitudes and perceptions about buying organic food. Furthermore, difficulties, problems and key reasons are identified through a thorough review of previous studies. The COVID-19 epidemic has had a significant impact on overall consumer behaviour. According to the India Organic Food Market Report of 17 June 2020, 'The consumption of organic food and beverages in India has increased in recent years due to its advanced dividend demographics, growing spending power, and interest in certain organic foods. Increased interest in the health benefits of the product' (Chandra & Rosman, 2020). Organic foods support health by reducing exposure to pesticides and improving nutritional value. We need to look at the big picture to understand why organic food is so important. Without the harmful side effects of conventional farming, organic food not only keeps us alive, but it also keeps us healthy. According to numerous observational studies, people who eat organic foods are generally healthier than those who eat conventional foods. A recent five-year French study of 70,000 adults found that those who regularly ate organic foods had about 25% lower risk of developing cancer than those who never ate organic food. Food consumption is essential for human health; hence, it was crucial to look at this topic in terms of the COVID-19 influence (Asseo & Asseo, 2020). The *Lancet's* health definition of 2009, 'the ability of a body to adapt to new threats and infirmities', is more suitable for today's world that is combating the biggest challenging transformation ever because of the coronavirus (COVID-19) pandemic (Iorver, 2020). The pandemic has had significant effects on the expansion of the organic food sector in the foreseeable future, prompting the researcher to analyse previous studies in this field.

The objective of this article is to contribute to the literature and create a conceptual model. Previous studies have rarely focused on the relationship between consumer information similarity and organic purchasing behaviour. To fill this gap, using potentially advance research on organic consumption, this article explores the relationship between consumer information similarity and organic purchasing behaviour before and after COVID-19. To find pertinent research studies, a systematic review approach was used. Various academic databases were searched using the terms 'consumer opinions', 'organic foods' and 'consumer perceptions'. Within the last 10 years, studies that appeared in peer-reviewed publications were considered. The study included more than 35 research articles that satisfied the inclusion requirements.

In this article, a conceptual model of consumers' perception has been framed based on important factors scrutinised from various literatures. The research has

also investigated consumers' perception of those factors along with a few other unavoidable factors. The discussion part of this article provides insightful information on consumers' perception. These insights can be used to guide marketing plans, legislative choices and future research.

Literature Review

Existing research has found a number of variables that affect consumers' perceptions of their health when consuming food and has further divided them into intrinsic and extrinsic product attributes. The first category of factors included in the reviewed literatures pertains to the product itself and includes aspects of the food (such as whether it is healthy, tasty, of high quality, nutritious, fresh or has a long shelf life), none of which can be changed without changing the product. Conversely, extrinsic cues relate to the market (income and price), social attitudes and conventions (fashion, tradition and other customers' behaviour), environmental considerations (environmental protection and animal welfare), availability and buying location. Research has also found that consumers are strongly motivated to pick an organic product over a conventional one owing to the absence of pesticides and genetically modified organisms (GMOs). Studies have found that independent of the socio-demographic traits of the consumers, the intrinsic qualities of the products influence the decision to buy an organic product. Consumers around the world have put sensory qualities first on their priority lists, followed by health advantages and outstanding quality. Because of their environmental convictions and a diminished perception of the cost of these items as a barrier, better educated consumers and people with higher incomes are also likely to consume organic products.

The high quality and health benefits of these sorts of products continue to be generally acknowledged, despite a number of perception gaps around the use of organic foods. Came to the conclusion that rising interest in a sustainable lifestyle and worries about the sustainability of food both contributed to the increased use of organic goods (Azzurra et al., 2019). The opinion of customers and the variables influencing their choice of both organically certified and non-certified foods were also examined (Lang & Rodriguez, 2022). According to a study's findings, consumers are willing to pay more for organic products if certain criteria are met, including certification, the absence of GMOs and hormones, and sustainable agriculture practices (Malissiova et al., 2022). The cost of organic food may, however, be prohibitive for certain consumers. The higher price than other food products served as the main barrier for Polish consumers, but another study of respondents from Poland supported earlier findings regarding the quality requirements for organic products (healthiness, superior taste, quality and food safety considerations) (Bryła, 2016). Additionally, those with higher levels of education and money, as well as women, were more inclined to favour organic foods. These conclusions were supported by a research study carried out in Korean households, which found that 94.1% of Korean women had a high level of awareness of organic foods and that 71.7% of them routinely bought it. Despite

the fact that organic products are quite popular in Korean families, 95.9% of respondents said that the price of such products prevented them from being purchased (Han & Lee, 2022).

A sizable German study examined the key channels that customers use to educate themselves about the nutritional content of the food they buy. As a result, the majority of respondents primarily consulted radio and television as well as experts in the field, such as doctors and chemists, to learn about nutrition. However, while making food purchase, a sizable portion of the respondents said that they listened to advice from their co-workers, acquaintances and other family members. Younger consumers have been found to typically support green living and to be more concerned in the environment and the effects that their actions have on it (Wortmann et al., 2018). Studies that explicitly link environmental concerns and attitudes with the intention to buy such products show that this further influences people's decisions to buy green and organic products. Additionally, they are more inclined to focus on the product's label more. Labelling provides consumers with some information about the various food characteristics, nutritional value and production process. The education level of consumers is particularly significant because a significant amount of research indicates differences in perception and purchase frequency related to organic products. Therefore, customers with less education likely to buy less organic food and show less interest in environmental sustainability, whereas those with a college degree are thought to buy organic items most frequently. A few marketing campaigns that raise the awareness of the effects food consumption has on the environment may also have an impact on consumers' attitudes towards healthy food and organic products, in particular. In this way, this research examined how 'green ad' campaigns affected respondents with various degrees of environmental awareness. The study came to the conclusion that a consumer's perception of an advertisement's efficacy increased with their level of interest in environmental issues (Mo et al., 2018).

With more people becoming concerned about their lifestyle and its impact on the environment, health worries during the COVID-19 epidemic have only grown. It is essential to examine the extent to which the pandemic has affected people's choices about food consumption, particularly with regard to organic products, in order to better comprehend this phenomenon. Because of the pandemic, there has been a surge in the consumption of organic products over the past several years, which has only served to accelerate this trend. Busch et al. (2021) conducted a study on German respondents regarding the impact of the epidemic on their purchasing behaviour, and they came to the conclusion that the stable shelf life of the items, along with the health benefits and geographical origin, have become more essential for the consumers. Additionally, more than 80% of the responders said that they had increased their organic food purchases since the outbreak. The following research questions have been developed in the light of the ones previously mentioned: What do consumers think about organic products in terms of their health? Before COVID-19, how did customers view organic foods in terms of their health? How much has the COVID-19 pandemic affected how people prefer organic foods in terms of their health?

Motivation for the Review Survey

The health and economical effects of the COVID-19 pandemic are likely to cause the food security and nutritional status of the most vulnerable population groups to significantly deteriorate (Moss, 2023). According to a study from the National Institutes of Health, a portion of organic customers already practices food-related mitigation techniques like reducing meat consumption. The authors suggest that this can be taken into account in the development of organic farming because some customers think that eating organic food can help to slow down climate change (Ravn Heerwagen et al., 2014). Contrarily, private spending decreased on average by more than 3%. Health spending as a proportion of GDP in OECD countries increased to 9.7% in 2020 from 8.8% in 2019 as a result of the significant spending growth and the widespread economic slowdown (OECD, 2023). Importantly, this research makes an effort to predict some of the effects of the global pandemic caused by COVID-19 on food security and nutrition. However, it is crucial to understand that any assessment at this point is susceptible to a significant degree of uncertainty and should be regarded with caution given that the destruction that COVID-19 would inflict is still mostly unknown. Nutrition and food security are strongly related. Malnutrition can take many different forms because of food poverty. The food that people eat, more precisely the calibre of their diet, is a crucial component that explains this connection (FAO, 2020). Various global-level organisations conducted several international surveys such as above mentioned; the results of most of those surveys made clear that COVID-19 has influenced the consumption of organic foods. This made the researcher to conduct a comprehensive review survey on this topic.

Consumers' Health Perception and Decision-Making

There are a variety of consumer perceptions on organic foods and their effects on health. Although many people hold the presumptive health advantages of organic foods in high regard, viewpoints differ, and other people express scepticism. The importance of understanding that scientific research into the health benefits of organic foods is ongoing and that dietary decisions should be based on a comprehensive approach to nutrition cannot be overstated. People can make educated judgements regarding their dietary choices and general health by emphasising a balanced diet, including a variety of whole foods, and seeking the advice of medical specialists or trained dietitians. Many people believe that organic foods are healthier than meals that are produced normally. They relate lower exposure to potentially hazardous compounds to organic farming practices, such as avoiding synthetic pesticides, herbicides and GMOs. Customers frequently believe that buying organic goods can help to improve their general health and well-being as a result of this notion. A sizable portion of people believe that eating organic foods has specific health advantages. They contend that the avoidance of industrial pesticides, herbicides and GMOs through the adoption of organic agricultural methods reduces exposure to potentially dangerous substances.

Consumers believe that a lower risk of adverse health effects, such as the buildup of pesticide residue in the body, results from this reduced exposure. Organic foods are seen as being healthier options because they are produced in a way that is more in line with natural processes. The review examines various health aspects, including perceptions, motivations, concerns and preferences of consumers regarding organic food products. The results show the wide range of perspectives that consumers hold and shed light on the variables affecting their decision-making.

Perception Prior to COVID-19

Awareness on organic foods among the population of the study is about 76% where the awareness level is greater amongst urban people. The key reasons for organic food intake are availability and credibility. Rising the level of awareness on organic products can increase the level of consumption of organic food products by cheering people to build their own organic yard (Rock et al., 2017b). This weighs against organic and conventional food production through factors essential en route for human health amid an accent on conditions of the European Union discussed about the possible result of management practices. A specific challenge is the reality that consumers who often purchase organic foods lean to prefer more vegetables, fruits, whole-grain products and less meat, and also to have healthier dietary outline, as shown in observational studies. Consumers those who frequently purchase organic foods are more physically active and also less likely to smoke. In children, a number of studies have stated a lesser prevalence of allergic reaction and/or atopic disease in families by a way of life involving the liking of organic food (Mie et al., 2017). The purchase objective of organic foods is influenced by these factors with an additional factor, that is, availability. The outcome shows that all these factors also influence the actual buying behaviour; however, attitude and purchase intension arbitrate the relationship. Additionally, socio-demographic factors also create an impact on real buying behaviour. In this study, the authors provide a good understanding on consumers' attitude, purchase objective and real buying behaviour on organic food products. The result inferences the organic food companies, retailers and market rigid agencies. This study also gives guidelines and marketers those who deal with the organic foods with an aim of extending the market of organic foods (Singh & Verma, 2017).

The implementation of organic production and its processing is well determined by market demand. As a result, it is revealed in consumers' perceptions and attitudes regarding organic food products' market share in the information existing and the awareness level of consumers. Results in this article are of vast significance because they have given valuable information regarding consumers in Bhopal city, which can be made use of by the policymakers in the field of organic farming at the national and local levels (Verma, 2016). Before executing organic foods on a wide scale disregarding the health point of view, economic, social and cultural factors, sensory attributes, food safety, environmental friendliness and nutritional factors also need to be considered. The present-day knowledge about the health impact of organic food is not clear. In this study, the authors have focused to get a

combined knowledge on the health-oriented view of organic food. The recent knowledge on health effects of organic food evolved from the existing research studies is still primal and not enough to suggest organic food to the society (Rock et al., 2017a).

For a country like India, intake that is packed with flavoured and splashed in vats of oil and ghee has been conventional, with the tendency of eating healthy and organic is being rather gradual. It can be said that the attitude regarding healthy and organic eating has developed over the recent years. People have become increasingly aware of what the consumption of organic food truly entails, together with the mass benefits associated with it (Jajodia, 2019). Consumers in India have a positive awareness on organic foods. Also, they want to change or at least offer an attempt to organic foods, and they are assured easy and entire information and faith along with the value for price. Particularly, endeavours are made to inspect the awareness level of consumers and preferences about organic food products existing in the market. Although there is a rising consciousness among consumers in India on health and environment, the organic food market in North India is still at its emerging state and could be measured as immature (Batra, 2016). India has witnessed an increase in the demand level of the organic food products, as these products impart a healthier lifestyle choice for consumers. Because of the rising number of cases on food adulteration and steady increasing income, the awaked consumers in our country want to turn completely towards natural foods in their nutritious requirement; therefore, they are making organic food products as their preferred choice (Chokani, 2019).

Sales of organic foods are increasing, but the lion's share of the food market is still shatteringly controlled by conventional products. The best way to increase the sales and build regular customers can be done with creating awareness on required facts about organic food products completely among the consumers (Chait, 2019). The previous studies on consumer perception and behaviour are unclear regarding what is meant by 'health' to organic consumers, and what accurately drives consumers to select organic products is remained unclear because of that. Look into health from the point of view of consumers and explanations behind their preferences regarding consumption. This study reveals that when 'health' is introduced as an abstract term, it is easily understood in terms of nutrition (Ditlevsen et al., 2019).

Perception Post COVID-19

In 2019, there was a noticeable shift in customer preferences towards vegan and organic food. Many businesses with a focus on nutritious, farm-to-table vegan cuisine started operating in late 2019 and early 2020. But if COVID-19 spreads around the globe, a lot of people will surely start living this way in the years to come. Owing to its multiple health and immunity-boosting advantages, an organic, vegan diet is becoming more and more popular in the light of the number of coronavirus cases reported worldwide. More 'vegan-only' eateries and businesses promoting plant-based items are therefore projected to enter the market. Given that the majority of Indians consume vegan food, most customers are anticipated

to adjust rather quickly to this paradigm shift (IBEF, 2020). The COVID-19 pandemic has caused immense rethinking, especially about what we consume, where our foods come from, and how they are produced, prepared and stored. An increasing awareness towards the health benefits of a balanced diet along with natural foods has started boosting the demand for organic and sustainable food products. Since the popularity of organics is not new, numerous consumers are consuming organic food more than ever before (Desai, 2020). The Consumer Unity and Trust Society's (CUTS International) survey was conducted among the organic food sellers and consumers in Rajasthan's districts. In the survey, nearly 62% of sellers agreed that they were selling organic products together with conventional products, and about 86% of the consumers stated that the changing consumption pattern of organic foods should continue in the future (Singh, 2021). Consumer awareness has raised after COVID-19, specifically the awareness towards the relationship between health and nutrition. This has resulted in a surge in interest towards the products that benefit from a 'health halo', including functional foods, vegetables and fruits (Askew, 2020).

According to a study conducted by the Associated Chambers of Commerce and Industry of India (ASSOCHAM, 2018), the Indian organic market stood slightly above ₹12 billion last year and during the current year, the organic food market is anticipated to cross ₹20 billion because the corona contagion struck health consciousness. People are clinging on organic foods to the health intrinsic as these are free of chemicals and pesticides, which are not only considered to be safe but also healthy and nutritious that made the world and India to screaming for organic food products. As per the statistical report by the Agricultural and Processed Food Products Export Development Authority, Indian organic products exports reached ₹51.51 billion last year, and it is anticipated to get doubled in the upcoming year (Goyal, 2020). In India, demand for organic and natural products was on the rise even before the pandemic. Products grown by natural systems and organic foods have increased manifold. This is evidenced by the steep growth in the market share of natural products and by the competing trend with MNCs (Padhee & Kane-Potaka, 2020). Consumable cereals, wheat and pasta had seen the biggest increases after the pandemic, which changed the composition of commercially available organic foods. The proportion of organic food consumption in total food consumption also changed. Increased consumer concern about their health as well as the fear of the COVID-19 pandemic can be said to be the reasons for changes in the percentage of internet buying as well as the type and volume of organic food consumption. This study provided information on just one aspect of online purchases of organic food by customers. Although it is outside the scope of this study, an investigation of the factors that influence consumers' use of online shopping platforms, in general, and that of organic food, in particular, offers important advice for future research (Ćirić et al., 2020).

The primary goals of the study were to evaluate how consumers felt about organic products and to pinpoint the key variables affecting this behaviour. They also looked into how the COVID-19 pandemic affected how frequently this kind of product is consumed. Irrespective of their socio-demographic background, consumers roughly tend to focus on the same organic product owing to its intrinsic

qualities, according to the study. Additionally, factors such as income and the education level affect the decision-making process when it comes to the extrinsic qualities of the products, such as price, brand and labels (Brata et al., 2022). The analysis of consumer traits, attitudes towards organic food items and changes in consumer behaviour during the COVID-19 pandemic in the Republic of Serbia are the topics of this essay. Even though currently customer confidence is low, as the organic market in our nation grows, with the gain in knowledge and awareness about organic products, an additional increase in the consumption of these products may possibly be witnessed because of more educated and informed consumers. The success in this industry depends on marketing effectiveness and specialised marketing strategies for this niche market, especially in times of the COVID-19 pandemic. Socio-demographic characteristics might provide additional insights into a profile of organic consumers. The study supported the notion that customers' buying intentions are highly influenced by concerns about food safety, health consciousness, nutritional content, premium price and attitude. Concerns about food safety, health awareness, nutritional value, natural ingredients and premium price are all found to be strongly correlated with attitudes towards healthy foods. The factors that influence consumers' propensity to purchase healthy foods in Malaysia during the COVID-19 epidemic were examined, and the findings showed that the association between the purchase intention and food safety worries, health consciousness and nutritional content is strongly moderated by food safety trust (Alam et al., 2022).

Most of the respondents reported that their habit of green food consumption was influenced significantly by the COVID-19 pandemic. Majority of the participants perceived that the upsurge in their purchasing intentions of green foods was a result of their rising concerns about health during pandemic. Respondents were willing to spend money on health and also to increase their purchase percentage of green foods consequently. An investigation was performed on the changes in consumers' habits and behaviour towards food consumption in the pandemic period. The results of the investigation confirmed that the changes in consumers' habits and behaviour towards food consumption, especially after COVID-19, were based on preference towards organic foods, concerns of food pricing, packaging and access, awareness towards food waste, and excessive and safety along with stock-piling (Güney & Sangün, 2021). ASSOCHAM and EY jointly reported that the local consumption of organic produce in India is only 1% in spite of being one of the largest exporters of organic food products. After COVID-19, the organic food market in India became the newest trend because of its nutritious worth, as it helps in the improvement of the immune system which in turn acts as a preventive measure against COVID-19. After the COVID-19 pandemic, a huge opportunity has been created in the Indian organic market as there is a clear shift of the local consumers to organic food from conventional food (Chaturvedi et al., 2021). According to a survey by CUTS International, at least 91% of organic retailers and 89% of shoppers in Rajasthan alone said that sales and consumption of organic products had increased significantly during the pandemic. This expansion is the result of a number of factors, including increased awareness, e-commerce accessibility, innovation and increased exports (Chokhani, 2021). According to a

mid-April Ecovia report and the 2020 Q1 Organic Produce Performance Report by the Organic Produce Network, the sales of organic food were grasping a boost from coronavirus as the consumers were likely to adopt healthier eating habits. There was another crucial shift in the sales of natural products. From around 3% of dollars spent by each buyer during the late January 2020 to nearly 15% in April 2020 was noted in the sales of natural products, which is more of online sales (Wiley, 2020).

Conceptual Model of Factors Influencing

Purchase decisions are greatly influenced by consumer perception, especially when it comes to organic foods. Consumers frequently believe organic foods to be advantageous for numerous elements of their health, including immunity boosters, the absence of additives, increased nutritional content, and food safety, health and environmental concerns. Organic foods are frequently associated with health and well-being.

Immunity Boosting

Most consumers think that consuming organic food can strengthen the immune system. This notion stems from the idea that organic agricultural methods forgo the use of synthetic pesticides, GMOs and other possibly dangerous materials. Customers link these behaviours to a lower body toxic load, which they believe supports a greater immune response (Mie et al., 2017). Although there is less scientific evidence particularly associating organic foods with immune improvement, people looking for natural and holistic approaches to health continue to hold this belief (Dangour et al., 2010).

No Additives Added

A key element influencing customer choices is the idea that organic foods are free of additives. The possible negative health impacts of synthetic additives, such as artificial colours, flavours and preservatives, are causing consumers to become more and more concerned (Zhong et al., 2018). Customers believe that they can prevent exposure to these additives by buying organic goods, which will result in a healthier diet. This impression is consistent with the preference for whole, less processed meals, which are thought to be healthier generally and more natural (Gundala & Singh, 2021).

Nutritional Value

Consumers believe that organic foods are more nutritious than foods grown in a traditional manner. While it is generally accepted by scientists that organic and conventionally cultivated foods have equivalent nutrient contents, several studies have found that some organic crops may have slightly higher concentrations

of specific nutrients and antioxidants (Mancombu, 2022). Consumers link these nutritional variations to organic agricultural methods that put emphasis on biodiversity, natural fertilisers and soil health. The idea that organic foods can deliver the vital vitamins, minerals and antioxidants required for a healthy immune system is supported by the idea that they have a better nutritional value (Mie et al., 2017).

Food Safety Concern

Consumers believe that organic foods are more nutritious than foods grown in a traditional manner. While it is generally accepted by scientists that organic and conventionally cultivated foods have equivalent nutrient contents, several studies have found that some organic crops may have slightly higher concentrations of specific nutrients and antioxidants (Mancombu, 2022). Consumers link these nutritional variations to organic agricultural methods that put emphasis on biodiversity, natural fertilisers and soil health. The idea that organic foods can deliver the vital vitamins, minerals and antioxidants required for a healthy immune system is supported by the idea that they have a better nutritional value (Liu & Zheng, 2019).

Health Concern

The study examines how consumers view the effects of consuming organic foods on their health. It examines consumer perceptions that organic foods are healthier, safer and contain more nutrients, as well as how they affect consumers' overall well-being (Kamboj et al., 2023). Correlations between organic farming practices and better health outcomes, such as a lower chance of developing chronic diseases, may be studied. It could investigate if customers believe that organic food promotes a healthy lifestyle and what factors led them to choose organic food in the first place (Wojciechowska-Solis & Barska, 2021).

Environmental Concern

The study examines how consumers view sustainably produced meals in relation to the environment. It explores consumer perceptions of the lower environmental effects of organic agricultural methods, including less soil erosion, water pollution and greenhouse gas emissions (Thomas et al., 2021). The study might look into whether people support biodiversity and soil health through organic farming. Given their worries about the negative environmental effects of conventional agriculture, including the use of synthetic fertilisers and intensive agricultural practices, it might investigate why consumers choose organic foods (Cachero-Martínez, 2020).

It is important to note that, despite popular belief, the scientific study on the precise effects of organic food on immunological function, additives and nutritional value is still in its early stages. Given that the food is organically

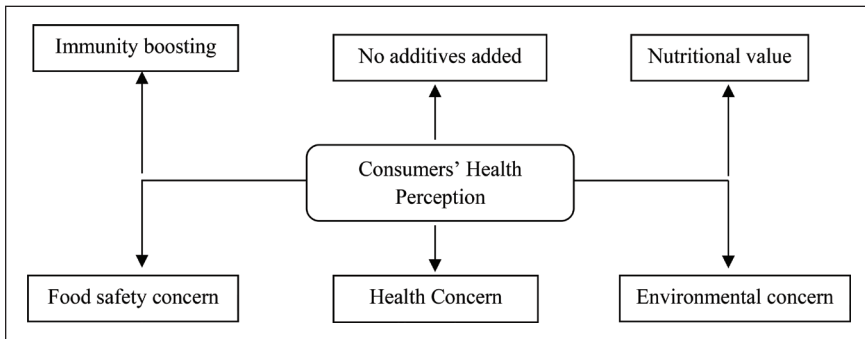


Figure 1. Conceptual Model Framed Based on the Factors Scrutinised from the Literatures Reviewed.

grown, the entire quality of a person's diet, including elements such as diversity, balance and overall nutrient intake, is essential for sustaining a robust immune system.

Other Influencing Factors Scrutinised

While studying particularly about consumers' health perception there are also some other factors like avoidance of antibiotics and hormones, micro-biome support, reduced chemical exposure, enhanced antioxidant content, supply chain transparency, trust and certification, sustainable practice and mitigating safety concerns that were also scrutinised by various pieces of literatures which cannot be neglected completely.

Avoiding Antibiotics and Hormones

Antibiotics and growth hormones are not allowed in organic animal rearing. Consumers can prevent exposure to these chemicals, which may have effects on general health and immunological function, by eating organic animal products (The Cornucopia Institute, n.d.).

Support for the Micro-biome

Organic farming methods frequently place a high priority on soil health and biodiversity, which can encourage a more varied and advantageous microbial community in the soil (Lori et al., 2017). According to several studies, using organic agricultural practices may increase the microbial diversity of organic products. Because the gut micro-biota is so important in controlling immunological responses, a diverse gut micro-biome is linked to the enhanced immune function (Wu & Wu, 2012).

Reduced Chemical Exposure

Organic food is a good option for those who want to reduce their exposure to synthetic chemicals and pesticides. Consumers think that abstaining from consuming these substances, their immune system will improve and they will not have to deal with many potentially hazardous things (*Better Health Channel*, n.d.). Organic crops are cultivated without the use of artificial fertilisers, pesticides and herbicides. Customers can limit the exposure to these potentially dangerous compounds by buying organic products. This may lessen the body's overall toxic load and promote the immune system for optimal performance (Benbrook et al., 2021).

Enhanced Antioxidant Content

It is good knowledge that organic fruits and vegetables contain more antioxidants. By scavenging the body's dangerous free radicals, antioxidants help to promote immunological function. It is possible that some customers believe organic foods to be superior in this regard and to be good for immune function (Fatkullin et al., 2021).

Supply Chain Transparency

Consumers are curious about the origins and production processes of the food they eat. If they become certain that organic food was grown and prepared without the use of synthetic pesticides, herbicides and fertilisers, they more likely trust it (Gundala & Singh, 2021).

Packaging and Handling

Organic food should be handled carefully and packed to reduce the chance of contamination. Packaging that is intended to prevent cross-contamination should be used because consumers are concerned about the possibility of cross-contamination with regular produce (Jose & Koshy, 2019).

Trust and Certification

Customers must have confidence that the organic food they purchase is indeed organic. For this reason, it is critical that organic food be certified by a trustworthy agency. Consumers are reassured by certification that the food has complied with specified production and processing standards (FAO, 2000).

Sustainable Practices

Concerns over how food production affects the environment are growing among consumers. If consumers think that organic food is produced sustainably, they are

more likely to choose it. This entails adopting methods that preserve natural resources while also protecting the soil, water and air (Sastre et al., 2022).

Mitigating Safety Concerns

Organic food raises various safety issues, such as the possibility of higher concentrations of germs and heavy metals. However, with rigorous production and handling procedures, these dangers can be reduced. Organic farmers, for instance, can check their soil for heavy metals and take action to lower their levels. Additionally, they can employ strategies to lessen the possibility of bacterial infection, like washing products properly before consumption (Murali et al., 2023).

Discussion

The key reason is that the primary motivation for purchasing organic food was to improve one's health consciousness. The majority of those who prefer organic food do so because they believe it is healthier. As a result, those who are producing and marketing organic food items must discover strategies to increase consumer trust in order to increase purchase intent. The appearance of COVID-19 is likely to encourage consumers to buy organic products. The primary motivation for purchasing organic food was to improve one's health. It was also discovered that psychological elements such as perception, attitude and purchase intention had a significant impact on organic food customers' purchasing intentions. To address the shift in the purchasing behaviour of consumers for organic food items among urban inhabitants, organic food marketers must be imaginative and dynamic. Research on consumer perception adds to the body of knowledge in the fields of sustainable agriculture, consumer behaviour and nutrition. It closes knowledge gaps and directs future research by providing empirical evidence on consumer perceptions, attitudes and behaviours connected to organic foods. This study can enlighten public conversation on the subject and produce recommendations that are supported by facts. It is suggested that organic food marketers must think out of the box and should be able to adapt to changing purchasing patterns among city dwellers for organic food items. Governments should also enact more stringent sustainability and environmental protection policies than those now in place. Although sustainability goals and objectives were already in place, COVID-19 acted as a catalyst for environmental protection. This review research study has mentioned the insightful information on consumers' opinions about organic agricultural practices in terms of environmental sustainability, correlations between organic foods and better health outcomes, and attitudes regarding the safety of organic foods. In order to meet the requirements and expectations of customers in the organic food market, these insights can be used to guide marketing plans, legislative choices and future research.

Suggestions and Limitations

Suggestions

Marketers and producers in the organic food sector must work on their tactics to reflect the changing preferences of consumers considering the changing trends in consumers' behaviour towards organic foods. Some strategies that they can use are as follows:

1. *Consider the advantages of organic food for consumers' health.* Marketers should emphasise the advantages of organic food in their marketing strategies as consumers' interest in the health benefits of organic food is growing.
2. *Stress the security of organic food.* Marketers should emphasise the safety of organic food because these days consumers are worried about food safety.
3. *Be open and honest about your procedures.* Be open and honest about your methods, and let customers know that you are dedicated to providing high-quality, organic food.
4. *Facilitate the purchase of organic food by customers.* Organic food should be simple to locate and buy for consumers.

Governments should set control over the application of fertilisers and pesticides in conventional agriculture. This can lessen the negative effects of conventional agriculture on the environment and increase farmers' interest in organic farming. And the awareness of organic food through public relations activities should be raised. By educating about the advantages of consuming organic food, people can be encouraged to buy organic foods.

Limitation of This Review Survey

Different techniques, such as surveys, interviews or focus groups, may have been used in the research studies included in the review. As a result, different approaches to data collecting and analysis may have been used. These methodological variations may affect the consistency and comparability of the results between research studies. This research has framed a conceptual model based on the factors scrutinised from the reviewed works of literatures; these factors have yet to be proven statistically only in the future extension of this research work.

Conclusion

Consumer behaviour is a vital factor in the case of the organic food market. Organic food consumption was highly restricted to the metropolitan cities and their neighbouring regions only. Rural areas of India were quite still not properly

aware of organic food products. Customers must be increasingly adamant in their requests for food goods to be easily accessible as they pass through various production processes from farm to plate. The emergence of COVID-19 is probably going to make people buy more organic goods. This is due to a rise in environmental consciousness brought on by the pandemic's success in reducing pollution. Purchasing organic food was mostly done to advance one's health. In order to create effective marketing strategies, respond to customer concerns and encourage informed decision-making, players in the organic food sector must have a thorough understanding of these viewpoints. It is necessary to conduct further studies to examine customer opinions in various cultural, demographic and socioeconomic circumstances. Additionally, it was found that psychological factors, including perception, attitude and buying intention, had a big impact on buyers' inclinations to buy organic food. It is concluded that the connection between the consumption of organic food and health remnants inadequately documented in the studies of epidemiology.

Declaration of Conflicting of Interests

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding

The corresponding author is one of the awardees of IPE-ICSSR Doctoral Research Fellowship (2023–2024). This article is largely an outcome of the Research Project sponsored by Indian Council of Social Science Research (ICSSR).

ORCID iD

C. M. Ezhilvani  <https://orcid.org/0000-0003-3213-0427>

References

- Alam, S. S., Wang, C. K., Lin, C. Y., Masukujjaman, M., & Ho, Y. H. (2022). Consumers' buying intention towards healthy foods during the COVID-19 pandemic in an emerging economy. *Cogent Business & Management*, 9(1), 2135212.
- Askew, K. (2020, May 6). Organic food's coronavirus boost: 'Health crises have a long-term impact on consumer demand'. *Food Navigator*. <https://www.foodnavigator.com/Article/2020/05/06/Organic-food-gets-coronavirus-boost#>
- Asseo, L., & Asseo, T. (2020, January 7). Organic tips for eating better in 2020. *Organic Grower*. <https://organicgrower.info/news/organic-tips-for-eating-better-in-2020/>
- Azzurra, A., Massimiliano, A., & Angela, M. (2019). Measuring sustainable food consumption: A case study on organic food. *Sustainable production and consumption*, 17, 95–107. <https://doi.org/10.1016/j.spc.2018.09.007>
- Batra, R. (2016). Consumer behaviour and purchase intension in Indian Organic Food Market. *Amity Business Review*, 17(2), 60–77.
- Benbrook, C., Kegley, S., & Baker, B. (2021). Organic farming lessens reliance on pesticides and promotes public health by lowering dietary risks. *Agronomy*, 11(7), 1266.
- Better Health Channel. (n.d.). *Pesticides and other chemicals in food*. <https://www.betterhealth.vic.gov.au/health/healthyliving/food-pesticides-and-other-chemicals>
- Brata, A. M., Chereji, A. I., Brata, V. D., Morna, A. A., Tirpe, O. P., Popa, A., Arion, F. H., Banzski, L. I., Chereji, I., Popa, D., & Muresan, I. C. (2022). Consumers' perception

- towards organic products before and after the COVID-19 pandemic: A case study in Bihor County, Romania. *International Journal of Environmental Research and Public Health*, 19(19), 12712.
- Bryła, P. (2016). Organic food consumption in Poland: Motives and barriers. *Appetite*, 105, 737–746. <https://doi.org/10.1016/j.appet.2016.07.012>
- Busch, G., Bayer, E., Iweala, S., Mehlhose, C., Risius, A., Rubach, C., Schütz, A., Ullmann, K., & Spiller, A. (2021). *Einkaufs-und Ernährungsverhalten sowie Resilienz des Ernährungssystems aus Sicht der Bevölkerung: Eine Studie während der Corona-Pandemie im November 2020. Ergebnisse der dritten Befragungswelle. Diskussionsbeitrag.*
- Cachero-Martínez, S. (2020). Consumer behaviour towards organic products: The moderating role of environmental concern. *Journal of Risk and Financial Management*, 13(12), 330.
- Chait, J. (2019, November 20). Why Consumers Should Buy Organic Food, the balance small business. *Liveabout dotcom*. <https://www.liveabout.com/reasons-to-buy-organic-food-2538039>
- Chandra, A., & Rosman, M. (2020, June 15). *Indian organic foods market report* [Report no. IN2020-0064]. Global Agricultural Information Network (GAIN). https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Indian%20Organic%20Foods%20Market%20Report_New%20Delhi_India_06-08-2020
- Chaturvedi, A., Rashid Chand, M., & Rahman, M. (2021). Impact of the COVID-19 on consumer behaviour towards organic food in India. In P. K. Khosla, M. Mittal, D. Sharma, & L. M. Goyal (Eds.), *Predictive and preventive measures for COVID-19 pandemic* (pp. 127–148). Springer.
- Chokani, R. (2019, August 8). Organic food startups: Massive opportunity, but high costs remain a challenge. *The NEWS Minute*. <https://www.thenewsminute.com/article/organic-food-startups-massive-opportunity-high-costs-remain-challenge-106841>
- Chokhani, R. (2021, April 29). Despite cost, Indian consumers now shifting to organic food. “Health Tips.” *Outlook India*. <https://www.outlookindia.com/website/story/opinion-indian-consumer-not-shying-to-shell-extra-for-organic-food/381556>
- Ćirić, M., Ilić D. S., Ignjatijević S. D., & Brkanlić S. D. (2020). Consumer behaviour in online shopping organic food during the Covid-19 pandemic in Serbia. *Food and Feed Research*, 47(2), 149–158.
- Dangour, A. D., Lock, K., Hayter, A., Aikenhead, A., Allen, E., & Uauy, R. (2010). Nutrition-related health effects of organic foods: A systematic review. *The American Journal of Clinical Nutrition*, 92(1), 203–210.
- Desai, S. (2020, July 08). Organic food gets a Covid-19 boost. *The Times of India*. <https://timesofindia.indiatimes.com/life-style/health-fitness/diet/organic-food-gets-a-covid-19-boost/articleshow/76850772.cms#:~:text=As%20people%20are%20searching%20for,per%20standards%20of%20organic%20farming>
- Ditlevsen, K., Sandøe, P., & Lassen, J. (2019). Healthy food is nutritious, but organic food is healthy because it is pure: The negotiation of healthy food choices by Danish consumers of organic food. *Food Quality and Preference*, 71, 46–53. <https://doi.org/10.1016/j.foodqual.2018.06.001>
- Fatkullin, R., Naumenko, N., Popova, N., Ruskina, A., Kalinina, I., & Potoroko, I. (2021). Explaining consumer intentions for foods with antioxidant properties: Predictors of choice and purchase barriers. *International Journal of Food Science*, 2021, 9971425. <https://doi.org/10.1155/2021/9971425>
- Food and Agriculture Organization [FAO]. (2000, July 24–28). *Food safety and quality as affected by organic farming* [Conference session]. Twenty Second FAO Regional Conference for Europe, Porto, Portugal. <https://www.fao.org/3/X4983e/X4983e.htm>

- FAO. (2020). *The state of food security and nutrition in the world 2020*. https://www.fao.org/3/ca9692en/online/ca9692en.html#chapter-1_1
- Goyal, S. (2020, May 21). Future shock: 25 health & wellness trends post COVID-19. *Economic Times–Brand Equity*. <https://brandequity.economicstimes.indiatimes.com/news/marketing/future-shock-25-health-wellness-trends-post-covid-19/75859294>
- Gundala, R. R., & Singh, A. (2021). What motivates consumers to buy organic foods? Results of an empirical study in the United States. *PLOS ONE*, 16(9), e0257288.
- Güney, O. I., & Sangün, L. (2021). How COVID-19 affects individuals' food consumption behaviour: A consumer survey on attitudes and habits in Turkey. *British Food Journal*. <https://pesquisa.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/pt/covidwho-1105077?lang=en>
- Han, S., & Lee, Y. (2022). Analysis of the impacts of social class and lifestyle on consumption of organic foods in South Korea. *Heliyon*, 8(10), e10998.
- IBEF. (2020, December 3). *Future of Indian food and beverage industry post-pandemic*. <https://www.ibef.org/blogs/future-of-indian-food-and-beverage-industry-post-pandemic>
- Iorver, T. R. (2020). Assessment of utilization of health information resources by diabetic patients in Benue state Nigeria. *Library Philosophy and Practice (e-journal)*. 4390. <https://digitalcommons.unl.edu/libphilprac/4390>
- Jajodia, S. J. (2019, August 19). India's organic food sector is out of its segregated niche. *The Sunday Guardian*. <https://sundayguardianlive.com/lifestyle/indias-organic-food-sector-segregated-niche>
- Jose, H., & Koshy, M. P. (2019). *Factors affecting organic fruits and vegetables buying behaviour of consumes in Kerala* [Doctoral dissertation]. Cochin University of Science and Technology.
- Kamboj, S., Matharu, M., & Gupta, M. (2023). Examining consumer purchase intention towards organic food: An empirical study. *Cleaner and Responsible Consumption*, 9, 100121. <https://doi.org/10.1016/j.clrc.2023.100121>
- Lang, M., & Rodrigues, A. C. (2022). A comparison of organic-certified versus non-certified natural foods: Perceptions and motives and their influence on purchase behaviours. *Appetite*, 168, 105698. <https://doi.org/10.1016/j.appet.2021.105698>
- Liu, C., & Zheng, Y. (2019). The predictors of consumer behaviour in relation to organic food in the context of food safety incidents: Advancing hyper attention theory within an stimulus-organism-response model. *Frontiers in Psychology*, 10, 2512. <https://doi.org/10.3389%2Ffpsyg.2019.02512>
- Lori, M., Symnaczik, S., Mäder, P., De Deyn, G., & Gättinger, A. (2017). Organic farming enhances soil microbial abundance and activity—A meta-analysis and meta-regression. *PLOS ONE*, 12(7), e0180442.
- Malissiova, E., Tsokana, K., Soutani, G., Alexandraki, M., Katsioulis, A., & Manouras, A. (2022). Organic food: A study of consumer perception and preferences in Greece. *Applied Food Research*, 2(1), 100129.
- Mancombu, R. S. (2022, August 3). Organic food market size likely to top \$2.6 billion by 2026. *The Hindu Business Line*. <https://www.thehindubusinessline.com/economy/agri-business/organic-food-market-size-likely-to-top-26-billion-by-2026/article65720090.ece>
- Mic, A., Andersen, H. R., Gunnarsson, S., Kahl, J., Kesse-Guyot, E., Rembiałkowska, E., Quaglio, G., & Grandjean, P. (2017). Human health implications of organic food and organic agriculture: A comprehensive review. *Environmental Health*, 16(1), 111.
- Mo, Z., Liu, M. T., & Liu, Y. (2018). Effects of functional green advertising on self and others. *Psychology & Marketing*, 35(5), 368–382.

- Moss, M. (2023, May 11). 75 years of WHO: The World Health Assembly considers what's next for the global health agency. *United Nations Foundation*. <https://unfoundation.org/blog/post/75-years-of-who-the-world-health-assembly-considers-whats-next-for-the-global-health-agency/>
- Murali, A. P., Trzaskowska, M., & Trafialek, J. (2023). Microorganisms in organic food-issues to be addressed. *Microorganisms*, *11*(6), 1557. <https://doi.org/10.3390/microorganisms11061557>
- Organic Beef. *The Cornucopia Institute*. <https://www.cornucopia.org/organic-beef/>
- Padhee, A. K., & Kane-Potaka, J. (2020). COVID-19 calls for renewed focus on eating right and natural. *DownToEarth*. <https://www.downtoearth.org.in/blog/food/covid-19-calls-for-renewed-focus-on-eating-right-and-natural-71334>
- Ravn Heerwagen, L., Mørch Andersen, L., Christensen, T., & Sandøe, P. (2014). Can increased organic consumption mitigate climate changes?. *British Food Journal*, *116*(8), 1314–1329.
- Rock, B., Puhalethi, K., Vishnupriya, S., Pavithra, R., Supriya, A., & Gayathri, K. (2017a). A study on awareness of organic food products in Trichy district. *International Journal of Community Medicine and Public Health*, *4*, 4490.
- Rock, B., Suriyan, J., Vijay, B., Thalha, N., Elango, S., Rajajeyakumar, M. (2017b). Organic food and health: A systematic review. *Journal of Community Medicine & Health Education*, *7*, 532. <https://doi.org/10.4172/2161-0711.1000532>
- Sastre, R. M., de Paula, I. C., & Echeveste, M. E. S. (2022). A systematic literature review on packaging sustainability: Contents, opportunities, and guidelines. *Sustainability*, *14*(11), 6727.
- Singh, A. (2021, January 14). Organic food products' consumption is a growing trend in Rajasthan amid pandemic: Survey, *Timesnownews.com—Health*. <https://www.timesnownews.com/health/article/organic-food-products-consumption-is-a-growing-trend-in-rajasthan-amid-pandemic-survey/707073>
- Singh, A., & Verma, P. (2017). Factors influencing Indian consumers' actual buying behaviour towards organic food products. *Journal of Cleaner Production*, *167*, 473–483. <https://doi.org/10.1016/j.jclepro.2017.08.106>
- The Cornucopia Institute. (n.d.). *Organic beef*. <https://www.cornucopia.org/organic-beef/>
- Thomas, C., Maitre, I., Picouet, P. A., & Symoneaux, R. (2021). Organic consumers' perceptions of environmental impacts of food overlap only partially with those considered by life cycle assessment. *Journal of Cleaner Production*, *298*, 126676. <https://doi.org/10.1016/j.jclepro.2021.126676>
- Verma, N. (2016, May). *Consumption of organic food and consumers awareness* [Conference session, pp. 689–694]. Proceedings of the 4th International Conference on Science, Technology and Management, India International Centre, New Delhi.
- Wiley, C. (2020, June 22). Effects of Covid-19 on natural products market. *Food Industry Executive*. <https://foodindustryexecutive.com/2020/06/effects-of-covid-19-on-the-natural-products-market/>
- Wojciechowska-Solis, J., & Barska, A. (2021). Exploring the preferences of consumers' organic products in aspects of sustainable consumption: The case of the Polish consumer. *Agriculture*, *11*(2), 138.
- Wortmann, L., Enneking, U., & Daum, D. (2018). German consumers' attitude towards selenium-biofortified apples and acceptance of related nutrition and health claims. *Nutrients*, *10*(2), 190.
- Wu, H. J., & Wu, E. (2012). The role of gut microbiota in immune homeostasis and autoimmunity. *Gut Microbes*, *3*(1), 4–14.
- Zhong, Y., Wu, L., Chen, X., Huang, Z., & Hu, W. (2018). Effects of food-additive-information on consumers' willingness to accept food with additives. *International Journal of Environmental Research and Public Health*, *15*(11), 2394.

Capital Structure Decisions: A Scientometric Assessment and Future Research Lines

BIMTECH Business Perspectives
4(2) 102–119, 2023
© 2023 Birla Institute of Management
Technology
DOI: 10.1177/25819542231220246
bsp.bimtech.ac.in



Umra Rashid¹ , Javaid Akhter¹ and Asif Akhtar¹

Abstract

A company's capital structure has long captured the interest of academics, industry professionals and decision-makers in corporate finance. This scientometric review carefully examines the large body of research on capital structure decisions. Co-word and co-citation analyses were used as two scientometric analytic techniques. Combining these two techniques helps the researcher understand the studied issue's evolution and the field's overall picture. A final dataset of 4,873 was used to synthesise and analyse the capital structure-related research. To the best of our knowledge, there is no comprehensive scientometric review of the literature on the domain of capital structure with this extensive data corpus. This review uses a scientometric approach to analyse the evolution of capital structure research, identify emergent trends and highlight areas that necessitate further investigation. This research lays the groundwork for future scholarly endeavours that resonate with the intricacies of capital structure's role in value creation and firm sustainability, thereby improving our understanding of capital structure decisions in the contemporary financial landscape.

Keywords

Capital structure decisions, financial decisions, bibliometrix-R, scientometric review, VOSviewer

¹ Department of Business Administration, Aligarh Muslim University, Aligarh, Uttar Pradesh, India

Corresponding author:

Umra Rashid, Department of Business Administration, Aligarh Muslim University, Aligarh, Uttar Pradesh, India.

E-mails: fb8446@myamu.ac.in; rashidumra95@gmail.com



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed.

Introduction

In corporate finance, the composition of a firm's capital structure has long captivated the attention of researchers, practitioners and policymakers alike. Capital structure, the blend of debt and equity used to finance a firm's operations, occupies a central position in financial decision-making due to its profound implications for risk, value creation and sustainable growth (Abdul Quddos & Nobanee, 2020; Myers, 1984). This review uses a scientometric approach to decipher the evolution of capital structure research, identify emergent trends and illuminate areas that necessitate further investigation.

The Complex Landscape of Capital Structure Decisions

Capital structure choice embodies a pivotal strategic decision for firms across industries. The composition of debt and equity financing not only shapes a firm's financial risk but also impacts its ability to seize growth opportunities, navigate economic fluctuations and optimise shareholder wealth (Harris & Raviv, 1991). The seminal work of Modigliani and Miller (1958), founded on the premise of perfect markets and costless information, initially proposed the notion of capital structure irrelevance in determining firm value. However, the real-world complexities of taxation, agency conflicts, asymmetric information and market imperfections have compelled scholars to re-examine and refine these fundamental principles (Myers, 1984).

Evolution of Capital Structure Research

An evolution marks the trajectory of capital structure research through various theoretical paradigms, methodological shifts and contextual refinements. The initial theoretical groundwork of (Modigliani & Miller, 1958, 1963) provided a launching pad for a burgeoning field of inquiry. Subsequent research illuminated the significance of taxes (Modigliani & Miller, 1963), agency costs (Jensen & Meckling, 1976), financial distress (Frank & Goyal, 2007) and information asymmetry (Myers & Majluf, 1984) in shaping capital structure decisions. The discipline witnessed the development of intricate models that capture the intricate interplay between these elements and their consequences on financing choices.

Scientometrics, a quantitative methodology encompassing bibliometric and network analysis, offers a powerful lens to discern and analyse patterns within the scholarly literature. By applying this approach to the domain of capital structure, this scientometric review seeks to unveil the underlying dynamics of research development (Ramy et al., 2018). Through rigorous analysis of publication patterns, co-citation networks and collaborative authorship, this review intends to portray the intellectual evolution of capital structure research and identify the scholarly beacons that have shaped its course. Employing scientometrics allows for identifying distinct research clusters within the capital structure landscape. These clusters, arising from shared themes and methodologies, mirror the progression of research directions and the cumulative accumulation of knowledge

(Owusu et al., 2023). By delineating these clusters, this review offers a visual map of the dominant trajectories that have guided capital structure research, shedding light on the ebb and flow of scholarly interest.

As the capital structure landscape continues to evolve in parallel with the dynamic financial environment, emerging trends beckon researchers to delve into previously uncharted territories. As financial technology permeates the realm of finance, investigating its impact on capital structure decisions and the emergence of alternative financing mechanisms becomes paramount (Asimakopoulos et al., 2009). Furthermore, the evolving importance of environmental, social and governance considerations prompts an exploration of their integration into capital structure frameworks (Cantino et al., 2017). In sum, this scientometric review embarks on an intricate journey through the annals of capital structure research, guided by the scientometric compass. By illuminating the historical evolution, identifying prevalent trends and illuminating knowledge gaps, this review lays the groundwork for a dynamic and forward-looking research agenda. To enhance our understanding of capital structure decisions in the contemporary financial landscape, this review paves the way for future scholarly endeavours that resonate with the complexities of capital structure's role in value creation and firm sustainability.

Review Methodology

Our goal was to compile as many papers as possible related to capital structure using a rigorous and repeatable process. This analysis adheres to the preferred reporting items for systematic reviews and meta-analyses (PRISMA) procedure, adhering to a four-step process flow for finding pertinent articles, comprising identification, screening, eligibility evaluation and inclusion, as well as a 27-point checklist on good practice for systematic reviews (Liberati et al., 2009). The investigation, which took a procedural approach influenced by earlier research in the capital structure literature, expanded on earlier literature reviews using the PRISMA methodology (Raisch & Birkinshaw, 2008; Tranfield et al., 2003).

Selection of Sample

Researchers can use a number of online databases, including Google Scholar, Scopus, WoS and Dimensions, to collect data for bibliometric study. However, taking into account the articles' broader scope, especially in the sciences (Hallinger & Nguyen, 2020; Mongeon & Paul-Hus, 2016), in this study, we searched and retrieved data for our analysis using the Scopus database (Anas et al., 2023; Khan et al., 2023; Khan & Khan, 2022), which provided reasonably reliable search results when compared to other databases.

In the initial phase, the search string included 'Capital Structure' OR 'Capital Structure Decisions'. In order to find literature that matched the goals of the

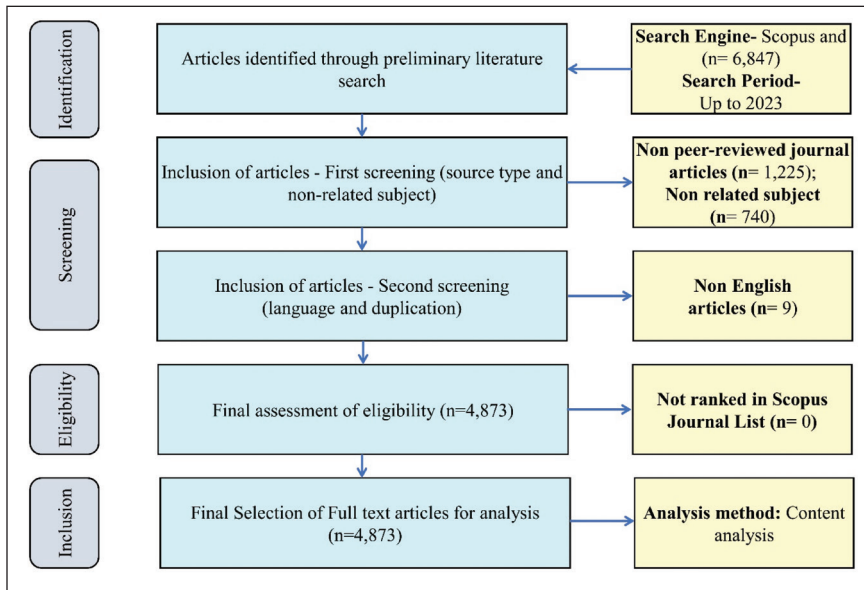


Figure 1. Review Procedure as per the PRISMA Protocol.

current study, researchers looked for combinations of these terms in the titles, abstracts and authors' keywords.

There were 6,847 entries found in total from the first search. Next, we used PRISMA (Moher et al., 2009) while choosing the last set of data to be screened and examined further (Figure 1). After limiting the results by document types to include journal articles and review papers, we received 4,882 articles overall. Ultimately, we ruled out nine publications since they were written in languages other than English. Therefore, 4,873 results remained for further investigation.

Data Analysis

The quantitative approach (scientometric analysis) of capital structure-related research is explained in this section. The Scopus database conducted a subclass of bibliometric analysis known as scientometric analysis (Boly et al., 2021). With the help of bibliometric data analysis, scientometrics create a network visualisation technique called knowledge mapping or scientific mapping (van Eck & Waltman, 2010). By extracting research topics from influential scholars, publications and institutions, the scientometric analysis seeks to evaluate the scientific community (Cobo et al., 2011; Sharma & Lenka, 2022). Through visualisation patterns in bibliographical databases, scientometrics assist researchers in analysing large volumes of scientific networks (Donthu et al., 2022). The scientometric analysis is built, examined and visualised using the bibliomatrix-R and VOSviewer software. It is a straightforward tool that visualises bibliometric networks (Fauzi, 2023; Rasul et al., 2022).

Co-word and co-citation analyses were used as two scientometric analytic techniques. By combining the two studies, the researcher can better comprehend the field's overall image and the development of the study issue (Tan Luc et al., 2022).

Co-word Analysis

Co-word analysis, sometimes referred to as keyword co-occurrence analysis, examines the connections between the terms in the current field (van Eck & Waltman, 2010). It gives experts in a field an overview so they may see the knowledge structure from many angles made possible by the articles that have been published (Su & Lee, 2010). Regarding the network actor, the knowledge structure can be extracted from the macro-, meso- and micro-levels in the form of author, institute and country keywords. Additionally, the study can be used to forecast emerging trends and the development of connected topics (Tan Luc et al., 2022). This analysis can comprehensively summarise current capital structure research in the broader organisational context.

Co-citation Analysis

The co-citation analysis is the second scientometric analysis. Co-citation analysis seeks to determine how prior research influenced the growth of capital structure research (Bernatović et al., 2022). Particularly in the current setting, the results would make it easier for researchers to find the most pertinent materials for capital structure research. When two items are cited together, co-citation analysis offers helpful information. It highlights two closely connected articles frequently mentioned and shared the same substance, theme and research stream (Pandey et al., 2023).

Results of Scientometric Analysis

Descriptive Analysis

The rapid expansion of published works directly reflects the expanding body of scientific knowledge. Therefore, it is important to examine this pattern and its origins (see Table 1). There was a total of 6,847 items found in the first search. About 4,873 publications were selected for the study after being whittled down based on criteria such as being peer-reviewed, subject area, source type and article published in English. There were a total of 15,125 citations and 8,400 (without self-citations). The h-index was 84, and the average number of citations per item was 3.13. The h-index, or Hirsch index, is a metric commonly used to assess scholars' research impact and productivity in various academic fields, including finance. Understanding the h-index is vital, as it allows us to evaluate the influence and reach of finance scholars whose work informs the framework of our study. Figure 2 shows that interest in capital structure studies increased tremendously after 2006. The number of studies has increased from 926 articles (1959–2006) to 3,899 articles

Table I. Performance Trends for Capital Structure and Corporate Sustainability.

Description	Results	Description	Results
<i>Part A. Publication data</i>		<i>Part C. Documents</i>	
Total publications (TP)	4,873	References	
Total cited publications		Keywords	1,393
Total sources (journals)	902	Author’s keywords (DE)	6,773
Article (e.g., conceptual and empirical)			
Review (e.g., critical and systematic reviews)			
Number of active years			
Productivity per active year	9.25		
<i>Part B. Citation data</i>			
Total citations (TC)	33.4		
Average citations per publication (TC/TP)	33.		
<i>h-index</i>			

Note: Period of coverage = 1959–Aug 2023.

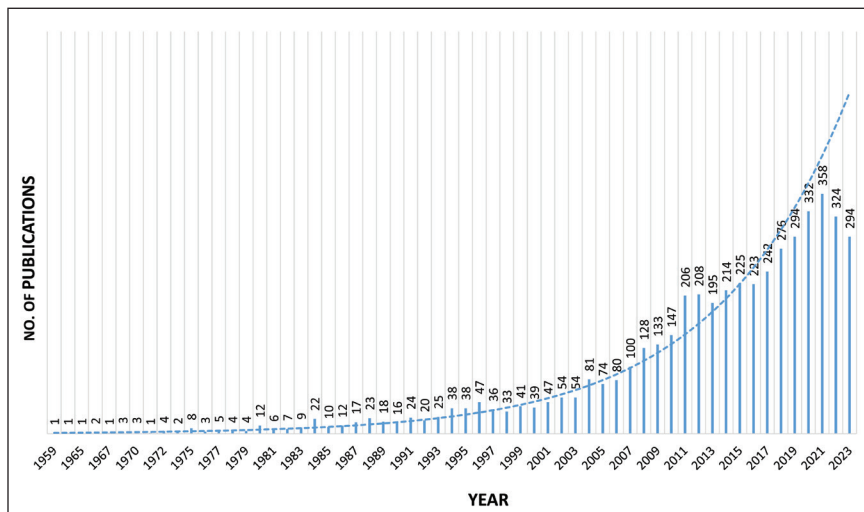


Figure 2. Number of Publications from 1959 to 2023.

in the past 17 years (2007–2023). This growth demonstrates scholars’ curiosity about how capital structure choices affect businesses.

Co-word Analysis

Thematic Cluster 1: The Relationship Between Capital Structure and Profitability

The first cluster of keywords includes terms that express the connection between the firm’s capital structure, profitability and speed of adjustments. The most common keywords in this cluster are ‘profitability’ (occurrences (OC): 193) and

'speed of corrections' (101). The publications in this cluster with the widely used keywords analyse the various connections between a firm's capital structure and its profitability both domestically and internationally (Alghifari et al., 2022; Ilie & Vasiliu, 2022), the importance of capital structure dynamics by looking at how quickly firms reach their ideal capital structure (Ghose & Kabra, 2019) as well as asymmetric information's impact on a firm's financing decisions, capital structure modifications' feedback on asymmetric information and capital structure adjustments' speed on target leverage (Ahmad et al., 2021; Haron, 2016).

Thematic Cluster 2: Leverage and Corporate Governance

The second cluster contains keywords: capital structure decisions, leverage and corporate governance. The most common keywords in this cluster are capital structure decisions (OC: 2,345), leverage (OC: 391) and corporate governance (OC: 228). Fischer et al. (1989) create a theoretical model of pertinent capital structure choice in a dynamic setting, considering the presence of recapitalisation costs and revealing that firms' debt ratio ranges to firm-specific variables that substantially support the model. The importance of capital structure or leverage with the interplay of the prevailing theories on SMEs has been the subject of many debates (Harasheh & De Vincenzo, 2023; Paulo Esperança et al., 2003; Seppa, 2014). Financial and non-financial aspects of a company's performance were studied concerning its capital structure, corporate leverage and corporate governance structures (Miloud, 2022; Zeitun & Goaid, 2022).

Thematic Cluster 3: Trade-off Theory (TOT) and Pecking Order Theory (POT)

The second cluster contains keywords that are debt and the application theories of the firm, that is, TOT and POT. The most common keywords in this cluster are debt (OC: 219), TOT (OC: 145) and POT (OC: 137). The research in this cluster contends that, when taking into account the ideal time to issue debt, zero leverage is optimally consistent with even elementary static TOT (Haddad & Lotfaliee, 2019), as well as analysed whether or not companies' debt choices adhere to the pecking order hypothesis. Using cross-country and within-country-year variation, we show that treated businesses issue more external financing and invest more after the new regime (Naranjo et al., 2022). In addition, many studies put forward the POT and TOT to examine their respective hypotheses in relation to corporate debt (Adair & Adaskou, 2015; Serrasqueiro & Caetano, 2014).

Thematic Cluster 4: Corporate Finance and Cost of Bankruptcy

The fourth cluster reflects on corporate finance and the bankruptcy of the firm. The widely used keywords are corporate finance (OC: 73), bankruptcy (OC: 58) and risk (OC: 38). The research in this cluster elucidates the interrelationship between corporate finance, bankruptcy and various types of risk of the firm. Castanias (1983) investigated the bankruptcy or failure rate in corporate finance. There was evidence against the non-significance hypothesis. The study also compares Moroccan enterprises' corporate finance practices to those in other nations in Morocco's frontier market (Baker et al., 2017). The myriad of research in this cluster also delineates the impact of various risks like a firm's risk of

rollover (Haque & Varghese, 2023), systematic political risk (Chuliá et al., 2023), environmental risk (Shu et al., 2023; Zhou & Wu, 2023) and so on that a firm face in its capital structure decisions-making.

Thematic Cluster 5: Dividend Policy and Financial Markets

The fifth and final cluster contains keywords emphasising dividend policy and financial markets. The widely used keywords are dividend policy (OC: 48), financial markets (OC: 43), stock market and corporate strategy (OC: 32). Importantly, this grouping of publications delineates the dividend policy's determinants (Ranti, 2013), the analysis of dividend policy in tandem with corporate governance (Roy, 2015) and dividend policy in tandem with defaultable firm's capital structure (Tse, 2020). The noteworthy research also focuses on the firm ownership, capital structure decisions and stock market (Campello et al., 2014), behaviour of stock market (Rajagopalan & Shankar, 2012), the effect of corporate strategy on the decisions of capital structure (Barton & Gordon, 1988; Cappa et al., 2020), in tandem with firm performance (Su & Vo, 2010), as well as with financial strategy (Korwar, 1996).

Co-citation Analysis

Document co-citation is a bibliographic technique that examines the number of times key studies or articles have been cited in other works to pinpoint the study in a field that those studies or publications have inspired. Using this bibliometric technique, we can identify the main research issues and hot topics in capital structure. This approach was first suggested by Small (1973), who suggested analysing the network of referenced references. The network analysis unit in an overlay visualisation is the article. Our goal in using this bibliometric study was to identify the organisational framework of the most significant contributions to capital structure research.

The network of document co-citations created by the VOS viewer is shown in Figure 3. High co-citation article pairs are represented with bigger node sizes, as seen. When two papers are listed together in the references of other research projects, they are said to be co-cited. Each node in the figure represents an article referenced at least twice. The graphic only shows the 33 clusters of the 59 publications with the highest number of co-citations. The node's radius indicates a document's citation frequency in other research. Four clusters were discovered by VOSviewer automatically because highly co-cited documents are frequently grouped. The red cluster, the most prominent cluster, provides several insights into the ideal capital structure choice of debt and equity, its determinants, corporate finance's theory and practice and capital structure adjustments. Titman's (1984) article received the highest citation count in 1926 and proposes that capital structure can act as a bonding or prepositioning device to manage this relationship's incentive/conflict issue. When the capital structure is appropriately chosen, incentives are balanced, and the company can adopt a liquidation strategy that maximises value ex ante. The pecking order hypothesis, or the theory of firm

leverage on a large sample of publicly traded firms from 1971 to 1998, was tested by Frank and Goyal (2003).

The green cluster reflects the irrelevancy and relevancy of capital structure to the firm value, agency theory and factors of capital structure. Modigliani and Miller (1958) proposed the irrelevance of capital structure on firm value in a perfect market, suggesting that how a company finances its operations (through debt or equity) does not affect its overall value under certain assumptions. This forms a foundational concept in modern corporate finance theory. In 1963, Modigliani and Miller (1963) extended their theory by introducing taxes and financial distress costs, acknowledging that under certain conditions, capital structure decisions can impact firm value due to tax shields and the potential costs of financial distress. The agency theory was pioneered by Jensen and Meckling (1976) and defined the concept of agency costs, showing its relationship to the firm's separation and control issue. The blue cluster focuses on investigating capital structure decisions in emerging countries, debt maturity and financial institutions for accessing sources of finance. In this cluster, Booth et al. (2001) evaluated the applicability of capital structure theory to nations with various institutional setups. He proved that the same factors influencing decisions in affluent nations also influence those in developing nations. However, consistent disparities between nations suggest that particular nation-specific forces are at play. Booth and Deli (1999) offered the first empirical support for a specific group of outside directors, specifically executives from insurance companies, commercial banks or investment banks. They provide light on these executives' services by studying how their presence is related to borrowing. The last cluster, yellow, delineates the dilemma in choosing the ideal capital structure for the firm, investment decisions and the impact of corporate taxes on capital structure.

Myers (1984) addressed the complex relationship between a firm's optimal capital structure and value, considering factors such as taxes, bankruptcy costs and agency issues, which influence the trade-off between debt and equity financing. The investigation of how information asymmetry between firms and investors affects financing and investment choices was explored by Myers and Majluf (1984). They analyse the impact of undervaluation due to asymmetric information on firms' decisions to issue equity or debt and their subsequent investment strategies. Kraus and Litzenberger (1973) presented a model integrating investor preferences for risk and return with a firm's optimal financial leverage decision. The model considers how different states of the economy influence the choice between debt and equity financing, highlighting the trade-offs involved in capital structure decisions.

Key Implications

Theoretical Contributions

This study's goal was to use the right research approach to undertake a scientific examination of selected publications' capital structure-related research. The analysis of 74 journal articles was thorough. Despite increased publications over the past several decades, this review's findings showed that capital structure

is still a relatively new topic of study. The review's initial objectives included identifying descriptive analyses of capital structure-related research, the key producing nations, total citations, self-citations, h-index and publishing trends—secondly, a substantial portion of the studies using empirical methods employed a secondary database methodology. An authors' network of document co-citations and keyword co-occurrence was used to conduct the scientometric analysis. Third, the existing literature shows that studies on capital structure have mainly concentrated on the economic elements, while the overlap in social dimensions has received less attention. This study provides a relevant and thorough assessment of capital structure, making substantial theoretical additions to the literature.

Lastly, our findings suggest that the industry may benefit from carefully deploying various funding sources in the long run. Choosing which type of funding to use first would be an issue, but businesses can adjust and match the proportionate debt and equity to lower their financing costs and boost their firm worth. Future research may also develop a direct assessment of the bankruptcy cost to demonstrate whether and how the assessment channel works with various funding sources. Moreover, further studies could examine the informative utility of the complete term structures of capital structure decisions spreads and stock options for realised short- and long-term asset/equity volatility. The findings of this review represent one of the earliest initiatives to advance the idea of capital structure and its connection to current interactions.

Implications for Researchers

The paper underscores the importance of empirical rigour and comprehensive analysis for academia in understanding complex financial concepts. The study showcases how quantitative methods can contribute to a deeper understanding of capital structure theories and their applications by employing a scientometric approach. This encourages researchers to explore similar methods in studying other intricate financial concepts. Furthermore, the research suggests that a scientometric approach can bridge the gap between theory and practice, facilitating more effective communication between academia and the business community. The paper encourages a collaborative approach that could lead to more relevant and actionable research outcomes by aligning theoretical insights with empirical findings. This, in turn, benefits firms seeking to optimise their capital structure for sustainable growth and resilience in dynamic market environments.

Implications for Practitioners/Managers

The managerial implications for a paper on the capital structure using a scientometric approach might include the following:

First, managers can benefit from the insights gained through scientometric analysis of existing literature, helping them make more informed decisions regarding the optimal capital structure for their company. Second, managers can identify areas where further research is needed by understanding the trends and gaps in the literature. This can help them anticipate emerging issues and consider potential

implications for their firm's capital structure decisions. Third, scientometric analysis can highlight how various factors impact capital structure decisions in different industries and economic conditions. This understanding can aid managers in developing risk management strategies aligned with industry best practices. Fourth, the analysis might shed light on how firms with more flexible capital structures successfully navigated economic fluctuations. Managers can learn from these examples and design capital structures for greater flexibility in uncertain times. Finally, managers can use insights from scientometric analysis to communicate with investors more effectively about their capital structure decisions. This communication could include discussing the rationale behind specific financing choices based on the trends and findings from the research.

Conclusion

The journey through the landscape of capital structure research, guided by the scientometric compass, has provided us with a panoramic view of the past, a comprehensive understanding of the present and a visionary outlook towards the future. This scientometric review has delved into the intricate fabric of capital structure decisions, offering insights that span theoretical underpinnings, methodological trajectories and emerging trends. As we conclude this exploration, several overarching themes emerge, underscoring the significance of this review and the fertile ground it lays for future scholarship. The scientometric analysis has enabled us to retrace the footsteps of capital structure research, revealing the intellectual evolution of the field. From the foundational propositions of Modigliani and Miller (1958) to the dynamic interplay of market imperfections elucidated by subsequent scholars, the journey through time and thought has highlighted the adaptability of financial theory to changing economic landscapes. This review acknowledges the foundations upon which current and future studies are built by recognising the pivotal contributions of pioneering researchers. Beyond retrospect, this review peers into the future of capital structure research, where emerging trends beckon scholars to explore uncharted territories. The infusion of financial technology into finance brings forth novel avenues for investigation, with digital innovations reshaping the landscape of capital structure decisions.

As we gaze towards the horizon of scholarship, this review's overarching aspiration is to foster a dynamic and impactful research agenda. By discerning research gaps and identifying emerging themes, this review provides a compass for future explorations that resonate with the complexities of capital structure decisions. The chasm between theory and practice has been a perennial challenge in finance. However, this review advocates for a symbiotic relationship where theoretical insights catalyse actionable decisions. By aligning theoretical paradigms with real-world complexities, future research endeavours can address the nuanced considerations that firms confront when navigating the labyrinth of capital structure decisions. The interplay of academia and industry promises to generate insights that transcend the confines of the ivory tower and resonate within boardrooms.

Recent Publications Induced Future Research Agenda

Four additional interesting avenues for future research are available based on recent publications.

First, future research may conduct interviews, surveys or case studies to collect primary data rather than depending on secondary data sources. This would guarantee reliable information for studying the connection between capital for the firm, board diversity and board composition (Yakubu & Oumarou, 2023).

Second, future studies may investigate creating a direct assessment of the cost of bankruptcy to show whether and how the assessment channel functions with different sources of finance (Agarwal & Singhvi, 2023).

Third, further studies could examine the informative utility of the complete term structures of capital structure decisions spreads and stock options for realised short- and long-term asset/equity volatility (Forte & Lovreta, 2023).

Lastly, future studies can examine how job protection affects leverage adjustment speed in developed nations. Also worth discussing is how employment protection affects firm-level information sharing and earning management (Li et al., 2023).

Thematic Clusters Induced Future Research Agenda

The majority of the study's data set exclusively includes listed companies. Because there are not enough data available, unlisted companies are overlooked. Therefore, the study's conclusions may not be applied to privately held companies, leaving room for further investigation (Ghose & Kabra, 2019). New methods may be used in the future of study, as suggested by Zeitun and Goaid (2022), to uncover additional elements that affect leverage via threshold effects. Future research could expand to incorporate more managerial ownership and board composition proxies to confirm these results. Furthermore, future studies can examine the justification for current corporate finance practices and potential barriers to adopting more theoretically sound strategies in emerging and developing countries (Baker et al., 2017). Lastly, future research will focus on widening the research horizon at the listed companies in central and eastern Europe and uncovering other influencing elements on the relationship between the capital structure and the profitability of businesses (Ilie & Vasiiu, 2022).

Overcome Limitations and the Future Research Agenda

The limitation considered in this study is threefold. First, despite a thorough search for the plausibility of pertinent capital structure studies in this review, it is still possible that some pertinent studies were missed due to the changing nature of the research field (Rejeb et al., 2021). Second, the fluctuation of papers in Scopus is concerning because it is possible that excellent capital structure research published in journals, books or book chapters is not indexed (Rasul et al., 2022). Finally, despite the groundbreaking ideas presented here, this review's range of scientometric insights remains constrained. Future reviews can, therefore, expand on the themes raised here by doing a thorough literary analysis of the data corpus (Fauzi, 2023).

Declaration of Conflicting Interests

The authors have no conflict to declare for this paper.

Funding

The authors received no financial support for the research, authorship and/or publication of this article.

ORCID iD

Umra Rashid  <https://orcid.org/0000-0003-0639-3813>

References

- Abdul Quddos, M., & Nobanee, H. (2020). Sustainable capital structure: A mini-review. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3538839>
- Adair, P., & Adaskou, M. (2015). Trade-off-theory vs. pecking order theory and the determinants of corporate leverage: Evidence from a panel data analysis upon French SMEs (2002–2010). *Cogent Economics & Finance*, 3(1). <https://doi.org/10.1080/2322039.2015.1006477>
- Agarwal, S., & Singhvi, B. (2023). Creditor-controlled insolvency and firm financing—Evidence from India. *Finance Research Letters*, 54, 103813. <https://doi.org/10.1016/j.frl.2023.103813>
- Ahmad, M. M., Hunjra, A. I., Islam, F., & Zureigat, Q. (2021). Does asymmetric information affect firm's financing decisions? *International Journal of Emerging Markets*, 18(9). <https://doi.org/10.1108/IJOEM-01-2021-0086>
- Alghifari, E. S., Solikin, I., Nugraha, N., Waspada, I., Sari, M., & Puspitawati, L. (2022). Capital structure, profitability, hedging policy, firm size, and firm value: Mediation and moderation analysis. *Journal of Eastern European and Central Asian Research (JEECAR)*, 9(5), 789–801. <https://doi.org/10.15549/jeecar.v9i5.1063>
- Anas, M., Khan, M. N., & Uddin, S. M. F. (2023). Mapping the concept of online purchase experience: A review and bibliometric analysis. *International Journal of Quality and Service Sciences* 15(2), 168–189. <https://doi.org/10.1108/IJQSS-07-2022-0077>
- Asimakopoulos, I., Samitas, A., & Papadogonas, T. (2009). The impact of capital intensity, size of firm and profitability on debt financing, case study in textile industry of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 3(10), 1061–1066.
- Baker, H. K., Jabbouri, I., & Dyaz, C. (2017). Corporate finance practices in Morocco. *Managerial Finance*, 43(8), 865–880. <https://doi.org/10.1108/MF-12-2016-0359>
- Barton, S. L., & Gordon, P. J. (1988). Corporate strategy and capital structure. *Strategic Management Journal*, 9(6), 623–632. <https://doi.org/10.1002/smj.4250090608>
- Bernatović, I., Slavec Gomezel, A., & Černe, M. (2022). Mapping the knowledge-hiding field and its future prospects: A bibliometric co-citation, co-word, and coupling analysis. *Knowledge Management Research & Practice*, 20(3), 394–409. <https://doi.org/10.1080/14778238.2021.1945963>
- Boloy, R. A. M., da Cunha Reis, A., Rios, E. M., J. de Araújo Santos Martins, Soares, L. O., de Sá Machado, V. A., & de Moraes, D. R. (2021). Waste-to-energy technologies towards circular economy: A systematic literature review and bibliometric analysis. *Water, Air, & Soil Pollution*, 232(7), 306. <https://doi.org/10.1007/s11270-021-05224-x>
- Booth, J. R., & Deli, D. N. (1999). On executives of financial institutions as outside directors. *Journal of Corporate Finance*, 5(3), 227–250. [https://doi.org/10.1016/S0929-1199\(99\)00004-8](https://doi.org/10.1016/S0929-1199(99)00004-8)

- Booth, L., Aivazian, V., Demirguc-Kunt, A., & Maksimovic, V. (2001). Capital structures in developing countries. *Journal of Finance*, 56(1), 87–130. <https://doi.org/10.1111/0022-1082.00320>
- Campello, M., Ribas, R. P., & Wang, A. Y. (2014). Is the stock market just a side show? Evidence from a structural reform. *Review of Corporate Finance Studies*, 3(1–2), 1–38. <https://doi.org/10.1093/rcfs/cfu006>
- Cantino, V., Devalle, A., & Fiandrino, S. (2017). ESG sustainability and financial capital structure: Where they stand nowadays. *International Journal of Business and Social Science*, 8(5), 116–126.
- Cappa, F., Cetrini, G., & Oriani, R. (2020). The impact of corporate strategy on capital structure: Evidence from Italian listed firms. *The Quarterly Review of Economics and Finance*, 76, 379–385. <https://doi.org/10.1016/j.qref.2019.09.005>
- Castanias, R. (1983). Bankruptcy risk and optimal capital structure. *The Journal of Finance*, 38(5), 1617–1635. <https://doi.org/10.1111/j.1540-6261.1983.tb03845.x>
- Chuliá, H., Estévez, M., & Uribe, J. M. (2023). Systemic political risk. *Economic Modelling*, 125, 106375. <https://doi.org/10.1016/j.econmod.2023.106375>
- Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2011). Science mapping software tools: Review, analysis, and cooperative study among tools. *Journal of the American Society for Information Science and Technology*, 62(7), 1382–1402. <https://doi.org/10.1002/asi>
- Donthu, N., Lim, W. M., Kumar, S., & Pattnaik, D. (2022). A scientometric study of the *Journal of Advertising Research*. *Journal of Advertising Research*, 62(2), 105–117. <https://doi.org/10.2501/JAR-2022-002>
- Fauzi, M. A. (2023). Knowledge hiding behavior in higher education institutions: A scientometric analysis and systematic literature review approach. *Journal of Knowledge Management*, 27(2), 302–327. <https://doi.org/10.1108/JKM-07-2021-0527>
- Fischer, E. O., Heinkel, R., & Zechner, J. (1989). Dynamic capital structure choice: Theory and tests. *The Journal of Finance*, 44(1), 19–40.
- Forte, S., & Lovreta, L. (2023). Credit default swaps, the leverage effect, and cross-sectional predictability of equity and firm asset volatility. *Journal of Corporate Finance* 79, 102347. <https://doi.org/10.1016/j.jcorpfin.2022.102347>
- Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, 67(2), 217–248. [https://doi.org/10.1016/S0304-405X\(02\)00252-0](https://doi.org/10.1016/S0304-405X(02)00252-0)
- Frank, M. Z., & Goyal, V. K. (2007). Trade-off and pecking order theories of debt. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.670543>
- Ghose, B., & Kabra, K. C. (2019). Firm profitability and adjustment of capital structure: Indian evidence. *Vision: The Journal of Business Perspective*, 23(3), 297–308. <https://doi.org/10.1177/0972262919855804>
- Haddad, K., & Lotfaliee, B. (2019). Trade-off theory and zero leverage. *Finance Research Letters*, 31, 165–170. <https://doi.org/10.1016/j.frl.2019.04.011>
- Hallinger, P., & Nguyen, V.-T. (2020). Mapping the landscape and structure of research on education for sustainable development: A bibliometric review. *Sustainability*, 12(5), 1947. <https://doi.org/10.3390/su12051947>
- Haque, S., & Varghese, R. (2023). Firms' rollover risk, capital structure and unequal exposure to aggregate shocks. *Journal of Corporate Finance*, 80, 102416. <https://doi.org/10.1016/j.jcorpfin.2023.102416>
- Harasheh, M., & De Vincenzo, F. (2023). Leverage-value nexus in Italian small-medium enterprises: Further evidence using dose-response function. *EuroMed Journal of Business*, 18(2), 165–183. <https://doi.org/10.1108/EMJB-11-2021-0166>

- Haron, R. (2016). Do Indonesian firms practice target capital structure? A dynamic approach. *Journal of Asia Business Studies*, 10(3), 318–334. <https://doi.org/10.1108/JABS-07-2015-0100>
- Harris, M., & Raviv, A. (1991). The theory of capital structure. *The Journal of Finance*. <https://doi.org/10.1111/j.1540-6261.1991.tb03753.x>
- Ilie, L., & Vasiliu, D. (2022). Capital structure and profitability. The case of companies listed in Romania. *Studies in Business and Economics*, 17(3), 100–112. <https://doi.org/10.2478/sbe-2022-0049>
- Khan, F. M., Anas, M., & Uddin, S. M. F. (2023). Anthropomorphism and consumer behaviour: A SPAR-4-SLR protocol compliant hybrid review. *International Journal of Consumer Studies*, 1–37. <https://doi.org/10.1111/ijcs.12985>
- Khan, N. F., & Khan, M. N. (2022). A bibliometric analysis of peer-reviewed literature on smartphone addiction and future research agenda. *Asia-Pacific Journal of Business Administration*, 14(2), 199–222. <https://doi.org/10.1108/APJBA-09-2021-0430>
- Korwar, A. (1996). On corporate strategy and financial strategy. *Vikalpa: The Journal for Decision Makers*, 21(1), 3–13. <https://doi.org/10.1177/0256090919960101>
- Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance*, 28, 911–922.
- Li, M., Chiang, Y.-M., & Liu, H. (2023). Employment protection and leverage adjustment speed: Evidence from China. *Research in International Business and Finance*, 64(40), 101894. <https://doi.org/10.1016/j.ribaf.2023.101894>
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration, *Journal of Clinical Epidemiology*, 62(10), e1–34. <https://doi.org/10.1016/j.jclinepi.2009.06.006>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Miloud, T. (2022). Corporate governance and the capital structure behavior: Empirical evidence from France. *Managerial Finance*, 48(6), 853–878. <https://doi.org/10.1108/MF-12-2021-0595>
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261–297.
- Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *American Economic Association*, 53(3), 433–443.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: A comparative analysis. *Scientometrics*, 106(1), 213–228. <https://doi.org/10.1007/s11192-015-1765-5>
- Myers, S. C. (1984). The capital structure puzzle. *The Journal of Finance*, 39(3), 575–592.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13, 187–221.
- Naranjo, P., Saavedra, D., & Verdi, R. S. (2022). The pecking order and financing decisions: Evidence from changes to financial-reporting regulation. *Journal of Accounting, Auditing & Finance*, 37(4), 727–750. <https://doi.org/10.1177/0148558X20945066>
- Owusu, G. M. Y., Koomson, T. A. A., & Donkor, G. N. A. (2023). A scientometric analysis of the structure and trends in corporate fraud research: A 66-year review. *Journal of Financial Crime*. <https://doi.org/10.1108/JFC-05-2023-0121>

- Pandey, D. K., Hunjra, A. I., Hassan, M. K., & Rai, V. K. (2023). Venture capital financing during crises: A bibliometric review. *Research in International Business and Finance* 64(C), 101856. <https://doi.org/10.1016/j.ribaf.2022.101856>
- Paulo Esperança, J., Matias Gama, A. P., & Azzim Gulamhussen, M. (2003). Corporate debt policy of small firms: An empirical (re)examination. *Journal of Small Business and Enterprise Development*, 10(1), 62–80. <https://doi.org/10.1108/14626000310461213>
- Raisch, S., & Birkinshaw, J. (2008). Organizational ambidexterity: Antecedents, outcomes, and moderators. *Journal of Management*, 34(3), 375–409. <https://doi.org/10.1177/0149206308316058>
- Rajagopalan, N. V. R., & Shankar, H. (2012). Stock market behaviour around buyback announcements in India: An empirical justification for preferring the open market repurchase mode. *Indian Journal of Finance*, 6(12), 608002. <https://doi.org/10.17010/ijf/2012/v6i12/72364>
- Ramy, A., Floody, J., Ragab, M. A. F., & Arisha, A. (2018). A scientometric analysis of knowledge management research and practice literature: 2003–2015. *Knowledge Management Research and Practice*, 16(1), 66–77. <https://doi.org/10.1080/14778238.2017.1405776>
- Ranti, U. O. (2013). Determinants of dividend policy: A study of selected listed firms in Nigeria. *Change and Leadership*, 15(17), 107–119.
- Rasul, T., Lim, W. M., Dowling, M., Kumar, S., & Rather, R. A. (2022). Advertising expenditure and stock performance: A bibliometric analysis. *Finance Research Letters*, 50, 103283. <https://doi.org/10.1016/j.frl.2022.103283>
- Rejeb, A., Rejeb, K., & Zailani, S. (2021). Are Halal food supply chains sustainable: A review and bibliometric analysis. *Journal of Foodservice Business Research*, 24(5), 554–595. <https://doi.org/10.1080/15378020.2021.1883214>
- Roy, A. (2015). Dividend policy and corporate governance: An analysis of listed Indian firms. *The Great Lakes Herald*, 9(2), 33–75.
- Seppa, R. (2014). Implication of inside-debt: Signalling for bankruptcy probabilities within small firms. *Baltic Journal of Management*, 9(2), 168–188. <https://doi.org/10.1108/BJM-03-2013-0043>
- Serrasqueiro, Z., & Caetano, A. (2014). Trade-off theory versus pecking order theory: Capital structure decisions in a peripheral region of Portugal. *Journal of Business Economics and Management*, 16(2), 445–466. <https://doi.org/10.3846/16111699.2012.744344>
- Sharma, S., & Lenka, U. (2022). Counterintuitive, yet essential: Taking stock of organizational unlearning research through a scientometric analysis (1976–2019). *Knowledge Management Research & Practice*, 20(1), 152–174. <https://doi.org/10.1080/14778238.2021.1943553>
- Shu, H., Tan, W., & Wei, P. (2023). Carbon policy risk and corporate capital structure decision. *International Review of Financial Analysis*, 86, 102523. <https://doi.org/10.1016/j.irfa.2023.102523>
- Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for Information Science*, 24(4), 265–269. http://onlinelibrary.wiley.com/doi/10.1002/asi.4630240406/abstract%5CnD:%5CZotero_Data%5CZotero%5CProfiles%5C1sqw9v0j.default%5Czotero%5Cstorage%5CGCR7NPQA%5Cabstract.html
- Su, G.-S., & Vo, H. T. (2010). The relationship between corporate strategy, capital structure and firm performance: An empirical study of the listed companies in Vietnam. *International Research Journal of Finance and Economics*, 50, 62–71.
- Su, H.-N., & Lee, P.-C. (2010). Mapping knowledge structure by keyword co-occurrence: A first look at journal papers in technology foresight. *Scientometrics*, 85(1), 65–79. <https://doi.org/10.1007/s11192-010-0259-8>

- Tan Luc, P., Xuan Lan, P., Nhat Hanh Le, A., & Trang, B. T. (2022). A co-citation and co-word analysis of social entrepreneurship research. *Journal of Social Entrepreneurship*, 13(3), 324–339. <https://doi.org/10.1080/19420676.2020.1782971>
- Titman, S. (1984). The effect of capital structure on a firm's liquidation decision. *Journal of Financial Economics*, 13(1), 137–151. [https://doi.org/10.1016/0304-405X\(84\)90035-7](https://doi.org/10.1016/0304-405X(84)90035-7)
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14, 207–222.
- Tse, A. S. L. (2020). Dividend policy and capital structure of a defaultable firm. *Mathematical Finance*, 30(3), 961–994. <https://doi.org/10.1111/mafi.12238>
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Yakubu, I. N., & Oumarou, S. (2023). Boardroom dynamics: The power of board composition and gender diversity in shaping capital structure. *Cogent Business & Management*, 10(2).<https://doi.org/10.1080/23311975.2023.2236836>
- Zeitun, R., & Goaid, M. (2022). Corporate governance and capital structure: Dynamic panel threshold analysis. *Applied Economics*, 55(50), 5878–5894<https://doi.org/10.1080/00036846.2022.2140770>
- Zhou, Z., & Wu, K. (2023). Does climate risk exposure affect corporate leverage adjustment speed? International evidence. *Journal of Cleaner Production*, 389, 136036. <https://doi.org/10.1016/j.jclepro.2023.136036>

Mapping the Structure of Luxury Consumption Behavior: A Bibliometric Assessment

BIMTECH Business Perspectives
4(2) 120–148, 2023
© 2023 Birla Institute of Management
Technology
DOI: 10.1177/25819542231210132
bsp.bimtech.ac.in



Sabara Soyafuddin Ahmed¹  and Bilal Mustafa Khan¹ 

Abstract

This study aims to identify current research trends and suggests potential areas for future investigation in the field of “luxury consumption behavior.” To achieve this, we gathered a comprehensive dataset spanning five decades, consisting of 1,289 articles from Scopus and Web of Science databases, which underwent rigorous bibliometric analyses. Our bibliometric analysis has unveiled crucial insights, including key performance indicators, emerging areas of study, significant keywords, and prevailing research themes within the luxury consumption domain. The findings emphasize the remarkable growth of luxury consumption as a research area, leading to the identification and examination of five distinct research clusters. Through this in-depth bibliometric analysis, our study enriches the existing body of knowledge on luxury consumption, offering a comprehensive overview of scholarly contributions in this field and paving the way for potential future research endeavors.

Keywords

Bibliometric analysis, luxury consumption, luxury brand management, luxury consumer behavior

¹ Department of Business Administration, Aligarh Muslim University, Aligarh, Uttar Pradesh, India

Corresponding author:

Sabara Soyafuddin Ahmed, Department of Business Administration, Aligarh Muslim University, Aligarh, Uttar Pradesh 202002, India.
E-mail: sabera.ahmad114@gmail.com



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed.

Introduction

The expansion of global luxury merchandise has piqued the curiosity of many researchers. Luxury brands' consumption differs from ordinary products because it goes beyond satisfying utilitarian necessities (Dahm & Fassnacht, 2018). *Luxury consumption*, an integral facet of consumer behavior, pertains to acquiring and utilizing high-end products and services often associated with premium quality, exclusivity, and elevated status (Dubois et al., 2005). According to a survey commissioned by Italy's Altgamma Foundation, the global luxury market increased by almost one-third to 288 billion euros (\$198 billion), bouncing back from its lowest recorded drop owing to the pandemic lockdown (Bain & Company, 2018). *Luxury consumption behavior* has gained significant prominence in academic and practical domains, reflecting its profound influence on modern societies and economies (Aliyev et al., 2019). Historical records indicate that luxury consumption dates back to ancient civilizations, where possessing rare and extravagant items symbolized social standing and affluence (Rathi et al., 2022). Over time, luxury consumption has evolved from conspicuous displays of wealth to encompass more nuanced dimensions, such as self-expression (Kim & Jang, 2014), identity formation (Bhanja & Mehta, 2022), and hedonistic experiences (Shukla, 2012). The allure of luxury consumption extends beyond the tangible aspects of products and services (Fuentes et al., 2022). It encompasses intangible elements, including luxury brands' narratives, values, and emotions (Han & Kim, 2020). Consumers often gravitate toward luxury goods for their utilitarian benefits and the aspirational and emotional connections they forge with these symbols of prestige (Park et al., 2013).

In recent decades, the landscape of luxury consumption has undergone dynamic shifts. Globalization, technological advancements, and changing social norms have reshaped how luxury is perceived and pursued (Aleem et al., 2022; Rathi et al., 2022; Shukla et al., 2022). The trend toward democratizing luxury, also known as "masstige marketing," has expanded the accessibility of premium products to a diverse spectrum of consumers (Kumar et al., 2020). This phenomenon has increased the availability of upscale goods to a broad spectrum of consumers, encompassing both developed and emerging countries (Lim et al., 2022a). The rise of digital platforms and social media has facilitated greater accessibility to luxury brands while fostering new avenues for self-presentation and social comparison (Eastman et al., 2020; Fazeli et al., 2020). Academically, the study of luxury consumption has garnered substantial interest from various disciplines, including marketing, psychology, sociology, and economics. Scholars have sought to unravel the intricate psychological and sociocultural drivers behind luxury consumption choices, examining status consumption (Roy & Rabbane, 2015), brand loyalty (He et al., 2010), social influence (Byun et al., 2020), and conspicuous leisure factors (Li & Stodolska, 2022).

The necessity for conducting bibliometric analysis in this field stems from the limited number of comprehensive studies that thoroughly chart and analyze the academic landscape of luxury consumption behavior. Bibliometric analysis offers a wide range of data, enabling researchers to gain insights into the patterns of

publication within a specific subject area (Jain & Dhingra, 2023). More specifically, bibliometric analysis provides a quantitative methodology for evaluating scholarly contributions, identifying emerging patterns and exploring the relationships within this field as highlighted by Donthu et al. (2021a).

This research delves into the *luxury consumption behavior* domain to enrich the existing knowledge base through a thorough bibliometric analysis within the marketing discipline. By examining the progression of research within this domain, we aim to discern critical trends, influential authors, countries, and emerging themes. Through this analysis, we hope to shed light on the evolving landscape of luxury consumption behavior and provide valuable insights for researchers and practitioners navigating this captivating and ever-evolving field.

With this objective in mind, the current study addresses two core research questions (RQs).

1. What is the existing comprehension status concerning the realm of “luxury consumption behavior?”
2. What are the potential future research avenues in luxury consumption behavior research?

We explore the aforementioned RQs using bibliometric methods to analyze the literature on “luxury consumption.” To address RQ1, we employ various performance indicators to identify growth patterns, notable articles, influential journals, authors, and contributing countries within the field, all based on bibliographic data. Moreover, we track the progression of key concepts in the “luxury consumption behavior” literature by analyzing how frequently scholars reference specific ideas in their articles across different time frames. Furthermore, our assessment involves bibliometric maps to capture the evolutionary trajectory of luxury consumption over time, aiding in anticipation of emerging trends. Finally, in response to RQ2, on the basis of cluster analysis, we propose future avenues of research and implications to expand the scope of the investigation into luxury consumption.

Contribution

This comprehensive review encompasses more than five decades of extensive literature, serving as a significant and noteworthy contribution to the field of “luxury consumption behavior.” It provides a critical and up-to-date understanding of various research aspects, reflecting a holistic approach to examining the crucial role of luxury consumption in the realm of marketing. The incorporation of bibliographic data for performance analysis, which includes growth trends, key articles, prominent journals, influential authors, and contributing countries, adds further significance to this study. Additionally, the investigation of thematic evolution, word cloud analysis, and the identification of keyword co-occurrences assist in defining five distinct clusters, offering valuable insights for future research directions to scholars in this field.

As Paul and Bhukya (2021) recommended, we enlist and explain the sequence of this review article. Subsequently, we detail the methodologies utilized in the

research. We then present the findings derived from the performance analysis. Additionally, we explore the outcomes of the science mapping and outline potential directions for future research. Finally, we conclude by addressing the study’s implications and limitations.

Research Methods

As illustrated in Figure 1, our approach draws from established practices commonly employed in standard bibliometric analysis, as elucidated by Donthu et al. (2021a) in their recent study. Following their methodologies, we embraced conventional procedures to conduct a comprehensive bibliometric analysis. This approach allows us to methodically explore the intricate dimensions of scholarly literature within our chosen domain (Mukherjee et al., 2022).

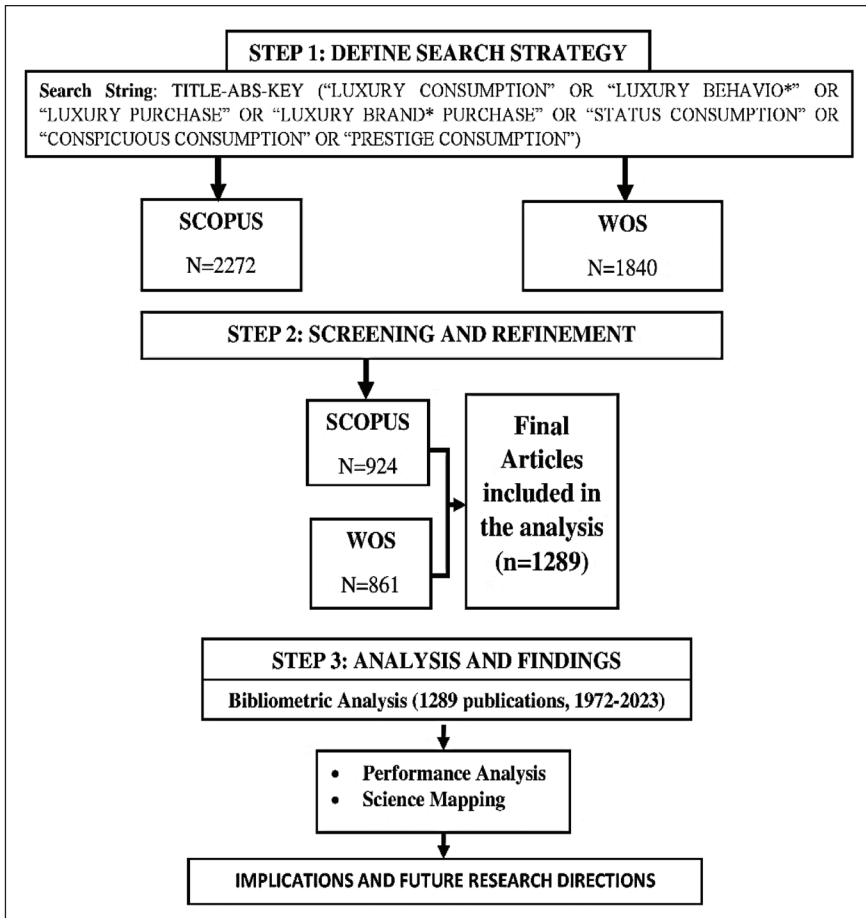


Figure 1. Literature Search and Screening Criteria.

Defining the Search Strategy

A crucial and demanding phase within bibliometric analysis involves identifying pertinent research articles, which relies on establishing suitable search parameters and choosing a suitable database (Donthu et al., 2021a). We obtained documents from Scopus and Web of Science (WOS). Scopus and WOS were utilized because of their widespread popularity, breadth of coverage, and high quality (Ameen et al., 2022; Bilro & Loureiro, 2020; Dawkins et al., 2019; Mariani et al., 2018). We performed a keyword-based search within the title, abstract, and keywords (TITLE-ABS-KEY) sections until August 2023. This search was executed in August 2023, yielding 4,112 records from the Scopus (2,272 documents) and WOS (1,840 documents) databases.

Screening the Initially Retrieved Documents and Refining the Search Results

Due to considerations of understanding boundaries and upholding the study's meticulousness, the filtering procedure incorporated explicit criteria for inclusion and exclusion (Lim et al., 2022b). First, only journal articles within the broader marketing realm and composed in English were encompassed. Second, our search scope was confined solely to journal articles, with conference papers, books, and non-peer-reviewed materials deliberately excluded from the database. Additionally, duplicate articles were eliminated through database filtration. Furthermore, the scrutiny extended to the title, keywords, abstract, and introduction segments to assess whether the emphasis revolved around "luxury consumption behavior." Besides, even if a solitary study within an article explored the realm of luxury consumption in the marketing context, it was incorporated into the analysis. As a result of this inclusive approach, the implemented search queries effectively pinpointed a total of 1,289 documents that were published prior to August 10, 2023. This substantial dataset is a robust foundation for conducting a comprehensive bibliographic analysis, aligning with the methodology highlighted by Paul and Criado (2020).

Describing the Data Processing Procedure

Subsequently, the gathered articles underwent a thorough assessment through bibliometric and content analyses, allowing for an in-depth exploration of the evolving landscape within "luxury consumption" research. The bibliometric analysis was meticulously executed using the specialized bibliometric package within the R software framework, facilitating a comprehensive array of bibliometric computations across an extensive dataset from May 1972 to August 2023. Table 1 illustrates the descriptive statistics concerning the dataset focused on luxury consumption. This dataset comprised 1,289 peer-reviewed publications, originating from 438 distinct journals and involving contributions from 2,554 authors representing 68 countries.

Table 1. Descriptive Information of the Data on Luxury Consumption from 1972 to August 2023.

Information	Results
Documents	1,289
Time	1972 to August 2023
Publication outlets	438
Articles	1,240
Review	49
Author(s) keywords	3,084
Annual growth rate %	9.53
Average citations per doc	28.9
Authors	
Authors	2,254
Single-authored docs	225
Co-authors per doc	2.49
International co-authorship %	22.27

Bibliometric Analysis

In recent times, bibliometrics has emerged as a widely accepted and reputable approach for reviewing extensive collections of literature across various scientific disciplines (Ellegaard & Wallin, 2015; Linnenluecke et al., 2020; Mukherjee et al., 2022). This method reduces potential biases while managing the substantial volume of bibliographic information (Mukherjee et al., 2022). Moreover, it aids in observing the longitudinal developments within the existing literature (Donthu et al., 2021a). Furthermore, it simplifies the identification of the intellectual framework and emerging concepts (Paul & Criado, 2020). Within the bibliometric approach outlined by Cobo et al. (2011), one component, “performance analysis,” focuses on evaluating the contributions of different research elements to the field. This facet aims to pinpoint leading research components and their evolving patterns within the studied domain. The second aspect, termed “science mapping,” involves the examination of citations, collaborative authorships, and co-words found in publications. This process involves using bibliometric techniques such as bibliographic coupling, co-citation analysis, co-authorship networks, keyword frequency, and more to visually represent the interconnections within the dataset (Cobo et al., 2011).

We utilized the “bibliometrics” package within the R software framework to perform comprehensive bibliometric calculations on an extensive dataset from 1972 to 2023, comprising 1,289 publications. Additionally, we employed VOSviewer, a tool created by van Eck and Waltman (2010), which serves two primary purposes: VOS mapping and VOS clustering. This software was utilized to examine the co-occurrence of keywords and generate visual representations.

Performance Analysis

Publications Trend

Figure 2 illustrates the chronological evolution of scholarly articles addressing the topic of “luxury consumption behavior” across the Scopus and WOS databases, encompassing the years 1972–2022. The exploration of this subject initially commenced in 1972 with one publication. However, it was only after 2012 that the field began to witness a notable surge in activity, and this trend has continued to progress markedly. This progression is highlighted by the fact that in 2019, a total of 102 articles were published, a number that further increased to 122 articles by 2020 and 160 articles by the year 2022. Notably, the production of literature in this area has seen a pronounced expansion, attributed to the escalating interest and engagement among scholars and experts alike. This escalating growth is characterized by an annual growth rate of 9.53%. Moreover, Figure 3 provides a graphical representation of the annual average citation count spanning the years 1972–2022. In Table 2, we emphasize the top 10 years with the most citations, revealing that 1998 stands out as the year with the highest average citation per article, at 190.8, followed closely by 1996, which received an average of 188.67 citations, and 1989 with an average of 171 citations.

Publication Outlets

Table 3 illustrates the leading 10 journals demonstrating the highest publication output within this field. The analysis encompasses a total of 1,289 publications,

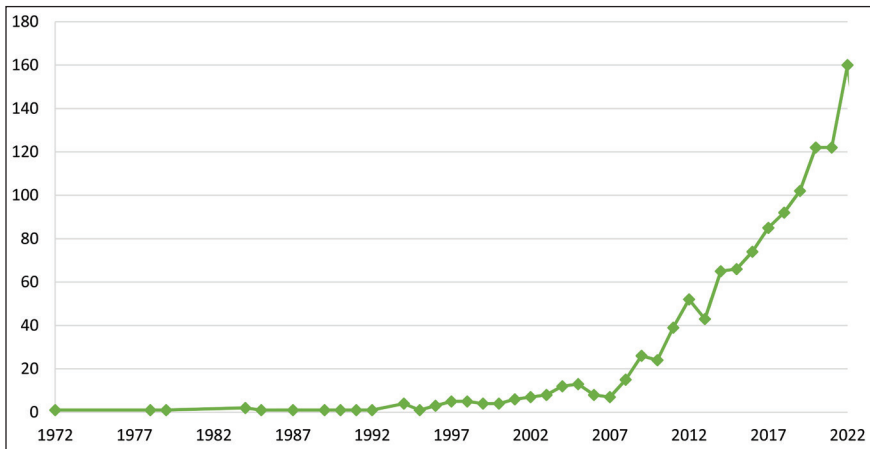


Figure 2. The Annual Publication Pattern of 1,289 Articles Collected from Scopus and Web of Science Spanning the Years 1972–2022.

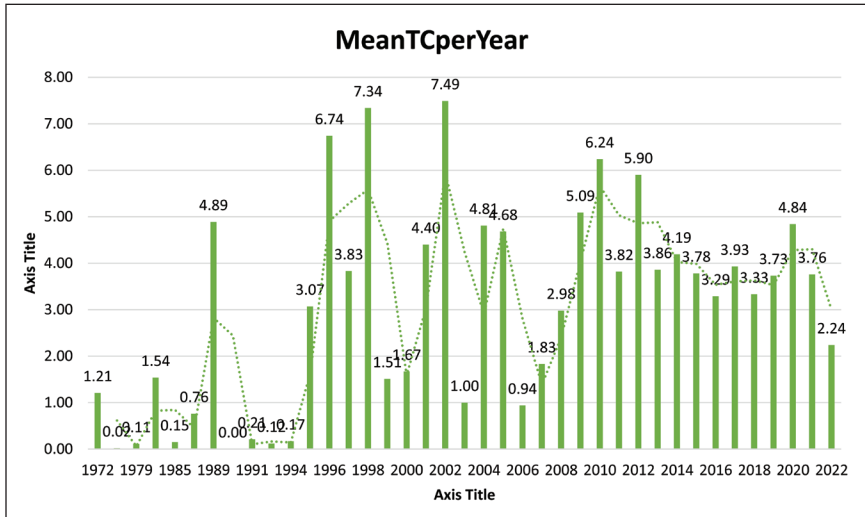


Figure 3. Average Citations Per Year from 1972 to 2022.

Table 2. Top 10 Mean Citation Per Article.

Year	Mean TC per Article
1998	190.8
1996	188.67
1989	171
2002	164.86
1997	103.4
2001	101.17
2004	96.17
1995	89
1995	88.85
2010	87.38

which are spread across 438 distinct journals. It is essential to highlight that many of these journals hold prestigious ratings from the Australian Business Deans Council (ABDC), particularly A* and A designations, signifying their recognition as esteemed publications in business and management research. Among the entirety of the articles examined, a noteworthy subset of 362 articles, equivalent to 28.08% of the total, emerged from the top 10 journals. The *Journal of Business Research* emerges as the most prolific outlet, boasting 84 published articles. Following closely is the *Journal of Retailing and Consumer Services*, contributing 57 articles. *Psychology & Marketing* secures the third spot with 39 articles, while the *Journal of Fashion Marketing and Management* has featured 30 articles.

Table 3. Top 10 Leading Journals Publishing on Luxury Consumption Behavior.

Journal	TP	<i>h</i> -Index	ABDC	Publisher
<i>Journal of Business Research</i>	84	33	A	Elsevier
<i>Journal of Retailing and Consumer Services</i>	57	24	A	Elsevier
<i>Psychology & Marketing</i>	39	20	A	Wiley-Blackwell
<i>Journal of Fashion Marketing and Management</i>	31	15	B	Emerald Group Publishing
<i>Journal of Consumer Research</i>	30	20	A*	Oxford University Press
<i>Journal of Consumer Psychology</i>	28	17	A*	Wiley-Blackwell
<i>Asia Pacific Journal of Marketing and Logistics</i>	25	10	A	Emerald Group Publishing
<i>International Journal of Consumer Studies</i>	24	13	A	Wiley-Blackwell
<i>European Journal of Marketing</i>	22	10	A*	Emerald Group Publishing
<i>Journal of Product and Brand Management</i>	22	10	A	Emerald Group Publishing

Notes: TP = total publications; ABDC = ABDC is the ranking of journal quality (provided by Australian Business Deans Council), A* = highest quality showing top 5%–7% journals in the field, A = second highest quality showing the next 15%–25% journals in the field, and B = third highest quality showing the next 35%–40% journals in the field.

Most Cited Publications

The identification of the most pertinent works within the realm of “luxury consumption behavior” was carried out through an examination of the citations garnered by each individual article. Table 4 showcases the articles with the highest level of productivity in the field of luxury consumption, determined by both their total citation count (TC) and the average annual sum of citations received. According to the table’s findings, the article authored by Han et al. (2010) holds the most significant influence in this field, accumulating 813 citations and maintaining an average annual citation rate of 58.07 since its publication. This study investigates the driving factors behind luxury consumption by segmenting consumers into four categories based on their wealth and desire for social status. Preceding this work is the research conducted by Wong and Ahuvia (1998), which has been cited 589 times. This study probes into the cultural influences underpinning the luxury consumption phenomenon, mainly through comparing Southeast Asian and Western cultural contexts. Subsequently, the study authored by Wiedmann et al. (2009) cited 506 times explores a comprehensive framework for understanding luxury value as a foundational approach to identifying consumer segments based on value-related factors.

Most Prolific Author(s)

Figure 4 provides a visual representation of how influential authors have evolved over time in terms of their publishing and citation impact. The size of the bubbles in

Table 4. Most Relevant Articles in Sorted by Total Citations (TC).

Title	Author(s)	TC	C/Y
Signaling Status with Luxury Goods: The Role of Brand Prominence	Young Jee Han, Joseph C. Nunes, and Xavier Drèze	798	57.00
Personal Taste and Family Face: Luxury Consumption in Confucian and Western Societies	Nancy Y. Wong and Aaron C. Ahuvia	589	22.65
Value-Based Segmentation of Luxury Consumption Behavior	Klaus-Peter Wiedmann, Nadine Hennigs, and Astrid Siebels	499	33.27
Earning the Right to Indulge: Effort as a Determinant of Customer Preferences Toward Frequency Program Rewards	Ran Kivetz and Itamar Simonson	487	22.14
Status Brands: Examining the Effects of Non-product-Related Brand Associations on Status and Conspicuous Consumption	Aron O’Cass and Hmily Frost	370	16.82

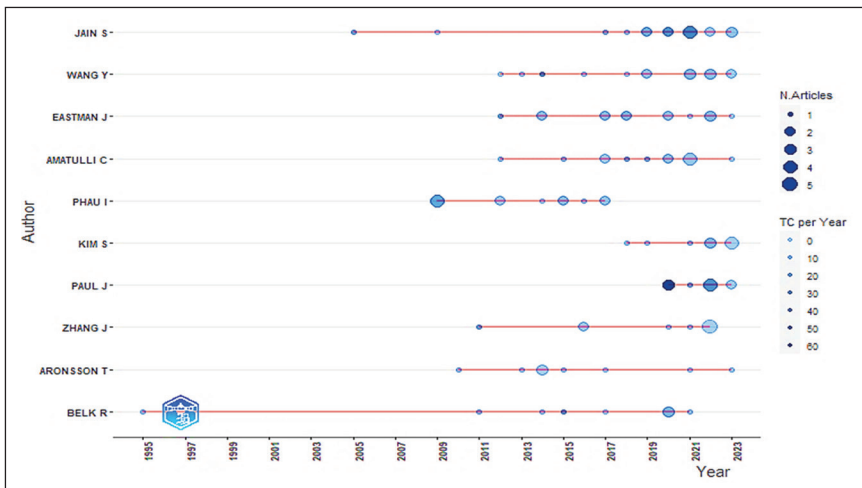


Figure 4. Authors Production Overtime.

Source: Biblioshiny, authors’ elaboration.

the graphic corresponds to the number of publications associated with each author, while the line graph illustrates the progression of an author’s publications over the years. The color intensity of the bubbles indicates the total yearly citations received.

Table 5 illustrates the primary contributors in order of their publication output. Among those who have exhibited the most significant productivity in the field of “luxury consumption behavior” are Sanjay Jain, with a total of 17 published works and 636 citations; Ying Wang, with 15 published works and 359 citations;

Table 5. Most Prolific Author(s) as per the Number of Publications.

Author(s)	NP	TC	<i>h</i> -Index	<i>g</i> -Index
Sanjay Jain	17	636	11	17
Yajin Wang	15	359	8	15
Jacqueline K. Eastman	14	456	8	14
Cesare Amatulli	13	333	7	13
Ian Phau	12	500	10	12
Justin Paul	10	338	7	10
Junfeng Zhang	10	237	5	10
Sang Jin Kim	10	64	4	8
Russell W. Belk	9	447	7	9
Thomas Aronsson	9	103	5	9

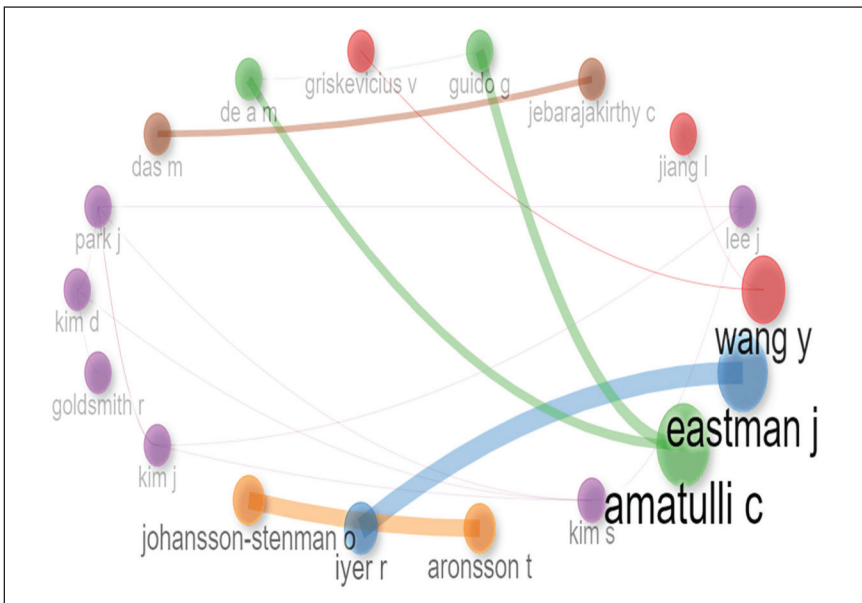


Figure 5. Author(s) Collaboration.

Source: Biblioshiny, authors' elaboration.

Jacqueline K. Eastman, having authored 14 works with 456 citations; and Cesare Amatulli, whose contributions amount to 13 published works and 333 citations.

It is crucial to identify significant author networks to gain a comprehensive understanding of luxury consumption research. To achieve this, we utilized association strength normalization in combination with the Louvain cluster algorithm on the top 50 documents to form the authors' clusters. Figure 5 illustrates the emergence of six distinct, color-coded clusters among the 25 most prolific authors. The larger nodes represent authors who have contributed more publications, while the connections between nodes are thicker for scholars who have collaborated on multiple articles. Notably, a prominent collaboration network is observed between Eastman J. and Iyer R.

The Scientific Production of the Countries

Examining the affiliations data reveals that the contributing organizations and institutions are spread worldwide, with a concentrated presence in countries such as the United States, China, the United Kingdom, India, and France. In Figure 6, a comprehensive overview is provided, showcasing the critical countries linked to authors engaged in the study of luxury consumption. Notably, the United States takes the lead as the foremost contributor, generating a substantial number of 619 articles. This is followed by China, which contributed significantly to 250 articles, signifying a notable scholarly involvement. Moreover, the United Kingdom has established itself as a noteworthy participant in this field, producing 210 articles contributing to the luxury consumption discourse. Additionally, India stands out with its scholarly contributions, having generated 147 articles that explore various facets of luxury consumption. This collective body of work highlights the global engagement and diverse perspectives that enrich the discourse around luxury consumption. Furthermore, Table 6 presents

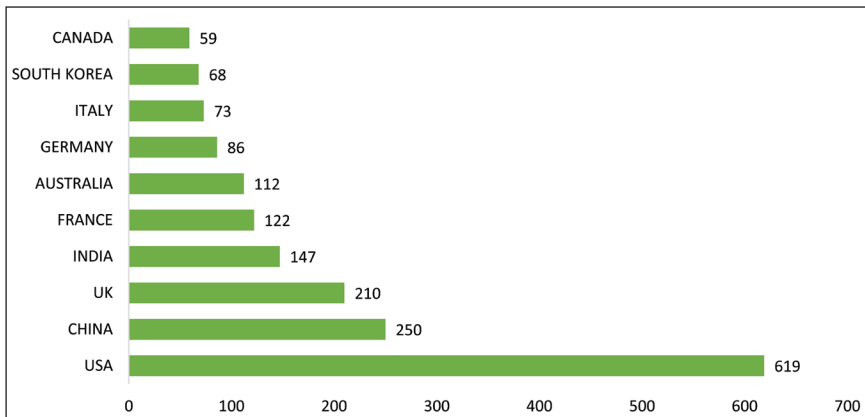


Figure 6. Most Productive Countries in Luxury Consumption Behavior Marketing Research.

Table 6. Countries Collaboration.

From	To	Frequency
USA	China	26
USA	United Kingdom	21
USA	France	18
USA	India	15
USA	Canada	14
USA	Korea	14
China	United Kingdom	11
China	Singapore	10
China	Canada	9
France	Germany	9

the leading 10 instances of international collaboration concerning behaviors related to luxury consumption.

Thematic Analysis

Thematic Map

Cobo et al. (2011) explore techniques for estimating and visually representing the focus of a specific area of research. They introduce a thematic map as an effective visual tool, assessing topics within a quadrant. The thematic map is structured based on centrality (along the *x*-axis) and density (along the *y*-axis). Density signifies the level of development of a chosen theme, while centrality gauges the significance of the central theme. This thematic map is divided into four sections. Themes positioned in the lower-left quadrant indicate either declining or emerging subjects. These themes either fade from research or are further developed by researchers. Themes in the lower-right quadrant represent foundational concepts that have undergone extensive research. In contrast, the upper-left quadrant showcases niche concepts developed but in relative isolation. Finally, themes in the upper-right quadrant indicate well-developed and established research areas.

Upon carefully examining the map (as shown in Figure 7), it becomes evident that “luxury consumption, sustainability, and luxury branding” form highly developed and isolated themes within the literature, characterized by internal solid connections. However, their significance in this research is limited due to their sparse connections with other themes. On the other hand, themes such as social media, brand equity, and masstige exhibit weaker development, featuring lower density and centrality. Conversely, themes such as status consumption, materialism, social comparison, and

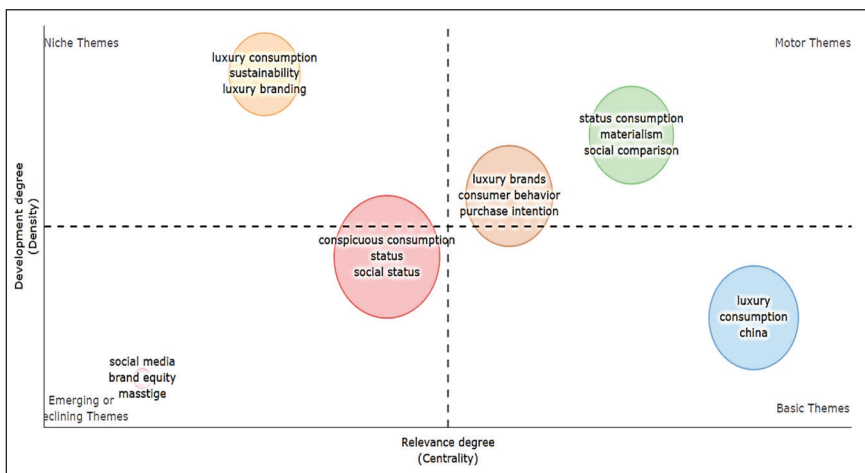


Figure 7. Thematic Map of Luxury Consumption Behavior Scholarship.

Source: Biblioshiny, authors' elaboration.

luxury brands emerge as the most well-developed and crucial elements in shaping the landscape of luxury consumption behavior research. These themes are pivotal because of their significant field progress and frequent appearances in various research studies.

Thematic Evolution

The progression of themes in a particular research domain can be depicted using alluvial graphs that segment the timeline into distinct periods (Aria et al., 2022). Analyzing the yearly distribution of publications, the data collection is segmented into four-time intervals, achieved by establishing three breakpoints in 2013, 2017, and 2019. Through the segmentation of the examined timeframe into distinct intervals, it becomes feasible to examine the progression of each theme (Donthu et al., 2020). A longitudinal visualization offers valuable insights into the inclinations of specific topics to converge with other themes or diverge into multiple new themes throughout the study, as demonstrated in Figure 8.

From 1972 to 2013, significant keywords that gained prominence included conspicuous consumption, consumer behavior, and luxury consumption. From 2014 to 2017, researchers delving into “luxury consumption behavior” underwent a noticeable shift in their focus, placing greater importance on conspicuous consumption, luxury consumption, luxury, status, brand consciousness, and luxury products. Between 2018 and 2019, there was an evident change in the research direction towards various domains, including self-monitoring, face consciousness, counterfeit, and brand selection. From 2022 to August 2023, noteworthy areas of interest have emerged, covering topics such as adaption strategies, perceived value, social identity, and luxury experience.

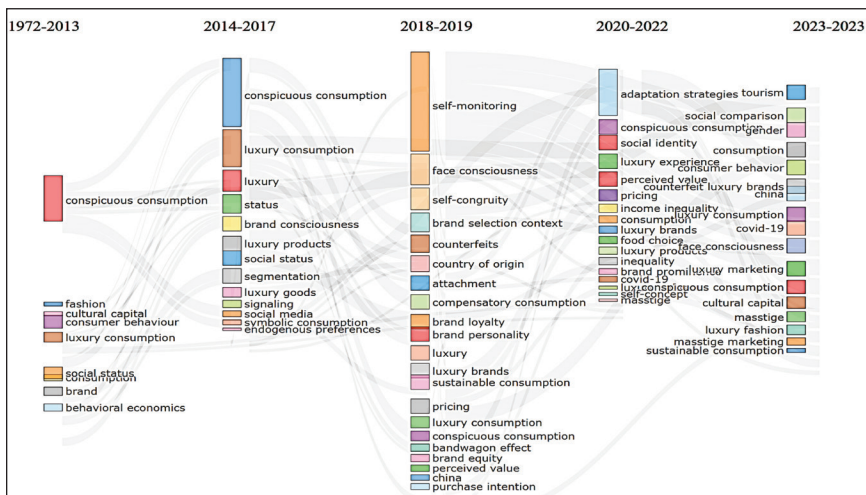


Figure 8. Thematic Evolution of Luxury Consumption Behavior Scholarship.

Source: Biblioshiny, authors’ elaboration.

Word Cloud

Word clouds serve as a visual representation technique for text data, highlighting the most frequently occurring words to provide a quick overview (Baker et al., 2021). Figure 9 clearly demonstrates that the primary keywords utilized by the author(s) in the chosen studies prominently include conspicuous consumption, luxury consumption, status-oriented consumption, and materialism. This word cloud provides compelling evidence that research in the realm of luxury consumption places significant emphasis on topics such as conspicuous consumption, the need for status, and materialistic tendencies.

Cluster Analysis

Data clustering is a technique used to gather a collection of articles. In the resultant network, nodes can be organized into clusters so that the links between nodes within the same cluster are more abundant than those between nodes in different clusters (Husain et al., 2022c). An essential advantage of this analysis is its ability to discern subfields within the research theme, which can be further identified by thoroughly examining the papers within specific clusters.

In this section, we have conducted an examination of terms used in the realm of luxury consumption research. We generated a term “co-occurrence network map” on the basis of a dataset comprising 1,289 studies related to luxury consumption, encompassing a total of 5,001 keywords. We established a minimum



Figure 9. Word Cloud of the Most Prominent Author Keywords.

Source: Biblioshiny, authors' elaboration.

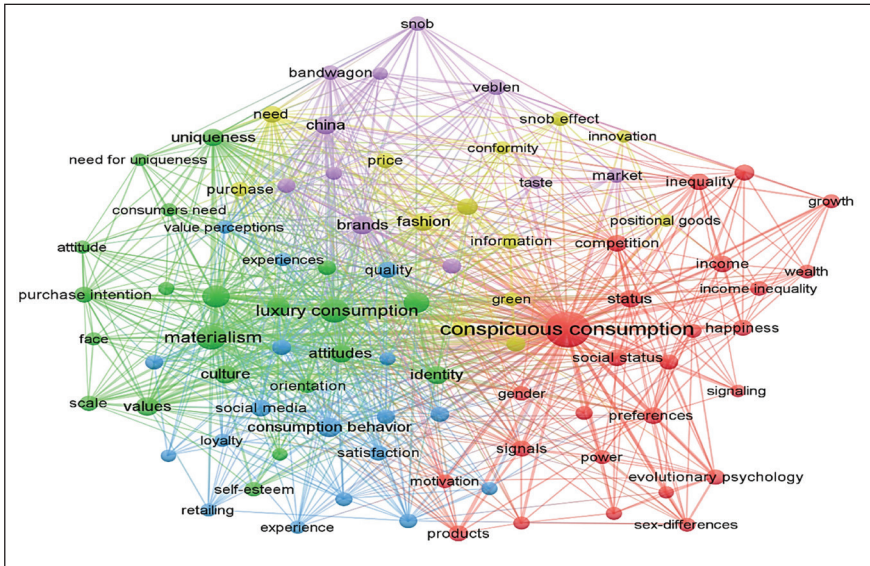


Figure 10. Co-occurrence and Network of Author(s) Keywords.

Source: VOSviewer, authors' elaboration.

threshold of five occurrences for the keywords to ensure the analysis yielded meaningful results. Among the 5,001 keywords, 200 keywords satisfied our pre-determined threshold. Figure 10, generated by VOSviewer, displays the formation of five distinct clusters. Nodes sharing the same color on the map are part of the same cluster, and the proximity between nodes within the cluster signifies their relationship's strength.

Cluster 1 # Luxury Consumption and Materialism

The relationship between luxury consumption and materialism has long been a subject of academic inquiry and societal debate. Luxury consumption involves purchasing and possessing high-end products or experiences, often linked to social status and exclusivity (Donthu et al., 2021b). Conversely, materialism refers to the pursuit of possessions and wealth as a source of life satisfaction (Kim et al., 2022). Numerous studies have explored the connection between luxury consumption and materialism (Hudders, 2012; Sundie et al., 2020). However, the relationship between luxury consumption and materialism is complex and only partially one dimensional (de Kerviler & Rodriguez, 2019). While luxury goods can offer esthetic pleasure and enhance self-esteem (Hudders et al., 2013). However, they can fuel materialistic tendencies as individuals seek to project their success and identity through possessions (Bhanja & Mehta, 2022). Research suggests that individuals may engage in luxury consumption for a variety of reasons, including personal enjoyment (Smit, 2022), appreciation for craftsmanship (Kapferer & Valette-Florence, 2021), and a desire to share meaningful

experiences with loved ones (Shahid & Paul, 2021). In conclusion, the relationship between luxury consumption and materialism is multifaceted (Duma, 2022). While luxury consumption can exacerbate materialistic tendencies, it is not the sole determinant of such behavior (Hemetsberger et al., 2012). By recognizing the diverse motivations behind luxury consumption and promoting values beyond material possessions, future researchers can navigate a more balanced approach to consumption and well-being.

Cluster 2 # Conspicuous Consumption and Signaling

Conspicuous consumption, a term coined by economist Thorstein Veblen, refers to purchasing and displaying luxury goods and services primarily to signal one's social status and wealth (Patsiaouras & Fitchett, 2012). This behavior is closely intertwined with signaling, a mechanism through which individuals communicate their attributes or qualities to others (Wang, 2022). Conspicuous consumption serves as a potent signaling tool in modern consumer societies (Bradshaw et al., 2020). By showcasing expensive possessions, individuals convey their economic prosperity and their membership in elite social circles (Han et al., 2010). Vohs et al. (2006) demonstrates the correlation between conspicuous consumption and signaling, revealing that luxury goods function as effective status symbols, facilitating social interactions and signaling personal success. Furthermore, Han et al. (2010) delve into the psychological mechanisms driving conspicuous consumption, shedding light on how such behavior fulfills individuals' need for social recognition and identity establishment. Drawing from insights into evolutionary psychology, conspicuous consumption reflects the age-old human inclination to signal desirable traits for mate selection and social integration (Griskevicius & Kenrick, 2013). Today, it manifests as a manifestation of this intrinsic tendency, facilitating connections, attracting mates, and gaining social approval (Chan, 2015). Future research should explore the evolving dynamics of conspicuous consumption and signaling in the digital age, where social media platforms offer new avenues for status display (Sogo & Matsubayashi, 2021). Additionally, investigating cultural variations in conspicuous consumption can show how signaling mechanisms differ across societies (Awanis et al., 2017).

Cluster 3 # Consumer Behavior and Sustainability

The intersection of luxury consumer behaviors and sustainability has gained significant attention in recent years as society becomes increasingly concerned about environmental and social impacts. References indicate that luxury brands adopting sustainability initiatives enhance their reputations and attract environmentally conscious consumers (Tofighi et al., 2020). Research by Amatulli et al. (2018) shows that consumers are willing to pay more for sustainable products, a trend likely to resonate with luxury consumers. Moreover, the rise of the circular economy and second-hand luxury market highlights changing consumer attitudes

toward longevity and value retention (Lou et al., 2022). Future research should explore the intricacies of luxury consumers' motivations and the effectiveness of sustainable practices in shaping their behaviors (Alghanim & Ndubisi, 2022). Investigating the role of social media, peer influence, and cultural factors on luxury sustainability adoption could yield valuable insights. Additionally, assessing the long-term impact of sustainable luxury consumption on brand loyalty and market dynamics is a promising avenue for exploration.

Cluster 4 # Luxury Brands and Perception

Luxury consumption—a complex phenomenon rooted in social, psychological, and cultural factors—is intricately tied to perception (Purohit & Radia, 2022). How do individuals perceive luxury goods and their consumption shapes their attitudes and behaviors (Husain et al., 2022b)? Previous research indicates that consumers' perceptions of luxury goods can influence their self-esteem, social identity, and aspirations (So et al., 2018). Furthermore, the perception of luxury can vary across cultures and generations, reflecting the evolving nature of luxury consumption (Xiang et al., 2019). Future research directions in this field could delve into the role of digital platforms and social media in investigating how luxury brands can leverage online spaces to enhance their perceived value and authenticity (Maman Larraufie & Kourdoughli, 2014). Additionally, understanding how sustainable practices influence luxury perception and whether eco-consciousness can become a marker of luxury is a compelling area for study (Pantano & Stylos, 2020). As consumer preferences and societal values evolve, continued research into luxury perception will provide crucial insights into the dynamics of consumer behavior and the changing landscape of luxury consumption.

Cluster 5 # Bandwagon and Snob Consumption

Luxury consumption, a hallmark of conspicuous wealth and status, is influenced by two contrasting psychological phenomena: the bandwagon effect and the snob effect (Kastanakis & Balabanis, 2014). The bandwagon effect propels individuals toward luxury goods as they seek to conform and align with prevailing trends, perceiving ownership as a means to social acceptance and inclusion (Eastman & Eastman, 2015). In contrast, the snob effect drives individuals to embrace luxury to distinguish themselves from the masses, valuing exclusivity and uniqueness (Kastanakis & Balabanis, 2014). Exploring how luxury brands strategically navigate these psychological influences, whether by fostering a sense of belonging or cultivating exclusivity, would provide valuable insights. Additionally, investigating the impact of cultural and generational factors on these behaviors could shed light on evolving consumer preferences. Understanding the interplay between these tendencies and their implications for marketing strategies and societal well-being becomes increasingly important as the consumer landscape evolves.

Future Research Avenues

In this section, we will focus on illuminating the gaps in the current body of literature within each cluster, with a particular emphasis on providing suggestions for future research avenues. Table 7 summarizes the potential avenues for future research within each cluster

Cluster 1 # Luxury Consumption and Materialism

Over the past five years, there have been notable advancements in the study of luxury consumption and materialism. However, there is still room for further improvement in this area. As Duma (2022) pointed out, the relationship between luxury consumption and materialism is complex. While luxury consumption can contribute to materialistic tendencies, it is important to note that it is not the sole factor influencing such behavior (Hemetsberger et al., 2012). Future researchers should acknowledge the diverse motivations behind luxury consumption and promote values beyond material possessions to foster a more balanced approach to consumption and well-being.

Commercial sharing systems are evolving into a significant business concept within the luxury sector, offering access to product advantages without the need for ownership (Akbar et al., 2016). It would be valuable to investigate how the sharing economy, including services such as luxury vacation rentals and designer clothing rentals, is reshaping the landscape of luxury consumption. Additionally, the concept of anthropomorphism is of great significance in the context of luxury fashion consumption (Khan et al., 2023). Subsequent research in this field should aim to better understand how brand anthropomorphism impacts luxury consumption, influencing emotional connections, identity representation, brand loyalty, and perceptions of value.

Cluster 2 # Conspicuous Consumption and Signaling

Conspicuous consumption has always been closely linked with the concept of signaling. In contemporary society, it continues to serve as an expression of this inherent tendency, facilitating social connections, attracting potential partners, and garnering social approval (Baker et al., 2020; Chan, 2015; Sundie et al., 2020). Future research should delve into the evolving dynamics of conspicuous consumption and signaling in the digital era, where social media platforms offer new avenues for displaying one's status (Sogo & Matsubayashi, 2021). Furthermore, the exploration of cultural differences in conspicuous consumption can provide insights into how signaling mechanisms vary across different societies (Awanis et al., 2017; Kastanakis & Balabanis, 2012). Subsequent studies should investigate extreme individualistic cultures, such as the United States, and collectivist

Table 7. Future Research Avenues Within Each Cluster.

Clusters	Research Questions
Cluster 1 # Luxury Consumption and Materialism	<ul style="list-style-type: none"> • What are the manifestations of luxury consumption and materialism in virtual environments? • How do materialistic values impact individuals' mental health, life satisfaction, and well-being? • Investigate the shift from material possessions to experiential luxury consumption. How are consumers valuing luxury experiences, such as travel, fine dining, and cultural events? • Explore how the sharing economy (e.g., luxury vacation rentals and designer clothing rentals) is changing the landscape of luxury consumption. Are consumers increasingly valuing access over ownership regarding luxury goods and experiences?
Cluster 2 # Conspicuous Consumption and Signaling	<ul style="list-style-type: none"> • How has conspicuous consumption and displaying one's status changed in the digital era, with social media platforms providing fresh opportunities for showcasing social standing? • How can conspicuous consumption differences across cultures illustrate variations in societal signaling mechanisms? • How does conspicuous consumption vary between collectivist and individualistic cultures?
Cluster 3 # Consumer Behavior and Sustainability	<ul style="list-style-type: none"> • How do celebrities' sustainable choices impact consumer behavior, and are consumers more likely to support sustainable brands endorsed by celebrities? • Examine consumer perceptions and behaviors related to circular luxury consumption. How can luxury brands transition to circular business models by promoting product durability, repairability, and recycling?
Cluster 4 # Luxury Brands and Perception	<ul style="list-style-type: none"> • Examine the prevalence of greenwashing in the luxury industry, where brands exaggerate or falsely claim their sustainability initiatives. Investigate how consumers perceive and respond to greenwashing in the luxury market. • How do online platforms contribute to the visibility and popularity of sustainable luxury brands? • How are luxury brands evolving their identities and branding strategies to remain relevant in a changing consumer landscape? • Investigate how brand extensions into more accessible product lines (e.g., diffusion lines, collaborations) affect the core luxury brand's perception. Do such extensions dilute or enhance the brand's prestige? • Investigate how the presence of counterfeit luxury products in the market affects consumer perceptions of genuine luxury brands. Do concerns about authenticity impact brand perception and purchasing decisions?
Cluster 5 # Bandwagon and Snob Consumption	<ul style="list-style-type: none"> • Explore the role of emerging technologies, such as AI and AR, in shaping bandwagon and snob consumption experiences in the luxury industry. • What factors influence the choices of bandwagon and snob consumers at different stages of the decision-making journey? • Investigate the role of culture, social norms, and peer pressure in shaping bandwagon and snob consumption behaviors. How do cultural values and societal expectations impact individuals' luxury choices? • What emotional and cognitive processes drive individuals to seek conformity or differentiation through luxury goods?

cultures, like those found in Asia, to examine whether cultural factors contribute to the differences in conspicuous consumption.

Cluster 3 # Consumer Behavior and Sustainability

The intersection of luxury consumer behaviors and sustainability has garnered significant attention in recent years, driven by society's growing concern for environmental and social impacts. As demonstrated in research by Amatulli et al. (2018), consumers are increasingly willing to pay a premium for sustainable products, a trend that is likely to resonate with luxury consumers. Furthermore, the emergence of the circular economy and the flourishing second-hand luxury market underscores shifting consumer attitudes toward durability and the retention of value (Christodoulides et al., 2021; Morales & Belmonte-Urena, 2021). Future research should delve deeper into the intricacies of luxury consumers' motivations and the effectiveness of sustainable practices in shaping their behaviors, as suggested by Alghanim and Ndubisi (2022). Within this context, online communities and forums centered around luxury consumption and fashion provide individuals with platforms to share information about their acquisitions and engage in meaningful discussions (Anas et al., 2023). An examination of the influence of social media, peer interactions, and cultural factors on the adoption of sustainable luxury consumption could yield valuable insights.

Cluster 4 # Luxury Brands and Perception

Luxury consumption—a multifaceted phenomenon shaped by social, psychological, and cultural influences—is closely intertwined with the concept of perception (Nobre et al., 2022; Purohit & Radia, 2022). Examining how luxury brands adapt their identities and branding strategies to remain relevant in an evolving consumer landscape can offer valuable insights. Brands frequently expand their established brands to introduce new products, leveraging the equity established by the parent brand in the market (Bhanja & Mehta, 2022). Future research should explore the impact of such brand extensions into more accessible product lines (e.g., diffusion lines and collaborations) on the perception of the core luxury brand and how these extensions either diminish or enhance the brand's prestige.

Additionally, brand authenticity has become a fundamental asset in contemporary marketing, but there is ambiguity surrounding the definition and application of this concept (Södergren, 2021; Wang et al., 2019). Subsequent research should investigate the influence of counterfeit luxury products and concerns about authenticity on brand perception and purchasing decisions.

Cluster 5 # Bandwagon and Snob Consumption

Luxury consumption, a symbol of conspicuous wealth and social status, is under the influence of two contrasting psychological phenomena: the bandwagon effect

and the snob effect, as demonstrated by Kastanakis and Balabanis (2014). Examining how luxury brands strategically navigate these psychological influences, whether by fostering a sense of inclusion or cultivating exclusivity, holds significant potential for gaining valuable insights. Additionally, delving into the effects of cultural and generational factors on these behaviors could provide a deeper understanding of shifting consumer preferences.

The transformation of the Internet, technology, and the prevalence of smartphones has brought about substantial changes in the way consumers interact with brands (Holmqvist et al., 2020). This shift has opened up previously unimaginable avenues for marketers to connect with their target audiences. One of these technologies is augmented reality (AR), which enables consumers to engage with brands in novel and innovative ways (Jayaswal & Parida, 2023). The exploration of the impact of emerging technologies, such as artificial intelligence and AR, on the shaping of bandwagon and snob consumption experiences within the luxury industry could offer valuable contributions to both theory and practical applications.

Conclusion

This comprehensive review encompasses over five decades of extensive literature, making a substantial and noteworthy addition to the body of knowledge on “luxury consumption behavior.” It offers a critical and contemporary understanding of diverse research dimensions, signifying a holistic approach to examining the vital role of luxury consumption within the marketing domain. Using bibliographic data for performance analysis, encompassing growth trends, critical articles, prominent journals, influential authors, and contributing nations, adds further significance to this study. Additionally, the exploration of thematic frameworks that have molded this field of study holds importance in establishing its legitimacy as a distinct area of research.

Implications for Theory and Practice

Our study, which connects diverse clusters of themes, is poised to propel the field forward by illuminating the current landscape of knowledge and initiating a discourse on the future trajectory of research. Scholars are embracing this paradigm shift and aligning their studies with more comprehensive and profound dimensions of luxury consumption. Nevertheless, most research has concentrated on luxury fashion, jewelry, and accessories (Grotts & Johnson, 2013; Phau & Cheong, 2009; Turunen & Leipämaa-Leskinen, 2015), whereas domains of higher involvement, such as luxury residences, automobiles, and yachts, remain relatively unexplored. Although luxury goods have garnered substantial scholarly attention, luxury services have received limited investigation (Klaus & Tarquini-Poli, 2022). However, there exists significant potential for solidifying service theories and conceptual frameworks. In conclusion, having thoroughly identified the outcomes of research endeavors, we propose potential avenues for future investigations, along with insights into each thematic cluster.

Understanding the real-world consequences of luxury consumption behavior assists businesses in effectively understanding consumer inclinations and societal shifts, thereby enabling them to forge deeper connections with their intended customer base (Husain et al., 2022a). This examination furnishes brand managers with a structured framework for appraising, executing, and appraising critical management choices. By aggregating and visually presenting the literature on luxury consumption behavior, this analysis provides a valuable resource for decision-making. Additionally, the assessment advocates for an all-encompassing perspective on luxury behavior, allowing companies to explore avenues for leveraging their community connections and enhancing customer engagement strategies.

Limitations

While the study employs a comprehensive methodology, it does exhibit certain constraints. First, its scope is confined to a general perspective on luxury consumption behavior and culminates in proposing potential avenues for future research within each cluster. Subsequent research endeavors could delve more profoundly into individual cluster themes, concentrating exclusively on particular aspects, such as counterfeiting or the role of luxury on social media. Second, we focused exclusively on the WOS and Scopus databases, disregarding the inclusion of other substantial databases such as EBSCO and PUBMED. Future researchers might consider broadening their scope by incorporating a wider array of databases for a more comprehensive investigation. Third, our specific subject domain criteria concentrated on publications categorized within the marketing field. Expanding the purview of our study to encompass related subject domains could provide a more holistic understanding of the scholarly landscape. Finally, the nature of our bibliometric approach hampers a more qualitative assessment of the available knowledge. Therefore, subsequent researchers could embark on systematic literature reviews to dissect the indicated study areas in greater depth, offering richer insights beyond the quantitative analysis provided here.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding

The authors received no financial support for the research, authorship and/or publication of this article.

ORCID iDs

Sabara Soyafuddin Ahmed  <https://orcid.org/0000-0003-3324-4856>

Bilal Mustafa Khan  <https://orcid.org/0000-0002-3762-0030>

References

- Akbar, P., Mai, R., & Hoffmann, S. (2016). When do materialistic consumers join commercial sharing systems. *Journal of Business Research*, 69(10), 4215–4224. <https://doi.org/10.1016/j.jbusres.2016.03.003>
- Aleem, A., Loureiro, S. M. C., & Billo, R. G. (2022). Luxury fashion consumption: A review, synthesis and research agenda. *Spanish Journal of Marketing - ESIC*. <https://doi.org/10.1108/SJME-06-2021-0105>
- Alghanim, S., & Ndubisi, N. O. (2022). The paradox of sustainability and luxury consumption: The role of value perceptions and consumer income. *Sustainability*, 14(22), 14694. <https://doi.org/10.3390/su142214694>
- Aliyev, F., Urkmez, T., & Wagner, R. (2019). A comprehensive look at luxury brand marketing research from 2000 to 2016: A bibliometric study and content analysis. *Management Review Quarterly*, 69 (3), 233–264. <https://doi.org/10.1007/s11301-018-00152-3>
- Amatulli, C., De Angelis, M., Korschun, D., & Romani, S. (2018). Consumers' perceptions of luxury brands' CSR initiatives: An investigation of the role of status and conspicuous consumption. *Journal of Cleaner Production*, 194, 277–287. <https://doi.org/10.1016/j.jclepro.2018.05.111>
- Ameen, N., Sharma, G. D., Tarba, S., Rao, A., & Chopra, R. (2022). Toward advancing theory on creativity in marketing and artificial intelligence. *Psychology and Marketing*, 39(9), 1802–1825. <https://doi.org/10.1002/mar.21699>
- Anas, M., Khan, M. N., & Uddin, S. M. F. (2023). Mapping the concept of online purchase experience: A review and bibliometric analysis. *International Journal of Quality and Service Sciences*, 15(2), 168–189. <https://doi.org/10.1108/IJQSS-07-2022-0077>
- Aria, M., Cuccurullo, C., D'aniello, L., Misuraca, M., & Spano, M. (2022). Thematic analysis as a new culturomic tool: The social media coverage on COVID-19 pandemic in Italy. *Sustainability*, 14(6), 1–22. <https://doi.org/10.3390/su14063643>
- Awanis, S., Schlegelmilch, B. B., & Cui, C. C. (2017). Asia's materialists: Reconciling collectivism and materialism. *Journal of International Business Studies*, 48(8), 964–991. <https://doi.org/10.1057/s41267-017-0096-6>
- Bain & Company. (2018). *Worldwide luxury Altgamma 2018 market monitor the future of luxury: A look into tomorrow to understand today* (pp. 1–51). Altgamma. https://altgamma.it/media/source/WORLDWIDE LUXURY MARKET MONITOR_BAIN.pdf
- Baker, H. K., Kumar, S., & Pattnaik, D. (2021). Twenty-five years of the *Journal of Corporate Finance*: A scientometric analysis. *Journal of Corporate Finance*, 66(January), 101572. <https://doi.org/10.1016/j.jcorpfin.2020.101572>
- Bhanja, N., & Mehta, R. (2022). It is better with a shade of blue! Consumer evaluation of unisex extension of brands. *International Journal of Consumer Studies*, 46(6), 2239–2253. <https://doi.org/10.1111/ijcs.12781>
- Billo, R. G., & Loureiro, S. M. C. (2020). A consumer engagement systematic review: Synthesis and research agenda. *Spanish Journal of Marketing - ESIC*, 24(3), 283–307. <https://doi.org/10.1108/SJME-01-2020-0021>
- Bradshaw, H. K., Rodeheffer, C. D., & Hill, S. E. (2020). Scarcity, sex, and spending: Recession cues increase women's desire for men owning luxury products and men's desire to buy them. *Journal of Business Research*, 120, 561–568. <https://doi.org/10.1016/j.jbusres.2019.07.021>
- Byun, S.-E., Long, S., & Mann, M. (2020). Drivers and dynamics of brand prominence preferences among the Chinese little emperors residing in the US. *Journal of Fashion Marketing and Management*, 24(1), 66–82. <https://doi.org/10.1108/JFMM-01-2019-0007>

- Chan, E. Y. (2015). Physically-attractive males increase men's financial risk-taking. *Evolution And Human Behavior*, 36(5), 407–413. <https://doi.org/10.1016/j.evolhum-behav.2015.03.005>
- Christodoulides, G., Athwal, N., Boukis, A., & Semaan, R. W. (2021). New forms of luxury consumption in the sharing economy. *Journal of Business Research*, 137, 89–99. <https://doi.org/10.1016/j.jbusres.2021.08.022>
- Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2011). Science mapping software tools: Review, analysis, and cooperative study among tools. *Journal of the American Society for Information Science and Technology*, 62(7), 1382–1402. <https://doi.org/10.1002/asi.21525>
- Dahm, J. M., & Fassnacht, M. (2018). The Veblen effect and (in)conspicuous consumption—a state of the art article. *Luxury Research J.*, 1(4), 343. <https://doi.org/10.1504/LRJ.2018.10011932>
- Dawkins, E., André, K., Axelsson, K., Benoist, L., Swartling, Å. G., & Persson, Å. (2019). Advancing sustainable consumption at the local government level: A literature review. *Journal of Cleaner Production*, 231, 1450–1462. <https://doi.org/10.1016/j.jclepro.2019.05.176>
- de Kerviler, G., & Rodriguez, C. M. (2019). Luxury brand experiences and relationship quality for millennials: The role of self-expansion. *Journal of Business Research*, 102, 250–262. <https://doi.org/10.1016/j.jbusres.2019.01.046>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021a). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133(April), 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Donthu, N., Kumar, S., Pattnaik, D., & Lim, W. M. (2021b). A bibliometric retrospection of marketing from the lens of psychology: Insights from *Psychology & Marketing*. *Psychology and Marketing*, 38(5), 834–865. <https://doi.org/10.1002/mar.21472>
- Donthu, N., Kumar, S., Pattnaik, D., & Pandey, N. (2020). A bibliometric review of *International Marketing Review* (IMR): Past, present, and future. *International Marketing Review*, 38(5), 840–878. <https://doi.org/10.1108/IMR-11-2020-0244>
- Dubois, B., Czellar, S., & Laurent, G. (2005). Consumer segments based on attitudes toward luxury: Empirical evidence from twenty countries. *Marketing Letters*, 16(2), 115–128. <https://doi.org/10.1007/s11002-005-2172-0>
- Duma, F. (2022). Luxury is dead, long live luxury! Resonance as an alternative lens to advance our understanding of an eternal desire and a global business. *Asia Pacific Journal of Marketing and Logistics*. <https://doi.org/10.1108/APJML-07-2022-0613>
- Eastman, J. K., & Eastman, K. L. (2015). Conceptualizing a model of status consumption theory: An exploration of the antecedents and consequences of the motivation to consume for status. *Marketing Management Journal*, 25(1), 1–15. <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=113072848&site=ehost-live&scope=site>
- Eastman, J. K., Shin, H., & Ruhland, K. (2020). The picture of luxury: A comprehensive examination of college student consumers' relationship with luxury brands. *Psychology and Marketing*, 37(1), 56–73. <https://doi.org/10.1002/mar.21280>
- Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics*, 105(3), 1809–1831. <https://doi.org/10.1007/s11192-015-1645-z>
- Fazeli, Z., Shukla, P., & Perks, K. (2020). Digital buying behavior: The role of regulatory fit and self-construal in online luxury goods purchase intentions. *Psychology and Marketing*, 37(1), 15–26. <https://doi.org/10.1002/mar.21276>
- Fuentes, H., Vera-Martinez, J., & Kolbe, D. (2022). The role of intangible attributes of luxury brands for signalling status: A systematic literature review. *International Journal of Consumer Studies*, 47(6), 2747–2766. <https://doi.org/10.1111/ijcs.12852>

- Griskevicius, V., & Kenrick, D. T. (2013). Fundamental motives: How evolutionary needs influence consumer behavior. *Journal of Consumer Psychology, 23*(3), 372–386. <https://doi.org/10.1016/j.jcps.2013.03.003>
- Grotts, A. S., & Johnson, T. W. (2013). Millennial consumers' status consumption of handbags. *Journal of Fashion Marketing and Management, 17*(3), 280–293. <https://doi.org/10.1108/JFMM-10-2011-0067>
- Han, S.-L., & Kim, K. (2020). Role of consumption values in the luxury brand experience: Moderating effects of category and the generation gap. *Journal of Retailing and Consumer Services, 57*, 102249. <https://doi.org/10.1016/j.jretconser.2020.102249>
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing, 74*(4), 15–30. <https://doi.org/10.1509/jmkg.74.4.15>
- He, Y., Zou, D., & Jin, L. (2010). Exploiting the goldmine: A lifestyle analysis of affluent Chinese consumers. *Journal of Consumer Marketing, 27*(7), 615–628. <https://doi.org/10.1108/07363761011086362>
- Hemetsberger, A., Von Wallpach, S., & Bauer, M. (2012). Because I'm worth it—Luxury and the construction of consumers' selves. *Advances in Consumer Research, 40*, 483–489. <https://scopus-amu.refread.com/inward/record.uri?eid=2-s2.0-84883739238&partnerID=40&md5=2048c6a15e398c223704b98d8d74eb68>
- Holmqvist, J., Wirtz, J., & Fritze, M. P. (2020). Luxury in the digital age: A multi-actor service encounter perspective. *Journal of Business Research, 121*, 747–756. <https://doi.org/10.1016/j.jbusres.2020.05.038>
- Hudders, L. (2012). Why the devil wears Prada: Consumers' purchase motives for luxuries. *Journal of Brand Management, 19*(7), 609–622. <https://doi.org/10.1057/bm.2012.9>
- Hudders, L., Pandelaere, M., & Vyncke, P. (2013). Consumer meaning making: The meaning of luxury brands in a democratised luxury world. *International Journal of Market Research, 55*(3), 391–412. <https://doi.org/10.2501/IJMR-2013-036>
- Husain, R., Ahmad, A., & Khan, B. M. (2022a). The role of status consumption and brand equity: A comparative study of the marketing of Indian luxury brands by traditional and social-media. *Global Business and Organizational Excellence, 41*(4), 48–67. <https://doi.org/10.1002/joe.22156>
- Husain, R., Paul, J., & Koles, B. (2022b). The role of brand experience, brand resonance and brand trust in luxury consumption. *Journal of Retailing and Consumer Services, 66*, 102895. <https://doi.org/10.1016/j.jretconser.2021.102895>
- Husain, R., Samad, T. A., & Qamar, Y. (2022c). Past, present and future of luxury brands: A review and bibliometric analysis. *Journal of Fashion Marketing and Management, 26*(4), 582–602. <https://doi.org/10.1108/JFMM-02-2021-0046>
- Jain, N., & Dhingra, R. (2023). A bibliometric analysis of 25 years of workplace deviant behavior research. *BIMTECH Business Perspectives, 4*(1), 9–26. <https://doi.org/10.1177/25819542231185598>
- Jayaswal, P., & Parida, B. (2023). Past, present and future of augmented reality marketing research: A bibliometric and thematic analysis approach. *European Journal of Marketing, 57*(1), 2237–2289. <https://doi.org/10.1108/EJM-05-2022-0397>
- Kapferer, J. N., & Valette-Florence, P. (2021). Which consumers believe luxury must be expensive and why? A cross-cultural comparison of motivations. *Journal of Business Research, 132*, 301–313. <https://doi.org/10.1016/j.jbusres.2021.04.003>
- Kastanakis, M. N., & Balabanis, G. (2014). Explaining variation in conspicuous luxury consumption: An individual differences' perspective. *Journal of Business Research, 67*(10), 2147–2154. <https://doi.org/10.1016/j.jbusres.2014.04.024>

- Khan, F. M., Anas, M., & Uddin, S. M. F. (2023). Anthropomorphism and consumer behaviour: A SPAR-4-SLR protocol compliant hybrid review. *International Journal of Consumer Studies*, 1–37. <https://doi.org/10.1111/ijcs.12985>
- Kim, D., & Jang, S. (2014). Motivational drivers for status consumption: A study of Generation Y consumers. *International Journal of Hospitality Management*, 38, 39–47. <https://doi.org/10.1016/j.ijhm.2013.12.003>
- Kim, S., Park, K., & Shrum, L. J. (2022). Cause-related marketing of luxury brands: Nudging materialists to act prosocially. *Psychology and Marketing*, 39(6), 1204–1217. <https://doi.org/10.1002/mar.21648>
- Klaus, P., & Tarquini-Poli, A. (2022). Come fly with me: Exploring the private aviation customer experience (PAX). *European Journal of Marketing*, 56(4), 1126–1152. <https://doi.org/10.1108/EJM-01-2021-0048>
- Kumar, A., Paul, J., & Unnithan, A. B. (2020). “Masstige” marketing: A review, synthesis and research agenda. *Journal of Business Research*, 113, 384–398. <https://doi.org/10.1016/j.jbusres.2019.09.030>
- Li, M. Z., & Stodolska, M. (2022). Beyond luxury consumption: The meaning and meaning-making mechanism in conspicuous outbound tourism. *Journal of Leisure Research*, 53(5), 687–704. <https://doi.org/10.1080/00222216.2021.1949651>
- Lim, W. M., Aggarwal, A., & Dandotiya, R. (2022a). Marketing luxury services beyond affluence in the new normal: Insights from fine dining during the coronavirus pandemic. *Journal of Retailing and Consumer Services*, 66(September 2021), 102936. <https://doi.org/10.1016/j.jretconser.2022.102936>
- Lim, W. M., Kumar, S., & Ali, F. (2022b). Advancing knowledge through literature reviews: ‘What’, ‘why’, and ‘how to contribute.’ *Service Industries Journal*, 42(7–8), 481–513. <https://doi.org/10.1080/02642069.2022.2047941>
- Linnenluecke, M. K., Marrone, M., & Singh, A. K. (2020). Conducting systematic literature reviews and bibliometric analyses. *Australian Journal of Management*, 45(2), 175–194. <https://doi.org/10.1177/0312896219877678>
- Lou, X. Q., Chi, T., Janke, J., & Desch, G. (2022). How do perceived value and risk affect purchase intention toward second-hand luxury goods? An empirical study of US consumers. *Sustainability*, 14(18). <https://doi.org/10.3390/su141811730>
- Maman Larraufie, A.-F., & Kourdoughli, A. (2014). The e-semiotics of luxury. *Journal of Global Fashion Marketing*, 5(3), 197–208. <https://doi.org/10.1080/20932685.2014.906120>
- Mariani, M., Baggio, R., Fuchs, M., & Höepken, W. (2018). Business intelligence and big data in hospitality and tourism: A systematic literature review. *International Journal of Contemporary Hospitality Management*, 30(12), 3514–3554. <https://doi.org/10.1108/IJCHM-07-2017-0461>
- Morales, M. E., & Belmonte-Urena, L. J. (2021). Theoretical research on circular economy and sustainability trade-offs and synergies: A bibliometric analysis. *2021 IEEE International Conference on Technology and Entrepreneurship, ICTE 2021*. <https://doi.org/10.1109/ICTE51655.2021.9584537>
- Mukherjee, D., Lim, W. M., Kumar, S., & Donthu, N. (2022). Guidelines for advancing theory and practice through bibliometric research. *Journal of Business Research*, 148(May), 101–115. <https://doi.org/10.1016/j.jbusres.2022.04.042>
- Nobre, H., Kumar, A., Kastanakis, M. N., & Paul, J. (2022). Consumers’ relationship with mass prestige brands and happiness. *European Management Review*, 20(2), 306–325. <https://doi.org/10.1111/emre.12538>

- Pantano, E., & Stylos, N. (2020). The Cinderella moment: Exploring consumers' motivations to engage with renting as collaborative luxury consumption mode. *Psychology and Marketing, 37*(5), 740–753. <https://doi.org/10.1002/mar.21345>
- Park, J., Han, H., & Park, J. (2013). Psychological antecedents and risk on attitudes toward e-customization. *Journal of Business Research, 66*(12), 2552–2559. <https://doi.org/10.1016/j.jbusres.2013.05.048>
- Patsiaouras, G., & Fitchett, J. A. (2012). The evolution of conspicuous consumption. *Journal of Historical Research in Marketing, 4*(1), 154–176. <https://doi.org/10.1108/17557501211195109>
- Paul, J., & Bhukya, R. (2021). Forty-five years of *International Journal of Consumer Studies*: A bibliometric review. *International Journal of Consumer Studies, 45*(5), 937–963.
- Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know? *International Business Review, 29*(4), 101717. <https://doi.org/10.1016/j.ibusrev.2020.101717>
- Phau, I., & Cheong, E. (2009). How young adult consumers evaluate diffusion brands: Effects of brand loyalty and status consumption. *Journal of International Consumer Marketing, 21*(2), 109–123. <https://doi.org/10.1080/08961530802153185>
- Purohit, S., & Radia, K. N. (2022). Conceptualizing masstige buying behavior: A mixed-method approach. *Journal of Business Research, 142*, 886–898. <https://doi.org/10.1016/j.jbusres.2022.01.023>
- Rathi, R., Garg, R., Kataria, A., & Chhikara, R. (2022). Evolution of luxury marketing landscape: A bibliometric analysis and future directions. *Journal of Brand Management, 29*(3), 241–257. <https://doi.org/10.1057/s41262-022-00273-x>
- Roy, R., & Rabbanee, F. K. (2015). Antecedents and consequences of self-congruity. *European Journal of Marketing, 49*(3–4), 444–466. <https://doi.org/10.1108/EJM-12-2013-0739>
- Shahid, S., & Paul, J. (2021). Intrinsic motivation of luxury consumers in an emerging market. *Journal of Retailing and Consumer Services, 61*(September 2020), 102531. <https://doi.org/10.1016/j.jretconser.2021.102531>
- Shukla, P. (2012). The influence of value perceptions on luxury purchase intentions in developed and emerging markets. *International Marketing Review, 29*(6), 574–596. <https://doi.org/10.1108/02651331211277955>
- Shukla, P., Rosendo-Rios, V., Trott, S., Lyu, J., & Khalifa, D. (2022). Managing the challenge of luxury democratization: A multicountry analysis. *Journal of International Marketing, 30*(4), 44–59. <https://doi.org/10.1177/1069031X221126925>
- Smit, A. (2022). Consuming the rich white “Bitch” on *The Real Housewives of Johannesburg*. *Consumption Markets and Culture, 25*(4), 395–409. <https://doi.org/10.1080/10253866.2021.2007478>
- So, K. K. F., Wu, L., Xiong, L., & King, C. (2018). Brand management in the era of social media: Social visibility of consumption and customer Brand Identification. *Journal of Travel Research, 57*(6), 727–742. <https://doi.org/10.1177/0047287517718354>
- Södergren, J. (2021). Brand authenticity: 25 Years of research. *International Journal of Consumer Studies, 45*(4), 645–663. <https://doi.org/10.1111/ijcs.12651>
- Sogo, K., & Matsubayashi, N. (2021). Dynamic production and pricing decisions in the presence of the snob effect. *International Transactions in Operational Research, 28*(6), 3330–3363. <https://doi.org/10.1111/itor.12961>
- Sundie, J. M., Pandelaere, M., Lens, I., & Warlop, L. (2020). Setting the bar: The influence of women's conspicuous display on men's affiliative behavior. *Journal of Business Research, 120*, 569–585. <https://doi.org/10.1016/j.jbusres.2019.09.039>

- Tofighi, M., Grohmann, B., & Bodur, H. O. (2020). Ethical attribute and brand concept congruity enhances brand evaluations. *European Journal of Marketing*, 54(1), 79–108. <https://doi.org/10.1108/EJM-02-2018-0104>
- Turunen, L. L. M., & Leipämaa-Leskinen, H. (2015). Pre-loved luxury: Identifying the meaning of second hand luxury possessions. *Journal of Product and Brand Management*, 24(1), 57–64. <https://doi.org/10.1108/JPBM-05-2014-0603>
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The psychological consequences of money. *Science*, 314(5802), 1154–1156. <https://doi.org/10.1126/science.1132491>
- Wang, Y., Stoner, J. L., & John, D. R. (2019). Counterfeit luxury consumption in a social context: The effects on females' moral disengagement and behavior. *Journal of Consumer Psychology*, 29(2), 207–225. <https://doi.org/10.1002/jcpy.1071>
- Wang, Y. (2022). A conceptual framework of contemporary luxury consumption. *International Journal of Research in Marketing*, 39(3), 788–803. <https://doi.org/10.1016/j.ijresmar.2021.10.010>
- Wiedmann, K. P., Hennigs, N., & Siebels, A. (2009). Value-based segmentation of luxury consumption behavior. *Psychology and Marketing*, 26(7), 625–651. <https://doi.org/10.1002/mar.20292>
- Wong, N. Y., & Ahuvia, A. C. (1998). Personal taste and family face: Luxury consumption in confucian and western societies. *Psychology and Marketing*, 15(5), 423–441. [https://doi.org/10.1002/\(SICI\)1520-6793\(199808\)15:5<423::AID-MAR2>3.0.CO;2-9](https://doi.org/10.1002/(SICI)1520-6793(199808)15:5<423::AID-MAR2>3.0.CO;2-9)
- Xiang, P., Zhang, H. B., Geng, L. N., Zhou, K. X., & Wu, Y. P. (2019). Individualist–collectivist differences in climate change inaction: The role of perceived intractability. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00187>

Past, Present and Future of Brand Attachment Research: A Review and Research Agenda

BIMTECH Business Perspectives
4(2) 149–167, 2023
© 2023 Birla Institute of Management
Technology
DOI: 10.1177/25819542231214152
bsp.bimtech.ac.in



Waseem Saeed Khan¹ , Mohammad Khalid Azam¹ and Fateh Mohd Khan¹ 

Abstract

Customers tend to form strong bonds with the brands and attach firmly to them, which may eventually impact purchasing intentions and enhance customer loyalty. This study intends to investigate the intellectual structure and existing performance trends of the extant literature on brand attachment. We accomplish this goal by employing a bibliometric analytical toolbox and visualization tools: VOSviewer and Bibliometrix-R. The relevant data were retrieved from the two most prominent and most significant abstract and citation databases, that is, Scopus and Web of Science. This study examines the dataset from several aspects. It identifies the most prominent authors, the most cited articles and the most relevant journals, hence deciphering the performance of the field. Then, a co-occurrence analysis was conducted, deciphering the field's intellectual structure. Further, we mention significant implications for practitioners and managers interested in the topic. Finally, we orchestrate future research lines from two aspects, first delineated from recent works and from thematic clusters generated using co-occurrence analysis.

Keywords

Brand attachment, systematic literature review, bibliometric analysis, customer involvement, brand experience

¹ Department of Business Administration, Aligarh Muslim University, Aligarh, Uttar Pradesh, India

Corresponding author:

Fateh Mohd Khan, Department of Business Administration, Aligarh Muslim University, Aligarh, Uttar Pradesh 202002, India.
E-mail: fatehmohd.khan20@gmail.com



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed.

Introduction

Brand attachment, a multidimensional construct reflecting the emotional and cognitive bond between consumers and brands, has been the subject of significant interest and investigation in consumer behavior and marketing (Ugalde et al., 2023). Lacoëuilhe (2000) posited that “attachment to the brand is a psychological variable that reveals a lasting and inalterable affective relationship (separation is painful) to the brand and expresses a relation of psychological closeness to it” (p. 66). Over the years, scholars and practitioners alike have recognized the profound impact of brand attachment on consumer preferences, loyalty, and, ultimately, organizational success (Liu et al., 2020). The concept of brand attachment stems from the realization that consumers can form powerful, enduring connections with brands, transcending mere functional benefits (Rajaobelina et al., 2021). This emotional connection, often referred to as brand love, passion, or loyalty, goes beyond the utilitarian aspect of products and services and engages consumers at a profoundly personal level (Shabani Nashtae et al., 2017). Understanding brand attachment mechanisms has become crucial for marketers seeking to forge lasting relationships with their customers and create enduring brand value (Arya et al., 2018).

Brand attachment is a concept that has garnered considerable attention in consumer behavior and marketing. Consumers often form emotional connections and strong bonds with certain brands beyond preference or loyalty (Fastoso & González-Jiménez, 2020). This deep and enduring connection between individuals and brands is known as a brand attachment (Aureliano-Silva et al., 2018). It encompasses a range of psychological, emotional, and cognitive dimensions that shape consumers’ attitudes, behaviors, and decision-making processes (Flight & Coker, 2022). Over the years, brand attachment has emerged as a vital area of research as scholars and marketers strive to understand this phenomenon’s underlying mechanisms and implications (Vredeveld, 2018). Researchers have delved into the psychological processes underpinning brand attachment formation, investigating factors such as self-identity, emotional bonding, nostalgia, and brand love (Li et al., 2019; Moussa, 2015; Moussa & Touzani, 2017; Shimul & Phau, 2023; Youn & Dadoo, 2021). Moreover, empirical studies have examined the role of various antecedents, such as brand personality (Malär et al., 2011), brand experiences (Zha et al., 2022), and self-congruity (Usakli et al., 2022), in shaping brand attachment (Aboulnasr & Tran 2019; Shimul & Phau, 2022). Several early investigations have laid the groundwork for subsequent studies and have contributed to our understanding of the intricacies of brand-consumer relationships (Fedorikhin et al., 2008; Park et al., 2006; Thomson et al., 2005).

In the present era, the study of brand attachment has evolved to incorporate new perspectives, methodologies, and contexts. Researchers have expanded their focus to explore the role of digital media (Sánchez-Fernández & Jiménez-Castillo, 2021), social networking platforms (Arya et al., 2018), and online communities (Wang et al., 2016) in fostering brand attachment. Technology has transformed how consumers engage with brands, necessitating a fresh examination of the dynamics between consumers, brands, and attachment (Lam & Shankar, 2014; Min et al., 2020; Read et al., 2011). Additionally, recent studies have explored cross-cultural variations in brand attachment, uncovering the influence of cultural

values (Chen et al., 2021), norms (S. et al., 2019), and practices on consumers' emotional bonds with brands (Grisaffe & Nguyen, 2011).

Two significant review articles on brand attachment research have been published in elite journals. First, Shimul's (2022) review adopts a framework-based approach, highlighting and summarizing the theories employed, contexts explored, moderators and mediators examined, and antecedents & outcomes investigated in the domain of brand attachment research. Second, Hemsley-Brown's (2023) review is framework-based, focusing on identifying antecedents and consequences; their review is a first attempt to chart and synthesize the antecedents, mediators and consequences of brand attachment research. None of the existing reviews has focused on investigating and unrolling the brand attachment research's intellectual knowledge structure and performance trends. Hence, to address this gap, we perform a bibliometric assessment of the extant literature on brand attachment research. This bibliometric variant of systematic review delves into the trajectory of brand attachment research, providing a comprehensive synthesis of the past, present, and potential future directions within this vibrant domain. As we delve into the current state of brand attachment research, we highlight the most recent advancements and key emerging themes. This includes an examination of novel research methodologies, the impact of digitalization and social media, and the interplay of cultural, societal, and individual factors influencing brand attachment. By synthesizing the current state of knowledge, we aim to provide a comprehensive overview that reflects the contemporary landscape of brand attachment research.

Moreover, this systematic review looks forward to the future of brand attachment research, identifying potential avenues for exploration and addressing critical gaps in the existing literature. Understanding how brand attachment adapts and thrives becomes paramount with the ever-changing consumer landscape, characterized by evolving technologies, cultural shifts, and environmental concerns. We shed light on the potential challenges and opportunities that await researchers and marketers, presenting a roadmap for future investigations that can shape the trajectory of the field.

Therefore, In light of the above discussion and following state-of-the-art bibliometric reviews (Goel et al., 2022; Husain et al., 2021; Jayaswal & Parida, 2023; Kumar et al., 2022; Stocchi et al., 2022), we curate two research questions considered as the present study's final blueprint. They are as follows:

- RQ₁*: What is the current descriptive and academic profile regarding the most influential authors, articles and journals of brand attachment research?
- RQ₂*: What are the significant themes which characterize the intellectual structure of brand attachment research, and what insights can be drawn from the current literature to pursue future research?

The remainder of this article is structured in the following scheme: First, we present the methodology adopted in the study. Second, we report the results of the content and bibliometric analysis. Third, we offer key implications learnt from the study. Finally, we conclude with the cluster-oriented and recent works-oriented future research directions.

Methodology

A systematic literature review (SLR) intends to assemble, arrange and assess the existing literature on a particular domain in a scientific and replicable manner (Paul et al., 2021), ensuring to provide an audit trail which may help to give a clear picture of the decisions taken, procedures adopted and conclusions inferred (Mulrow et al., 1998). Bibliometric reviews are the sub-variants of SLRs (Lim et al., 2022; Sugla & Sen, 2023), often conducted in liaison (Behl et al., 2022; Donthu, Kumar, Pandey, et al., 2021; Jain & Dhingra, 2023).

Taking cues from the works of Tiwary et al. (2021) and Saini et al. (2022), this study adopts an iterative cycle approach, which begins with zeroing in on the relevant keywords, which is followed by the database selection and running the search queries and ends with the deployment of various bibliometric techniques on the resultant dataset. Figure 1 shows an overview of the methodological procedure.

Scheming the Search String and Data Collection

Following Kumar Kar and Harichandan (2022), we used previously established keywords from past literature reviews on the brand attachment concept (Hemsley-Brown, 2023; Shimul, 2022). Our search string was as follows: “brand attachment” OR “emotional attachment” OR “emotional brand attachment.” We searched this string in the two most extensive abstract and citation databases, that is, Scopus and Web of Science. Several accomplished branding researchers have employed these databases in their bibliometric reviews (Rojas-Lamorena et al., 2022; Sepulcri et al., 2020). Our initial search yielded 8,915 and 1,254 results on Scopus and Web of Science, respectively.

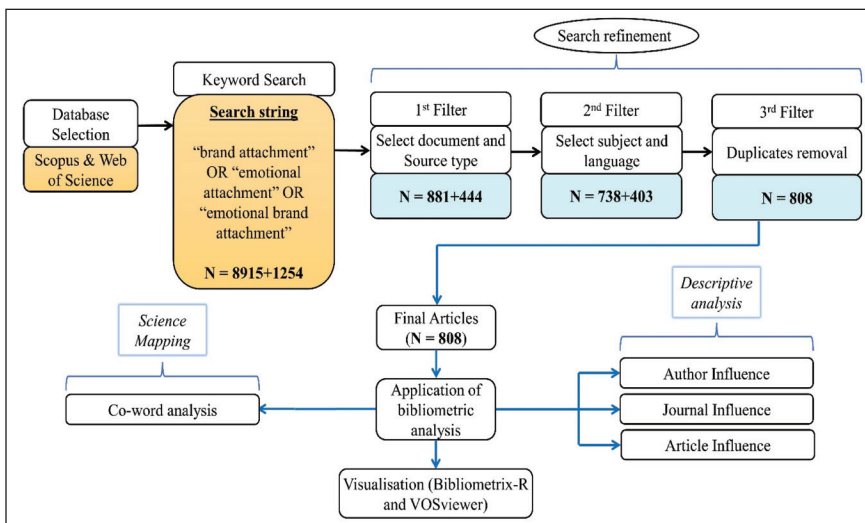


Figure 1. Snapshot of the Review Methods and Material Employed.

Refining the Dataset

In line with the filtration approach adopted by Tiwary et al. (2021), we applied several filters to purify our data. First, we considered only “articles” and “reviews” published in peer-reviewed academic journals, as they are the true indicators of “certified knowledge” (Ramos-Rodríguez & Ruiz-Navarro, 2004). Second, we kept the subject filter limited to business, management, and economics to keep our search results academically relevant. Also, to address comprehension limitations, we only considered “English-language” articles (Husain et al., 2021; Khan et al., 2023). Further, as we searched and downloaded our dataset from two databases, We used R software (Team, 2013) to merge and remove the duplicates from the dataset using the procedure suggested and employed by Kasaraneni and Rosaline (2022). The final curated sample contained 808 articles.

Bibliometric Analysis

Bibliometric analysis is an application of quantitative methods to bibliographic data (Pritchard, 1969) to investigate the theoretical and conceptual roots and probable research trajectories (Wang & Liu, 2023). This article employs bibliometric techniques selected from the bibliometric toolbox (Donthu, Kumar, Mukherjee, et al., 2021) for managing and analysing the exponentially increasing corpus of literature in the domain of brand attachment research. Bibliometric tools have been used in branding research (Oh et al., 2020; Veloutsou & Ruiz Mafe, 2020) and other fields (Anas et al., 2023; Khan & Khan, 2022; Mas-Tur et al., 2020; Migliavacca et al., 2022; Singh et al., 2023) for quantitatively analysing the relationship between the articles, keywords, and authors in a domain and identifying and deciphering the significant themes which characterize the intellectual structure of a domain (Mukherjee et al., 2022). We conducted the descriptive analysis [also known as performance analysis (See Donthu, Kumar & Pandey, 2021) using R software’s “bibliometrix” package (Aria & Cuccurullo, 2017) and co-word analysis using VOSviewer (van Eck & Waltman, 2010).

Analysis, Findings and Discussion

Descriptive Analysis

Our filtered literature dataset on brand attachment research comprised 808 articles published in 344 peer-reviewed Journals from 1999 to 2003, with an annual growth rate of 18.6%. The total citations received by the domain of brand attachment is 28,258 citations, whereas the total references used in the domain were 48,016. Figure 2 shows the annual publication trend of brand attachment research, suggesting an upsurge in article publications from 2011 onwards.

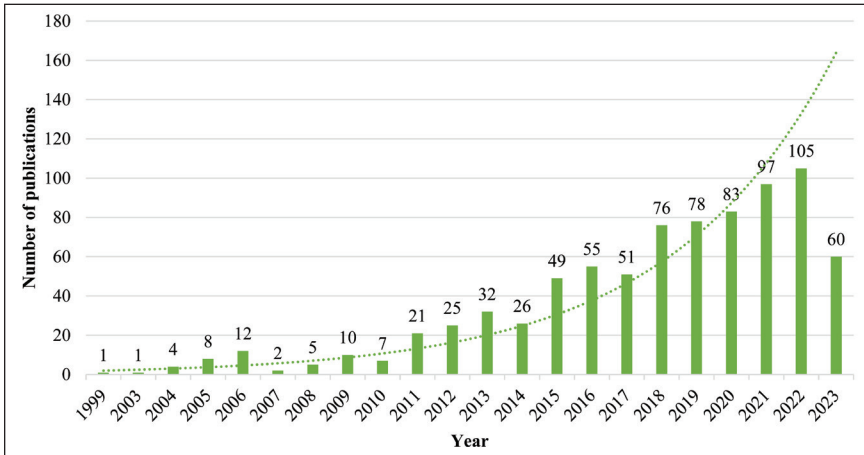


Figure 2. Annual Scientific Production.

Author Influence

In Table 1, we present the 10 most influential authors in the domain of brand attachment research as per the citation impact. The most cited author was C. Whan Park, who was cited 3,178 times for 8 articles with an h-index of 7, followed by Deborah J. Macinnis, who published 8 articles garnering 2,950 citations, making her h-index 6. Bernd Schmitt, the third highest cited scholar in the domain, published 2 articles, making her h-index 2.

Journal Influence

In Table 2, we show the most influential journals in the brand attachment research domain regarding citation impact. We found that the Journal of Marketing has garnered the most citations, that is, 4,409, publishing 5 articles on brand attachment. The second most highly influenced journal was the Journal of Consumer Psychology, garnering 2,936 citations with 10 articles, followed by the Journal of Business Research, which published 33 articles and garnered 1,671 citations.

Article Influence

In Table 3, we present the most influential articles in the domain of brand attachment research as per citations impact. We observed that the article titled “Brand Experience: What is It? How is it Measured? Does it Affect Loyalty?” by Brakus et al. (2009) is the most highly cited work, garnering 1,843 citations, meeting a yearly average of 122.87. This article is followed by the work of Thomson et al. (2005) titled “The Ties That Bind: Measuring the Strength of Consumers’ Emotional Attachments to Brands,” garnering a total of 1,485 citations with a yearly citation average of 78.16. Whan Park et al. (2010) authored the third most cited work titled “Brand Attachment and Brand Attitude Strength: Conceptual and Empirical Differentiation of Two Critical Brand Equity Drivers,” which has garnered 1,058 citations.

Table 1. Most Influential Authors.

Author (s)	TC	NP	h
C. Whan Park	3178	8	7
Deborah J. Macinnis	2950	8	6
Bernd Schmitt	2089	2	2
Aaron Ahuvia	1986	3	3
J. Joško Brakus	1843	1	1
Lia Zarantonello	1843	1	1
Matthew Thomson	1768	3	3
Andreas B. Eisingerich	1364	7	6
Joseph Priester	1148	3	3
Dawn Iacobucci	1058	1	1

Notes: TC- Total citations; NP- No. of publications; h- h index.

Table 2. Most Influential Journals.

Journals	TC	NP
<i>Journal of Marketing</i>	4409	5
<i>Journal of Consumer Psychology</i>	2936	10
<i>Journal of Business Research</i>	1671	33
<i>Marketing Letters</i>	1117	3
<i>Journal of Product and Brand Management</i>	860	31
<i>Journal of Consumer Research</i>	803	8
<i>European Journal of Marketing</i>	774	21
<i>Journal of Brand Management</i>	709	20
<i>Journal of Retailing and Consumer Services</i>	625	21
<i>Psychology & Marketing</i>	598	17

Notes: TC- Total citations; NP- No. of publications.

Table 3. Most Influential Articles.

Article Title	Author Citation	TC	TC/Y
“Brand experience: What is it? How is it measured? Does it affect loyalty?”	Brakus et al. (2009)	1843	122.87
“The ties that bind: Measuring the strength of consumers’ emotional attachments to brands”	Thomson et al. (2005)	1485	78.16
“Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers”	Whan Park et al. (2010)	1058	75.57
“Some antecedents and outcomes of brand love”	Carroll and Ahuvia (2006)	982	54.56
“Brand love”	Batra et al. (2012)	882	73.50
“Emotional brand attachment and brand personality: The relative importance of the actual and the ideal self”	Malär et al. (2011)	622	47.85

(Table 3 continued)

(Table 3 continued)

Article Title	Author Citation	TC	TC/Y
“Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family”	Halbesleben et al. (2009)	396	26.40
“Brand authenticity: An integrative framework and measurement scale”	Morhart et al. (2015)	347	38.56
“Strategic divestments in family firms: Role of family structure and community culture”	Sharma and Manikutty (2005)	283	14.89
“The mediating effect of place attachment on the relationship between festival satisfaction and loyalty to the festival hosting destination”	Lee et al. (2012)	274	22.83

Notes: TC- Total citations; TC/Y- Total citations per year.

Keyword Analysis

For identifying and analysing the most prominent keywords in the domain of brand attachment, we built a treemap using author keywords on the Bibliometrix-R software. The treemap displaying relevant keywords is shown in Figure 3; it reveals that “brand attachment” is the most recurring keyword (24%), followed by “emotional attachment” (11%) and “brand loyalty” (08%). The existence of keywords such as “emotional brand attachment” (04%), “brand love” (03%), “brand trust” (03%), and “brand experience” (03%) portrays that branding is the central foci of the retrieved dataset.

Furthermore, Table 4 displays results similar to the treemap above, showing 30 highly recurring keywords in the brand attachment dataset retrieved from two databases.

Co-word Analysis

Co-word analysis is a bibliometric tool which is used to unravel the “relationships among author listed or natural language processing (NLP) extracted keywords (periodical or present topics), wherein keywords converging into a cluster represent a common theme” (Mukherjee et al., 2022, p. 105). Co-word analysis is primarily employed to unroll and decipher the intellectual structure of the domain (Donthu, Kumar, Mukherjee, et al., 2021); hence, we employ this tool for delineating thematic knowledge clusters. Following the sensemaking approach that Lim and Kumar (2023) propounded, we develop, design and elaborate on the clusters generated from the co-word analysis. In line with the approach employed by Donthu, Kumar, Pandey, et al. (2021), we kept the minimum threshold of 10 occurrences, which led to the generation of 5 thematic clusters. Those clusters are as follows:

Thematic Cluster 1 (Red): This cluster is named “emotional brand attachment.” The highest recurring keywords in this cluster are “emotional brand attachment,” “consumer,” “consumption,” “word-of-mouth,” and “personality.” These keywords

relationship with consumer engagement; also, the mediating relationship of brand communication has been established between the two (Arya et al., 2018). Researchers have also established that variables like customer trust and brand attachment fully mediate the influence of customer engagement on brand loyalty (Li et al., 2020). Further, In non-conventional consumer contexts like non-brand owner community members, studies have proven the relationship between consumer engagement and brand attachment (Kumar & Nayak, 2019).

Thematic Cluster 4 (Yellow): This cluster is titled “brand loyalty.” The highest recurring keywords in this cluster are “customer experience,” “customer loyalty,” “customer satisfaction,” “brand experience,” and “behavioural intentions.” This cluster emphasizes the loyalty of the customers towards brands and products. Scholars have examined and concluded that celebrity attachment positively and significantly impacts brand attachment along with variables like brand quality, actual self-congruence and ideal self-congruence (Özer et al., 2022). Further, Research has explored myriad antecedent and outcome variables along with the three components of brand attachment (i.e., brand affection, brand passion, and self-brand connection) (Hemsley-Brown & Alnawas, 2016). Moreover, from the generational cohort perspective, researchers have also examined the influence of emotional brand attachment on the brand loyalty of smartphone users belonging to Gen-Y (Rathnayake, 2021).

Thematic Cluster 5 (Violet): This cluster is named “Emotional attachment.” The highest recurring keywords in this cluster are “marketing,” “place attachment,” “self-congruence,” “tourism,” “tourist destination,” “placement,” “emotional attachment,” and “consumer.” This cluster signifies the relevance of emotional attachment in the extant literature. Scholars have investigated how emotional attachment to the marketed brand is influenced by customers’ perceptions of their self-congruence concepts with the dancing image used in internet commercials (Manyiwa*, 2020). Furthermore, Wang et al. (2016) examined the antecedents of emotional attachment in social media users in the specific context of users and website personality traits. Moreover, researchers have also developed scales related to emotional attachment, such as Dwyer et al. (2015), who developed an emotional attachment to a sports team scale by taking cues from attachment theory.

Implications

In light of the methodological approach employed, our bibliometric variant of systematic review offers several implications to managers and practitioners.

First, Marketing strategists may use this study’s inputs to formulate positioning strategies for products and brands (Ugalde et al., 2023). Second, In addition to this, marketers need to emphasize developing and delivering brand experiences, particularly sensory experiences (Japutra et al., 2018b). These encounters could tempt or attract the customer (Japutra et al., 2018b). Third, Firms should use friend-like language and connect with customers as caring friends in intelligent interaction since consumers’ emotional attachment to a focused brand depends on

their view of the brand's warmth and competence (Wu et al., 2017). It's possible that solution creators and consumers would need to work together closely to support such an engagement style (Wu et al., 2017).

Conclusion

To this end, this bibliometric review revealed significant insights related to the intellectual structure and performance of the domain of brand attachment research. Addressing the research questions set for the study, we first identified the most influential authors, most cited articles and most productive journals of brand attachment research (RQ1). Second, we performed a co-word analysis to decipher the intellectual structure, which led to unpacking the domain's thematic knowledge clusters (RQ2). In concordance with the burgeoning scholarly interest, quite many research-related gaps exist which may be addressed to help deepen the understanding of realms of brand attachment research, which may be crafted and presented in three ways: For future explorations, we offer (a) Thematic clusters directed research lines, (b) Recent academic works directed research lines, and (c) Recommendations to overcome the limitations of this study.

Future Research Lines Delineated from Thematic Clusters

Discussion in the form of elaboration and elucidation on thematic knowledge clusters revealed several noteworthy and relevant future research pathways.

First, Several studies have recommended that upcoming studies could delve deeper into the temporal dynamics of brand attachment, investigating the stability and changes in attachment over time (Pedeliento et al., 2016). Furthermore, there is a need to explore the implications of brand attachment on consumer decision-making, brand advocacy, and the overall well-being of individuals (Goi et al., 2023). Second, Future studies may focus on exploring the usage of psychometrically more robust measurement scales, such as Paulssen's scale of brand attachment styles (Japutra et al., 2018a). Third, In the context of the Hospitality industry, Future research should compare and concentrate on specific product categories since consumers may have distinct emotional connections to various hotel types. (Liu et al., 2020). Fourth, Several opportunities exist to investigate the relationship between consumer identity and emotional intelligence as the drivers of emotional brand attachment (Vredeveld, 2018).

Future Research Lines Delineated from Recent Academic Works

Taking relevant cues from recent articles on brand attachment, we consider that a few additional future pathways for research may be availed.

First, Future Research may explore the causality of myriad relationships aligned with emotional brand attachment, such as subcultural and popular brand coolness, using non-conventional research methods such as experimental and

quasi-experimental (Koskie & Locander, 2023). Also, several other dimensions of brand coolness may be explored using experimental methods (Koskie & Locander, 2023). Second, Research in the future might look at how individuals in other Asia-Pacific nations respond emotionally to micro-celebrities and how they feel about companies due to cultural and religious differences (Chen et al., 2023). Third, Future research may consider testing the mediation effects of several psychological constructs (i.e., perceptions, preferences and intentions) between brand attachment and avoidance of similarity (Goi et al., 2023).

Limitation-overcoming Recommendations for Future Explorations

Despite the relevant and seminal insights presented here, this review carries inherent limitations due to the focus on bibliometric data. Hence, future reviews can focus on extending the thematic insights by using alternative analyses from the bibliometric toolbox, such as using triangulation by employing bibliographic coupling and PageRank Analysis (Mukherjee et al., 2022). Also, future researchers can take cues from the works of Lim et al. (2022) and Kraus et al. (2022) and focus on expanding on the “what,” “why,” and “how” of the literature on brand attachment research, which framework-based reviews (such as, when, who, what, why, where and how [5W1H] framework and Theory, Context, Characteristics and Methods [TCCM] frameworks) and structured reviews may cover.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding

The authors received no financial support for the research, authorship and/or publication of this article.

ORCID iDs

Waseem Saeed Khan  <https://orcid.org/0009-0002-0304-8598>

Fateh Mohd Khan  <https://orcid.org/0000-0002-6400-4348>

References

- Aboulnasr, K., & Tran, G. A. (2019). Is love really blind? The effect of emotional brand attachment on the perceived risk of really new products. *Journal of Product & Brand Management*, 29(1), 81–96. <https://doi.org/10.1108/JPBm-09-2018-2005>
- Anas, M., Khan, M. N., & Uddin, S. M. F. (2023). Mapping the concept of online purchase experience: A review and bibliometric analysis. *International Journal of Quality and Service Sciences*, 15(2), 168–189. <https://doi.org/10.1108/IJQSS-07-2022-0077>
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Arya, V., Sethi, D., & Verma, H. (2018). Are emojis fascinating brand value more than textual language? Mediating role of brand communication to SNS and brand

- attachment. *Corporate Communications: An International Journal*, 23(4), 648–670. <https://doi.org/10.1108/CCIJ-03-2018-0036>
- Aureliano-Silva, L., Strehlau, S., & Strehlau, V. (2018). The relationship between brand attachment and consumers' emotional well-being. *Journal of Relationship Marketing*, 17(1), 1–16. <https://doi.org/10.1080/15332667.2017.1391058>
- Batra, R., Ahuvia, A., & Bagozzi, R. P. (2012). Brand love. *Journal of Marketing*, 76(2), 1–16. <https://doi.org/10.1509/jm.09.0339>
- Behl, A., Jayawardena, N., Pereira, V., Islam, N., Del Giudice, M., & Choudrie, J. (2022). Gamification and e-learning for young learners: A systematic literature review, bibliometric analysis, and future research agenda. *Technological Forecasting and Social Change*, 176, 121445. <https://doi.org/10.1016/j.techfore.2021.121445>
- Bian, X., & Haque, S. (2020). Counterfeit versus original patronage: Do emotional brand attachment, brand involvement, and past experience matter? *Journal of Brand Management*, 27(4), 438–451. <https://doi.org/10.1057/s41262-020-00189-4>
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52–68. <https://doi.org/10.1509/jmkg.73.3.52>
- Carroll, B. A., & Ahuvia, A. C. (2006). Some antecedents and outcomes of brand love. *Marketing Letters*, 17(2), 79–89. <https://doi.org/10.1007/s11002-006-4219-2>
- Chen, T.-Y., Yeh, T.-L., & Huang, Y.-W. (2023). The influence of self-disclosure micro-celebrity endorsement on subsequent brand attachment: From an emotional connection perspective. *The Service Industries Journal*, 1–28. <https://doi.org/10.1080/02642069.2023.2209514>
- Chen, X., You, E. S., Lee, T. J., & Li, X. (2021). The influence of historical nostalgia on a heritage destination's brand authenticity, brand attachment, and brand equity. *International Journal of Tourism Research*, 23(6), 1176–1190. <https://doi.org/10.1002/jtr.2477>
- Donthu, N., Kumar, S., & Pandey, N. (2021). A retrospective evaluation of Marketing Intelligence and Planning: 1983–2019. *Marketing Intelligence and Planning*, 39(1), 48–73. <https://doi.org/10.1108/MIP-02-2020-0066>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Donthu, N., Kumar, S., Pandey, N., Pandey, N., & Mishra, A. (2021). Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis. *Journal of Business Research*, 135, 758–773. <https://doi.org/10.1016/j.jbusres.2021.07.015>
- Dwyer, B., Mudrick, M., Greenhalgh, G. P., LeCrom, C. W., & Drayer, J. (2015). The tie that blinds? Developing and validating a scale to measure emotional attachment to a sport team. *Sport Management Review*, 18(4), 570–582. <https://doi.org/10.1016/j.smr.2015.01.001>
- Fastoso, F., & González-Jiménez, H. (2020). Materialism, cosmopolitanism, and emotional brand attachment: The roles of ideal self-congruity and perceived brand globalness. *Journal of Business Research*, 121, 429–437. <https://doi.org/10.1016/j.jbusres.2018.12.015>
- Fedorikhin, A., Park, C. W., & Thomson, M. (2008). Beyond fit and attitude: The effect of emotional attachment on consumer responses to brand extensions. *Journal of Consumer Psychology*, 18(4), 281–291. <https://doi.org/10.1016/j.jcps.2008.09.006>
- Flight, R. L., & Coker, K. (2022). Birds of a feather: Brand attachment through the lens of consumer political ideologies. *Journal of Product and Brand Management*, 31(5), 731–743. <https://doi.org/10.1108/JPBM-01-2020-2719>

- Goel, P., Sharma, N., & Saha, R. (2022). Consumption behaviour of poor consumers: A bibliometric and content analysis. *FIIB Business Review*. <https://doi.org/10.1177/23197145221115794>
- Goi, C. L., Chieng, F. Y. L., & Goi, M. T. (2023). Avoidance of similarity and brand attachment of Generation X in sportswear brand loyalty: The roles of self-congruity. *Journal of Global Scholars of Marketing Science: Bridging Asia and the World*, 33(1), 133–153. <https://doi.org/10.1080/21639159.2022.2135012>
- Grisaffe, D. B., & Nguyen, H. P. (2011). Antecedents of emotional attachment to brands. *Journal of Business Research*, 64(10), 1052–1059. <https://doi.org/10.1016/j.jbusres.2010.11.002>
- Halbesleben, J. R. B., Harvey, J., & Bolino, M. C. (2009). Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family. *Journal of Applied Psychology* 94(6): 1452–1465. <https://doi.org/10.1037/a0017595>
- Hemsley-Brown, J., & Alnawas, I. (2016). Service quality and brand loyalty. *International Journal of Contemporary Hospitality Management*, 28(12), 2771–2794. <https://doi.org/10.1108/IJCHM-09-2015-0466>
- Hemsley-Brown, J. (2023). Antecedents and consequences of brand attachment: A literature review and research agenda. *International Journal of Consumer Studies*, 47(2), 611–628. <https://doi.org/10.1111/ijcs.12853>
- Hung, H. Y., & Lu, H. T. (2018). The rosy side and the blue side of emotional brand attachment. *Journal of Consumer Behaviour*, 17(3), 302–312. <https://doi.org/10.1002/cb.1712>
- Husain, R., Samad, T. A., & Qamar, Y. (2021). Past, present and future of luxury brands: A review and bibliometric analysis. *Journal of Fashion Marketing and Management*, 26(4), 582–602. <https://doi.org/10.1108/JFMM-02-2021-0046>
- Jahn, S., Gaus, H., & Kiessling, T. (2012). Trust, commitment, and older women: Exploring Brand attachment differences in the elderly segment. *Psychology & Marketing*, 29(6), 445–457. <https://doi.org/10.1002/mar.20533>
- Jain, N., & Dhingra, R. (2023). A bibliometric analysis of 25 years of workplace deviant behavior research. *BIMTECH Business Perspectives*, 4(1). <https://doi.org/10.1177/25819542231185598>
- Japutra, A., Ekinci, Y., & Simkin, L. (2018a). Positive and negative behaviours resulting from brand attachment: The moderating effects of attachment styles. *European Journal of Marketing*, 52(5–6), 1185–1202. <https://doi.org/10.1108/EJM-10-2016-0566>
- Japutra, A., Ekinci, Y., & Simkin, L. (2018b). Tie the knot: Building stronger consumers' attachment toward a brand. *Journal of Strategic Marketing*, 26(3), 223–240. <https://doi.org/10.1080/0965254X.2016.1195862>
- Jayaswal, P., & Parida, B. (2023). Past, present and future of augmented reality marketing research: A bibliometric and thematic analysis approach. *European Journal of Marketing*. <https://doi.org/10.1108/EJM-05-2022-0397>
- Kasaraneni, H., & Rosaline, S. (2022). Automatic merging of scopus and web of science data for simplified and effective bibliometric analysis. *Annals of Data Science*. Springer Berlin Heidelberg. <https://doi.org/10.1007/s40745-022-00438-0>
- Khan, F. M., Anas, M., & Uddin, S. M. F. (2023). Anthropomorphism and consumer behaviour: A SPAR-4-SLR protocol compliant hybrid review. *International Journal of Consumer Studies*, 1–37. <https://doi.org/10.1111/ijcs.12985>
- Khan, N. F., & Khan, M. N. (2022). A bibliometric analysis of peer-reviewed literature on smartphone addiction and future research agenda. *Asia-Pacific Journal of Business Administration*, 14(2), 199–222. <https://doi.org/10.1108/APJBA-09-2021-0430>

- Koskie, M. M., & Locander, W. B. (2023). Cool brands and hot attachments: Their effect on consumers' willingness to pay more. *European Journal of Marketing*, 57(4), 905–929. <https://doi.org/10.1108/EJM-02-2022-0086>
- Kraus, S., Breier, M., Lim, W. M., Dabić, M., Kumar, S., Kanbach, D., Mukherjee, D., Corvello, V., Piñeiro-Chousa, J., Liguori, E., Palacios-Marqués, D., Schiavone, F., Ferraris, A., Fernandes C., & Ferreira, J. J. (2022). Literature reviews as independent studies: Guidelines for academic practice. *Review of Managerial Science*, 16(8), 2577–2595. <https://doi.org/10.1007/s11846-022-00588-8>
- Kumar, J., & Nayak, J. K. (2019). Brand engagement without brand ownership: a case of non-brand owner community members. *Journal of Product & Brand Management*, 28(2), 216–230. <https://doi.org/10.1108/JPBM-04-2018-1840>
- Kumar Kar, S., & Harichandan, S. (2022). Green marketing innovation and sustainable consumption: A bibliometric analysis. *Journal of Cleaner Production*, 361, 132290. <https://doi.org/10.1016/j.jclepro.2022.132290>
- Kumar, S., Xiao, J. J., Pattnaik, D., Lim, W. M., & Rasul, T. (2022). Past, present and future of bank marketing: A bibliometric analysis of International Journal of Bank Marketing (1983–2020). *International Journal of Bank Marketing*, 40(2), 341–383. <https://doi.org/10.1108/IJBM-07-2021-0351>
- Lacoeuilhe, J. (2000). L'attachement à la marque: Proposition d'une échelle de mesure. *Recherche et Applications en Marketing*, 15(4), 61–77.
- Lam, S. Y., & Shankar, V. (2014). Asymmetries in the effects of drivers of brand loyalty between early and late adopters and across technology generations. *Journal of Interactive Marketing*, 28(1), 26–42. <https://doi.org/10.1016/j.intmar.2013.06.004>
- Lee, J. (Jiyeon), Kyle, G., & Scott, D. (2012). The mediating effect of place attachment on the relationship between festival satisfaction and loyalty to the festival hosting destination. *Journal of Travel Research*, 51(6), 754–767. <https://doi.org/10.1177/0047287512437859>
- Li, M.-W., Teng, H.-Y., & Chen, C.-Y. (2020). Unlocking the customer engagement-brand loyalty relationship in tourism social media: The roles of brand attachment and customer trust. *Journal of Hospitality and Tourism Management*, 44, 184–192. <https://doi.org/10.1016/j.jhtm.2020.06.015>
- Li, Y., Lu, C., Bogicevic, V., & Bujisic, M. (2019). The effect of nostalgia on hotel brand attachment. *International Journal of Contemporary Hospitality Management*, 31(2), 691–717. <https://doi.org/10.1108/IJCHM-12-2017-0797>
- Lim, W. M., & Kumar, S. (2023). Guidelines for interpreting the results of bibliometrics analysis: A sensemaking approach. *Global Business and Organizational Excellence*, 1–10. <https://doi.org/10.1002/joe.22229>
- Lim, W. M., Kumar, S., & Ali, F. (2022). Advancing knowledge through literature reviews: 'what', 'why', and 'how to contribute'. *The Service Industries Journal*, 42(7–8), 481–513. <https://doi.org/10.1080/02642069.2022.2047941>
- Liu, Y., Kou, Y., Guan, Z., Hu, J., & Pu, B. (2020). Exploring hotel brand attachment: The mediating role of sentimental value. *Journal of Retailing and Consumer Services*, 55, 102143. <https://doi.org/10.1016/j.jretconser.2020.102143>
- Ma, J., Tu, H., Zhou, X., & Niu, W. (2023). Can brand anthropomorphism trigger emotional brand attachment? *The Service Industries Journal*, 43(7–8), 555–578. <https://doi.org/10.1080/02642069.2021.2012163>
- Malär, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional brand attachment and brand personality: The relative importance of the actual and the ideal self. *Journal of Marketing*, 75(4), 35–52. <https://doi.org/10.1509/jmkg.75.4.35>

- Manyiwa*, S. (2020). Impact of dance in advertisements on emotional attachment towards the advertised brand: self-congruence theory. *Journal of Promotion Management*, 26(1), 144–161. <https://doi.org/10.1080/10496491.2019.1685620>
- Mas-Tur, A., Kraus, S., Brandtner, M., & Ewert, R. (2020). Advances in management research: A bibliometric overview of the Review of Managerial Science. *Review of Managerial Science*, 14(5), 933–958. <https://doi.org/10.1007/s11846-020-00406-z>
- Migliavacca, M., Patel, R., Paltrinieri, A., & Goodell, J. (2022). Mapping impact investing: A bibliometric analysis. *Journal of International Financial Markets, Institutions and Money*, 81, 101679. <https://doi.org/10.1016/j.intfin.2022.101679>
- Min, J., Yoo, Y., Hah, H., & Lee, H. (2020). Social network technology (SNT) as a tool and a social actor: from self-verification to SNT use. *Internet Research*, 30(5), 1329–1351. <https://doi.org/10.1108/INTR-07-2019-0285>
- Morhart, F., Malär, L., Guèvremont, A., Girardin, F., & Grohmann, B. (2015). Brand authenticity: An integrative framework and measurement scale. *Journal of Consumer Psychology*, 25(2), 200–218. <https://doi.org/10.1016/j.jcps.2014.11.006>
- Moussa, S. (2015). I may be a twin but i'm one of a kind: Are brand attachment and brand love different names for the same construct? *Qualitative Market Research*, 18(1), 1352–2752. <https://doi.org/10.1108/QMR-05-2013-0028>
- Moussa, S., & Touzani, M. (2017). The moderating role of attachment styles in emotional bonding with service providers. *Journal of Consumer Behaviour*, 16(2), 145–160. <https://doi.org/10.1002/cb.1605>
- Mukherjee, D., Lim, W. M., Kumar, S., & Donthu, N. (2022). Guidelines for advancing theory and practice through bibliometric research. *Journal of Business Research*, 148, 101–115. <https://doi.org/10.1016/j.jbusres.2022.04.042>
- Mulrow, C., Cook, D. J., & Davidoff, F. (1998). Introduction: Systematic reviews: Critical links in the great chain of evidence. *Systematic Reviews: Synthesis of Best Evidence for Health Care Decisions*, 126(5), 389–391.
- Oh, T. T., Keller, K. L., Neslin, S. A., et al. (2020). The past, present, and future of brand research. *Marketing Letters*, 31(2–3), 151–162. <https://doi.org/10.1007/s11002-020-09524-w>
- Özer, M., Özer, A., Ekinçi, Y., & Koçak, A. (2022). Does celebrity attachment influence brand attachment and brand loyalty in celebrity endorsement? A mixed methods study. *Psychology & Marketing*, 39(12), 2384–2400. <https://doi.org/10.1002/mar.21742>
- Park, C. W., MacInnis, D. J., & Priester, J. (2006). Brand attachment: Constructs, consequences, and causes. *Foundations and Trends in Marketing*, 1(3), 191–230. <https://doi.org/10.1561/1700000006>
- Paul, J., Lim, W. M., O’Cass, A., Hao, A. W., & Bresciani, S. (2021). Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). *International Journal of Consumer Studies*, 45(4), 01–16. <https://doi.org/10.1111/ijcs.12695>
- Pedieliento, G., Andreini, D., Bergamaschi, M., Salo, J. (2016). Brand and product attachment in an industrial context: The effects on brand loyalty. *Industrial Marketing Management*, 53, 194–206. <https://doi.org/10.1016/j.indmarman.2015.06.007>
- Pritchard, A. (1969). Statistical bibliography or bibliometric? *Journal of Documentation*, 25(4), 348–349.
- Rajaobelina, L., Prom Tep, S., Arcand, M., & Ricard, L. (2021). The relationship of brand attachment and mobile banking service quality with positive word-of-mouth. *Journal of Product & Brand Management*, 30(8), 1162–1175. <https://doi.org/10.1108/JPBM-02-2020-2747>

- Ramos-Rodríguez, A.-R., & Ruíz-Navarro, J. (2004). Changes in the intellectual structure of strategic management research: A bibliometric study of the Strategic Management Journal, 1980–2000. *Strategic Management Journal*, 25(10), 981–1004. <https://doi.org/10.1002/smj.397>
- Rathnayake, D. T. (2021). Gen Y consumers' brand loyalty: A brand romance perspective. *Marketing Intelligence & Planning*, 39(6), 761–776. <https://doi.org/10.1108/MIP-09-2020-0421>
- Read, W., Robertson, N., & McQuilken, L. (2011). A novel romance: The technology acceptance model with emotional attachment. *Australasian Marketing Journal*, 19(4), 223–229. <https://doi.org/10.1016/j.ausmj.2011.07.004>
- Rojas-Lamorená, Á. J., Del Barrio-García, S., & Alcántara-Pilar, J. M. (2022). A review of three decades of academic research on brand equity: A bibliometric approach using co-word analysis and bibliographic coupling. *Journal of Business Research*, 139, 1067–1083. <https://doi.org/10.1016/j.jbusres.2021.10.025>
- S, S., Sarkar, J. G., Sarkar, A., & M.R, A. (2019). Investigating the roles of hotel brand relationship norms in generating relationship satisfaction and commitment. *International Journal of Contemporary Hospitality Management*, 31(1), 309–329. <https://doi.org/10.1108/IJCHM-07-2017-0394>
- Saini, G. K., Lievens, F., & Srivastava, M. (2022). Employer and internal branding research: a bibliometric analysis of 25 years. *Journal of Product & Brand Management*, 31(8), 1196–1221. <https://doi.org/10.1108/JPBM-06-2021-3526>
- Sánchez-Fernández, R., & Jiménez-Castillo, D. (2021). How social media influencers affect behavioural intentions towards recommended brands: The role of emotional attachment and information value. *Journal of Marketing Management*, 37(11–12), 1123–1147. <https://doi.org/10.1080/0267257X.2020.1866648>
- Sepulcri, L. M. C. B., Mainardes, E. W., & Belchior, C. C. (2020). Nonprofit branding: A bibliometric analysis. *Journal of Product & Brand Management*, 29(5), 655–673. <https://doi.org/10.1108/JPBM-05-2019-2366>
- Shabani Nashtae, M., Heidarzadeh Hanzaei, K., & Mansourian, Y. (2017). How to develop brand attachment in various product categories? *Asia Pacific Journal of Marketing and Logistics*, 29(5), 1198–1220. <https://doi.org/10.1108/APJML-01-2017-0003>
- Sharma, P., & Manikutty, S. (2005). Strategic divestments in family firms: Role of family structure and community culture. *Entrepreneurship Theory and Practice*, 29(3), 293–311. <https://doi.org/10.1111/j.1540-6520.2005.00084.x>
- Shimul, A. S. (2022). Brand attachment: A review and future research. *Journal of Brand Management*, 29(4), 400–419. <https://doi.org/10.1057/s41262-022-00279-5>
- Shimul, A. S., & Phau, I. (2022). Luxury brand attachment: Predictors, moderators and consequences. *International Journal of Consumer Studies*, 46(6), 2466–2487. <https://doi.org/10.1111/ijcs.12799>
- Shimul, A. S., & Phau, I. (2023). The role of brand self-congruence, brand love and brand attachment on brand advocacy: A serial mediation model. *Marketing Intelligence & Planning*, 41(5), 649–666. <https://doi.org/10.1108/MIP-10-2022-0443>
- Singh, A., Lim, W. M., Jha, S., Kumar, S., & Ciasullo, M. V. (2023). The state of the art of strategic leadership. *Journal of Business Research*, 158, 113676. <https://doi.org/10.1016/j.jbusres.2023.113676>
- Stocchi, L., Pourazad, N., Michaelidou, N., Tanusondjaja, A., & Harrigan, P. (2022). *Marketing research on mobile apps: Past, present and future*. Springer US. <https://doi.org/10.1007/s11747-021-00815-w>
- Sugla, R., & Sen, S. (2023). Influence of social and economic factors on impulse buying: A research framework. *BIMTECH Business Perspectives*, 4(1). <https://doi.org/10.1177/25819542231185603>

- Team RDC. (2013). *R: A language and environment for statistical computing*. <http://www.R-project.org>
- Thomson, M., MacInnis, D. J., & Whan Park, C. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal of Consumer Psychology, 15*(1), 77–91. https://doi.org/10.1207/s15327663jcp1501_10
- Tiwary, N. K., Kumar, R. K., Sarraf, S., Kumar, P., & Rana, N. P. (2021). Impact assessment of social media usage in B2B marketing: A review of the literature and a way forward. *Journal of Business Research, 131*, 121–139. <https://doi.org/10.1016/j.jbusres.2021.03.028>
- Ugalde, C., Vila-Lopez, N., & Kuster-Boluda, I. (2023). Brand attachment toward functional, symbolic and hedonic brands. *Journal of Fashion Marketing and Management: An International Journal, 27*(3), 470–488. <https://doi.org/10.1108/JFMM-09-2021-0228>
- Usakli, A., Kucukergin, K. G., Shi, D., & Okumus, F. (2022). Does self-congruity or functional congruity better predict destination attachment? A higher-order structural model. *Journal of Destination Marketing and Management, 23*, 100686. <https://doi.org/10.1016/j.jdmm.2021.100686>
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics, 84*(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Veloutsou, C., & Ruiz Mafe, C. (2020). Brands as relationship builders in the virtual world: A bibliometric analysis. *Electronic Commerce Research and Applications, 39*. Elsevier: 100901. <https://doi.org/10.1016/j.elerap.2019.100901>
- Vredeveld, A. J. (2018). Emotional intelligence, external emotional connections and brand attachment. *Journal of Product & Brand Management, 27*(5), 545–556. <https://doi.org/10.1108/JPBM-10-2017-1613>
- Wang, S., & Liu, M. T. (2023). Celebrity endorsement in marketing from 1960 to 2021: A bibliometric review and future agenda. *Asia Pacific Journal of Marketing and Logistics, 35*(4), 849–873. <https://doi.org/10.1108/APJML-12-2021-0918>
- Wang, T., Yeh, R. K. J., Yen, D. C., & Sandoya, M. G. (2016). Antecedents of emotional attachment of social media users. *Service Industries Journal, 36*(9–10), 438–451. <https://doi.org/10.1080/02642069.2016.1248419>
- Whan Park, C., MacInnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing, 74*(6), 1–17. <https://doi.org/10.1509/jmkg.74.6.1>
- Wu, J., Chen, J., & Dou, W. (2017). The Internet of Things and interaction style: The effect of smart interaction on brand attachment. *Journal of Marketing Management, 33*(1–2), 61–75. <https://doi.org/10.1080/0267257X.2016.1233132>
- Youn, S., & Doodoo, N. A. (2021). The power of brand nostalgia: Contrasting brand personality dimensions and consumer-brand relationships of nostalgic and non-nostalgic brands. *Journal of Consumer Behaviour, 20*(6), 1373–1387. <https://doi.org/10.1002/cb.1941>
- Zha, D., Foroudi, P., Melewar, T. C., & Jin, Z. (2022). Experiencing the sense of the brand: the mining, processing and application of brand data through sensory brand experiences. *Qualitative Market Research: An International Journal, 25*(2), 205–232. <https://doi.org/10.1108/QMR-09-2021-0118>

Analyzing the Interplay of Incentive Pay and Governance in the Boeing 737 MAX Incident: Implications for Corporate Structure and Ethics

BIMTECH Business Perspectives
4(2) 168–193, 2023
© 2024 Birla Institute of Management
Technology
DOI: 10.1177/25819542231225902
bsp.bimtech.ac.in



Ngoc Cindy Pham¹ , Darlene Augustine² and Dov Fischer¹

Abstract

This study delves into the relationship between incentive-based compensation models and corporate governance, focusing on the Boeing 737 MAX incident as a critical case study. It thoroughly examines data from annual reports of Boeing Company (2007–2014) and the proxy statements issued between 2008 and 2015 (Boeing Company, 2008–2015), highlighting the impact of incentive-driven decisions, particularly by Boeing's CEO. Post-2011, the CEO's compensation, heavily linked to a risk reduction strategy, saw a substantial increase. This strategy received backing from a compensation committee, members of which shared the CEO's General Electric background, raising concerns about potential conflicts of interest. The research emphasizes the urgent need to reassess corporate governance norms, focusing on executive pay structures and the independence of corporate boards. The Boeing 737 MAX incident starkly warns of the dangers and ethical issues associated with misaligned incentive frameworks. The study calls for reforms to ensure corporate decisions are ethically responsible and in harmony with long-term, sustainable business practices.

Keywords

Boeing 737 MAX, corporate governance, incentive pay, research article, board independence

¹ Brooklyn College, The University of New York, USA

² Independent Researcher, USA

Corresponding author:

Ngoc Cindy Pham, Brooklyn College, The University of New York, New York 11210-2814, USA.
E-mail: Ngocindy.pham@brooklyn.cuny.edu



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed.

Introduction

In April 2019, following the crashes of two newly manufactured Boeing 737 MAX jetliners within six months, Boeing CEO Dennis Muilenburg made a statement:

We at Boeing are sorry for the lives lost in the 737 MAX accidents. These tragedies continue to weigh heavily on our hearts and minds. We extend our sympathies to the loved ones of the passengers and crew on board Lion Air Flight 610 and Ethiopian Airlines Flight 302 ... it is apparent that in both flights, the Maneuvering Characteristics Augmentation System, known as MCAS, activated in response to erroneous angle of attack information.... It is our responsibility to eliminate this risk. We own it, and we know how to do it.

Following investigations traced the cause to a unique feature of the 737 MAX (Schaper, 2019). The aircraft was equipped with the Maneuvering Characteristics Augmentation System (MCAS), designed to activate only during manual flight operations. During a congressional hearing on October 30, 2019, about the Boeing 737 MAX crashes, Muilenburg admitted that Boeing had made mistakes in designing and developing the 737 MAX's flight control system (Schaper, 2019).

In 2018, after the first 737 MAX crash and just before the second, Muilenburg earned over \$23 million, including stocks and bonuses, marking a 27% increase from 2017 (Clough & Melin, 2019; Isidore, 2019). As noted by Cosgrove (2019), the subsequent reduction in his compensation was in reaction to escalating public and congressional pressures due to the two fatal crashes and Boeing's financial troubles. Muilenburg, facing these challenges, opted for a pay cut instead of resigning as CEO.

Our research, however, shifts focus from Muilenburg to James McNerney, the preceding CEO, particularly examining the compensation committee's decisions in 2011, a crucial year marking the launch of the 737 MAX. Notably, a board member involved in the underfunded inception of the 737 MAX was later promoted to non-executive chairman during the post-crisis restructuring, replacing Muilenburg with lead director David Calhoun.

This analysis suggests that the board of directors, active during the 737 MAX's 2011 introduction, bears more accountability than Muilenburg. The development of the 737 MAX, with a budget of only \$2.5 billion (Flight Global, 2012), was notably constrained, costing less than a quarter of designing a new aircraft. To save costs, Boeing took specific shortcuts, such as fitting oversized engines onto a decades-old airframe, ultimately contributing to the aircraft's issues.

In the words of Boeing's then-CEO (James McNerney) in the Boeing Company's annual report in 2011:

With development costs and risks far below an all-new airplane, the 737 MAX will provide customers the capabilities they want, at a price they are willing to pay, on a shorter, more certain timeline. This approach is an all-around winner for Boeing, too. We maintain our qualitative advantage over competitors in the segment, free up resources to invest in other growth projects, and reduce our business risk substantially for the next decade. (Boeing CEO James McNerney, 2011 annual report)

The phrase “risk reduction” was not just a boast for public relations purposes in the annual report. Instead, it was intricately linked to the compensation policy, as detailed in that year’s proxy statement:

This above target performance resulted in a Company performance score of 1.6.... The above-target performance scores were primarily due to strong integrated performance across the company, including better-than-expected mitigation of risks. (2011 Annual Incentive Assessment, 2012 proxy statement)

This article highlights and supports theoretical and empirical findings on board governance (i.e., agency theory and stewardship theory), management compensation systems and rewards, and business ethics. Examining the issues surrounding the Boeing Company’s 737 MAX jetliner incident highlights the impact of compensation based on incentives and problematic governance practices. These included a lack of sufficient independence in both the board and the compensation committee, which led to significant risks for Boeing and ultimately caused the tragic loss of many lives.

The examination of poor corporate governance at Boeing and further understanding of how it paralyzes the Boeing CEO’s decision-making process regarding the 737 MAX are imperative, relevant, and timely. Ineffective, weak, and dysfunctional governance structures and monitoring systems have already led to several publicized and damaging corporate scandal cases. For example, due to the Volkswagen board’s lack of genuine involvement in senior managers’ decision-making process, the Volkswagen diesel vehicles are equipped with emission-defeating devices to pass the EPA test. Sharpe (2017) argues that the cosmetic board independence or the formality of a two-tier board of directors without effective board monitoring and supervisory attributes contributed to the downfall of Volkswagen. In Tyco’s case, Kozlowski bribed the board members to hide his use of the company’s money to purchase a mansion for himself and his wife (Romero, 2020). Under a failed financial audit provided by PricewaterhouseCoopers (PwC), Kozlowski continued his illegal, greedy, and materialistic gain from buying millions of dollars’ worth of art (Romero, 2020).

Moreover, lack of accountability and weak board oversight allowed CEO Kozlowski, CFO Swartz, and their accomplices to exploit Tyco’s Key Employee Loan Program to pay for things other than taxes on their stock options (Romero, 2020). In the case of Enron, Dibra (2016) argues that the board members’ unethical behavior, immorality, and willingness to participate in fraudulent activities (i.e., waiving conflict of interest rules in 1999) led to corporate governance failure in Enron. The root cause of the WorldCom scandal is that CEO Bernie Ebbers put his financial interests ahead of shareholders’ (Stefano, 2005). Bernie Ebbers used the company’s stock to make significant acquisitions to show Wall Street the growth needed to increase compensation. The accounting statements were falsified to facilitate the fraud (Stefano, 2005).

Last but not least, despite Markopolos’s efforts to make the Securities and Exchange Commission (SEC) investigate Madoff since 2000, Madoff’s Ponzi scheme was not prosecuted until 2009 (Rhee, 2009). Rhee (2009) finds that the

SEC's staff lawyers do not have adequate knowledge and experience in financial markets to read the early warning signs of Madoff's Ponzi scheme, leading to ineffective fraud monitoring and detection. All these scandal cases are wake-up calls for us to study the detrimental effects of weak corporate governance, dysfunctional executive compensation and incentive systems, and unethical senior managers' behavior on stakeholders' interests and organizational outcomes.

Background of the Literature

An Overview of the Problematic MCAS Revision and the 737 MAX Launch

The revised MCAS system that caused two 737 MAX crashes was rushed through the development phase, not rigorously tested, and flawed for relying on a single angle-of-attack sensor instead of two or more sensors (Gates & Baker, 2019). There were communication failures as well among the managers, engineers, system designers, test pilots, and regulators (Nicas et al., 2019). It is a classic information asymmetry problem, part of the agency issue (Mishra et al., 1998). This problem was compounded by the silo segmented approach, in which each Boeing employee focused on a small part of the plane without knowing the whole picture of how the revised MCAS would affect the plane (Nicas et al., 2019). 737 MAX was rushed to meet aggressively targeted earnings and yearly goals set by the CEO, senior managers, and board of directors. At the time of 737 MAX development and pre-launch, Boeing faced significant competitive pressure from its rival Airbus. According to three Federal Aviation Administration (FAA) officials, Boeing did not disclose the redesign of the MCAS system to the FAA (Nicas et al., 2019). In the final version, safeguards were removed to make the MCAS system more compatible with all types of situations. MCAS was also allowed to operate longer than usual. Its aggressiveness and duration of activation were dramatically increased in the final version. The Boeing employees and the regulators did not fully understand the newly revised MCAS system. Neither did the MCAS certification agency perform a safety analysis on the design changes from multiple sensors to only one (Nicas et al., 2019). The faulty angle-of-attack sensor scenario was not tested, because Boeing underestimated the risk of external events (e.g., bird collisions, bumps) that are classified as "hazardous" but not catastrophic, with a frequency of occurrence less than 1 in 10 million flight hours.

On March 30, 2016, Mark Forkner, Max's chief technical pilot, made the request to FAA to remove MCAS from the pilot's manual. The three FAA officials were not told that MCAS was undergoing revisions at that time (Nicas et al., 2019). This decision is to cut down on the training cost for a new system that deviates from previous versions of the 737. The decision also smoothens the sale of the 737 MAX to customers who are familiar with the current 737. Forkner was a former FAA employee, which indeed created a conflict of interest. Moreover, Boeing made the change to switch tech pilots from active pilots to simulator pilots. According to the three FAA officials, the malfunctioning sensor was never tested,

and the new MCAS system does not require new training (Nicas et al., 2019). Herkert, Borenstein, and Miller (2020) find that Boeing downplayed MCAS's role. A recording reviewed by *The Times* revealed Boeing's underestimation of the MCAS system (Nicas et al., 2019). Following the incidents, three senior Boeing managers regretted the profit-driven and cost-cutting approach regarding the training process (Ellis, 2019).

Risk Reduction and 737 Max

In Boeing's 2011 annual report and 2012 proxy statement, CEO James McNerney commended the 737 Max for the reduction of risks and costs: "With development costs and risks far below an all-new airplane, the 737 Max will provide customers the capabilities they want, at a price they are willing to pay, on a shorter, more certain timeline." Here, we examine what risks and costs were to be reduced and how they motivated the launch of the 737 Max.

First and foremost, in order to catch as many market shares as possible from the rival Airbus, the 737 MAX was conceived to shorten the lengthy development, certification, and deployment time by fitting a new engine onto the current 737 platform. R&D costs were also reduced due to reuse of the 737 airframe and other familiar technologies.

Second, the training, maintenance, and transaction costs for pilots and maintenance (e.g., time spent on studying a completely new airplane, productivity loss during the trail-and-error period) were significantly cut down (Gelles & Kaplan, 2019; Rindfleisch & Heide, 1997), thereby appealing to existing customers such as Southwest and prospective customers who know the 737 platform well.

Third, the MCAS software was implemented to address an expensive and time-consuming hardware fix for relocated new engines disrupting the aerodynamics of the 737 airframe (Herkert et al., 2020).

Fourth, building on an established 737 platform expedited Boeing's commercialization of the 737 Max airplane through FAA's self-certification program, which put the 737 Max more quickly to the market compared to its competitor Airbus, albeit with the fatal oversight of underestimating the power of the revised MCAS and the significance of over-relying on a single angle-of-attack sensor without any other redundancy in case of sensor failure (Federal Aviation Administration, 2021; Herkert et al., 2020).

Beyond Complexity: Insights from the Corporate Governance and Executive Compensation Theories

Vaughan (1996) told a detailed story of the Challenger disaster from anthropological and sociological points of view. More importantly, she analyzed how large complex institutions work, why accidents occur in a complex system, and what we can learn from the Challenger incident. From her work, we learn that the Challenger disaster was caused by the acceptance of calculated risk (i.e., issuing waivers and lifting launch constraints), the shift in NASA's organizational norm

and culture (i.e., from space exploration to regular shuttle launch or the “culture of production”), and constrained nontransparent information flows (i.e., no official channel for Thiokol engineers to report to the launch control managers the potential O-ring failure in unusually cold conditions). Perrow (1999, 2004) described inevitable failures and accidents in a highly complex system. Two constructs, namely, complexity and tight coupling, were used to examine the accidents and why and how they take place. Perrow (2004) argued that high-risk, complicated technologies that interact with each other and are tightly coupled can eventually lead to disastrous system outcomes (“normal accidents”).

We feel that there is more to it than organizational and engineering complexity in the case of the 737 Max disaster. It is not our intention to imply that Boeing ignored the 737 Max risks. But rather, Boeing did not fully disclose and test the revised MCAS fitted on the 737 Max (Gates & Baker, 2019). In fact, Boeing underplayed the MCAS system (Herkert et al., 2020). Its employees (including test pilots, engineers, and safety analysts) as well as FAA regulators were not fully informed about the revised MCAS system, which relies on a single sensor rather than multiple sensors (Gates & Baker, 2019). There were also communication obstacles and information disconnectedness among upper management, employees, and regulators (Nicas et al., 2019). Mr. Schubbe, a senior FAA official interviewed by Nicas et al. (2019), described:

The way the system was presented to the F.A.A., the Boeing Corporation said this thing is so transparent to the pilot that there’s no need to demonstrate any kind of failing.

Extending Perrow’s (1999) theory, we posit that the danger of oversimplifying a complex system is underestimating the simple failure of familiar technologies. In 737 Max, underestimating the angle-of-attack sensor failure clearly leads to severe consequences.

Although deserving further examination, organizational complexity and organizational culture, which may directly or indirectly cause the 737 MAX disasters, are beyond the scope of this article. The purpose of this article is to explore the corporate governance issues (e.g., dysfunctional incentive pay, non-independent board of directors) underpinning the poor managerial decisions made toward the revised MCAS and 737 Max. We also look at the factors attributed to these governance problems. Catchpole (2020) discovered that the high-pressure, cost-cutting, and profit-driven corporate culture at Boeing is attributed to the 737 Max crisis. We argue that such a culture and working environment have fostered a dysfunctional incentive and reward system and a weak non-independent board structure at Boeing, which in turn resulted in poor, short-sighted managerial decisions focusing on inflating earnings and managers’ self-interests at the cost of long-term shareholders’ and stakeholders’ value. As Catchpole (2020) wrote:

These twin crises, industry insiders say, spring from a culture that consistently put short-term rewards to shareholders ahead of engineering-driven decisions and long-term strategy. For all of Boeing’s business coups and innovation, one stark statistic has come to symbolize the company’s priorities: Over the past six years, Boeing spent

\$43.4 billion on stock buybacks, compared with \$15.7 billion on research and development for commercial airplanes. The board even approved an additional \$20 billion buyback in December 2018, less than two months after the first 737 Max crash, though it subsequently shelved that plan.

By looking at the phenomenon from the angles of moral hazards (i.e., information asymmetry) and opportunistic behavior (i.e., misuse of trust), the corporate governance and strategic management theories, namely, agency theory and stewardship theory, complement Vaughan's (1996) and Perrow's (1999) organizational and engineering complexity theories.

In particular, we show that the dysfunctional incentive pay system (i.e., CEO compensation measured by non-GAAP performance adjusted for perceived risk reduction) (see sections "Goals and Incentive Systems," "Policies on Executive Compensation at Boeing," and "The Linkage Between Boeing's Dysfunctional Compensation Incentives and Flawed MCAS") and the weak corporate governance (i.e., inadequate independence of the board and compensation committee) (see the section "Insufficient Independence of the Compensation Committee") can be taken advantage of by the opportunistic CEOs to maximize their own pay and consequently lead to poor managerial decisions and firm performance. We argue that such a dysfunctional incentive system, coupled with a non-independent governance structure, has expedited Boeing's transition from a culture of meticulous engineering and R&D to a culture of sales-driven, cost-reduction, and production that aggressively presses on earnings to surpass its competitor Airbus. By not clearly disclosing the revised MCAS system to the involved parties (e.g., test pilots, engineers, safety analysts, employees, regulators, and 737 MAX buyers), strategically speaking, Boeing is killing two birds with one stone. In essence, Boeing is able to sell more 737 MAX planes to existing customers familiar with the previous 737 without incurring additional costs. One of our main contributions is to validate the managerial power theory (Bebchuk et al., 2002) and the managerial entrenchment and rent extraction theory (Jensen & Meckling, 1976; Shleifer & Vishny, 1989), in essence, the side effect of incentive pay, that CEOs can influence and manipulate the weak boards to maximize their compensations for self-interest. Moreover, based on the managerial entrenchment and rent extraction theory (Jensen & Meckling, 1976; Shleifer & Vishny, 1989), we argue that the Boeing 737 MAX project is not necessarily value-maximizing for shareholders, stakeholders, and Boeing in the long run, but rather the complexity and specificity of this project make the CEO McNerney costly to be replaced and thus for him to demand higher pay now and later (see Figure 1). To raise the expected earnings, McNerney and the Boeing board rushed through the decision to implement into the 737 MAX a flawed final version of the MCAS system relying on only one sensor, along with the removal of the description of MCAS from the pilot's manual (Gates & Baker, 2019; Nicas et al., 2019). All these decisions are intended to significantly reduce the transaction and learning costs (e.g., training time and fees, difficulty in knowledge transfer, absorption and application, trial and error, adaptation to new working environment, productivity loss, and performance inefficiency) (Rindfleisch & Heide, 1997; Shi & de Jong, 2020); to decrease perceived

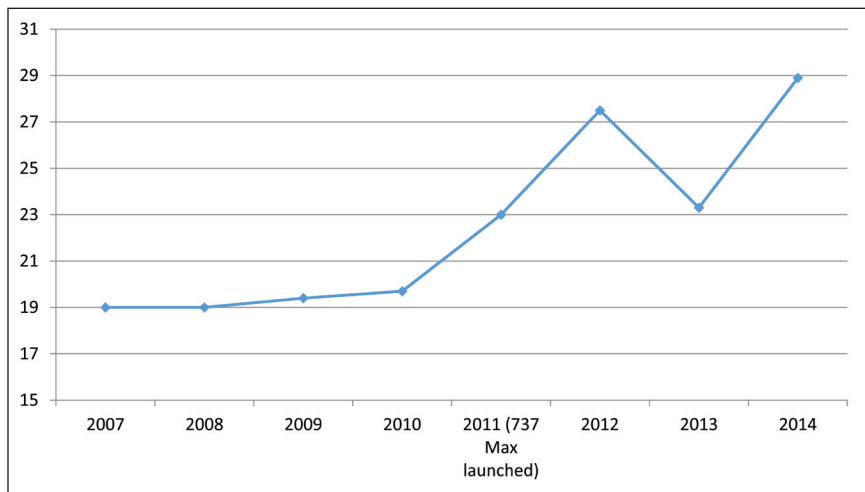


Figure 1. Total Compensation in Millions for Boeing CEO James McNerney (2007–2014), Analyzed About the 737 MAX Launch.

Table 1. Data Compiled from Boeing’s Proxy Statements, CEO Compensation, Objective Financial Metrics, and Compensation Committee Performance Score from 2007 to 2014.

Calendar Year	2007	2008	2009	2010	2011	2012	2013	2014
CEO pay, millions	19.0	19.0	19.4	19.7	23.0	27.5	23.3	28.9
Objective Financial Performance Measures								
Revenues, billion	66	61	68	64	69	82	87	91
Backlog, billions	327	352	316	321	356	390	441	502
Earnings per share	5.28	3.67	1.84	4.46	5.34	5.11	5.96	7.38
Compensation Committee Performance Score								
Percent of target met	150	60	70	140	160	160	170	130

Source:

Note: The year 2011, marked as significant, is when Boeing announced the 737 MAX.

engineering risks using familiar technologies (Branscomb & Auerswald, 2003); to increase sales by appealing to Southwest Airlines, which is one of Boeing 737’s largest customers (Gates, 2019); to increase Boeing’s expected earnings via perceived risk reduction (Guest et al., 2018); and consequently to raise McNerney’s compensation for high company performance score (CPS) (see Boeing 2011–2012 proxy statements, Figure 1 and Table 1). As noted by Lin and Shi (2020) and Shi, Lin, and Pham (2021), the good-intentioned incentive pay, based on agency theory or optimal contracting theory, which is to align CEO’s (agent’s) interests with principal’s (board of directors’) goals, can be misused to serve CEO’s own self-interests, as we see here in Boeing’s 737 MAX case. We emphasize these with a detailed case analysis in the section “Governance of the 737 MAX Launch.”

Further Discussion of the Literature and Theories

The Importance of Board Independence in Agency Theory

The agency theory has been widely applied in many business studies to understand the relationship between the principal (i.e., board of directors) and the agent (i.e., executives) (Arthurs & Busenitz, 2003; Daily et al., 2003; Eisenhardt, 1989; Jensen & Meckling, 1976; Ross, 1973; Wasserman, 2006). It assumes that the agent will behave differently than the principal wants, in that the agent will behave opportunistically in their self-interest rather than the principal's (Eisenhardt, 1989; Jensen & Meckling, 1976; Wiseman et al., 2012). In order to deter opportunistic behavior from the agent, the principal sets up an objective monitoring mechanism to align the principal's interests with the agent's (Cruz et al., 2010; Fama & Jensen, 1983). Information asymmetry is the core concept of the agency theory, with the assumption that neither of the two parties fully knows what the other party is doing, or, in other words, how the other party will behave. Thus, two problems surface: moral hazards and adverse selection (Eisenhardt, 1989; Karra et al., 2006). On the one hand, regarding moral hazards, the agent does not entirely fulfill the duties laid out in the contract and is in the best interest of the stakeholders (Chrisman & McMullan, 2004; Ross, 1973). On the other hand, the adverse selection issue occurs when the agent is not competent enough to do the job (Eisenhardt, 1989; Fama, 1980; Schulze et al., 2001). A robust monitoring mechanism (e.g., straightforward reporting procedures, third-party oversight committee), a transparent governance system (e.g., office of accountability, clearly stated organization structure, executive job titles and responsibilities, consistent and transparent corporate culture), and an independent board of directors (e.g., outsider directors with relevant industry backgrounds, separation of duties) are ways to minimize agency costs (Anderson & Reeb, 2004; Chrisman et al., 2007; Corbetta & Salvato, 2004; Donaldson & Davis, 1991; Fama, 1980; Jensen & Meckling, 1976; Wasserman, 2006).

One of the agency theory's implications in the executive compensation field is the incentive pay or the so-called optimal contracting (Kaplan, 2008; Tosi & Gomez-Mejia, 1989), where CEOs are supposed to be paid for good performance and their ownership (i.e., stock shares) is linked tightly with the firm's performance. However, without a robust independent board and a transparent, non-arbitrary monitoring system, the executives can exert power over the board and manipulate their compensations. Bergstresser and Philippon (2006), Shleifer and Vishny (1989), and Jensen and Meckling (1976) find that opportunistic CEOs can take advantage of the weak, non-independent board to inflate their compensations. These CEOs extract economic rents by investing in management-specific investments, which are not necessarily value-maximizing for the companies, to make them more complex and costly to replace (Shleifer & Vishny, 1989). Moreover, Murphy (2013) is concerned about the exploitable nature of the financial performance measures merely dependent on accounting figures.

In Boeing's 737 Max case, a nontransparent and non-independent board compromises the monitoring mechanism and the incentive system. Ntim et al. (2019) find that, under a weak governance structure with an insufficient monitoring system,

CEOs have the power to influence the board to rig the directors' selection process and are thus able to set their pay that is not linked to desirable or optimal organizational outcomes. For example, Boeing CEO McNerney, close to the compensation committee (see the section "Insufficient Independence of the Compensation Committee"), took advantage of the non-GAAP performance measure (adjusted for perceived risk reduction from 737 MAX) to inflate his compensation at the cost of stakeholders' interests and airplane safety. Both the monitoring mechanism and the incentive system failed because of managerial entrenchment and rent extraction (Jensen & Meckling, 1976; Shleifer & Vishny, 1989).

At the time of Boeing 737 MAX's launch in 2011, Jim McNerney held both the CEO and the chairman title. Combining these two critical governance roles, the strength of the board's independence, transparency, and objectivity is significantly weakened by the CEO's ability to populate the board with nominally independent directors to pursue personal interests (Miller & Xu, 2019). The non-independent board structure erodes the monitoring mechanism for opportunistic managerial behavior and, therefore, comprises the proper alignment of managers' self-motives, organizational outcomes, and societal benefits. Miller and Xu (2019) argue that self-serving executives can deploy short-term tactics, such as earnings management, to raise their pay and/or retain executive positions. We observe that Boeing's CEO, board of directors, and compensation committee arbitrarily over-emphasized the importance of risk reduction and inflated the CPS with adjusted non-GAAP performance measures.

Guest, Kothari, and Pozen (2018) find that non-GAAP earnings measures lead to excessive executive remuneration. One key mechanism Boeing utilizes to set CEO pay is the risk-adjusted non-GAAP earnings. Ironically, Boeing adjusted earnings higher for compensation due to the perceived risk reduction from the 737 MAX. These high non-GAAP earnings led to Boeing CEO's excessive pay. Despite the safety issues and long-term risks from the 737 MAX, it benefits the Boeing CEO in the short run because of the higher non-GAAP performance measure linked to enormous pay. This exposes the dysfunctional CEO compensation and incentive program at Boeing. Sufficient and substantial (non-superficial) compensation committee independence, in the form of governance structure and group dynamics, is critical for protecting the company from excessive executive pay (Grant, 2014). Main and Johnston (1993, p. 353) vividly describe that "in the absence of an independent compensation committee, managers write their contracts with one hand and sign them with the other."

The Role of Board Governance in Stewardship Theory

The stewardship theory is in contrast to the agency theory discussed above. The agency theory assumes that the agent (i.e., executives) behaves irrationally and opportunistically so that the principal (i.e., board of directors) needs to implement robust monitoring mechanisms and objective incentive programs to deter the opportunistic behavior of the agent (Eisenhardt, 1989; Jensen & Meckling, 1976; Wiseman et al., 2012). However, stewardship assumes that the agent and the

principal voluntarily and rationally work hand-in-hand for the best interests of everyone and society (Davis et al., 1997; Eddleston & Kellermanns, 2007; Zahra et al., 2008). At the core of this stewardship, it is assumed that opportunistic behavior can be minimized by humanism, and hence, organizational costs can be reduced by good corporate citizenship (Donaldson & Davis, 1991; Eddleston & Kellermanns, 2007; Tosi et al., 2003). Two factors, including external (environmental or situational) factors and internal (personal or intrinsic) factors, are the backbones of this stewardship (Corbetta & Salvato, 2004; Davis et al., 1997; Vallejo, 2009). As to external factors, a community-driven, low power distance, and experience-based corporate culture and working environment foster the stewardship behavior of taking responsibility, self-improvement, self-empowerment, accountability, and loyalty (Eddleston, 2012; Nicholson, 2008; Vallejo, 2009). Regarding internal factors, belonging, self-motivation, psychological rewards, and favorable international relationships promote stewardship (Lee & O'Neill, 2003; Ryan & Deci, 2000).

However, the stewardship theory puts too much burden and trust on self-guidance, which opportunistic CEOs can exploit. We argue that the reason for the corporate governance failure at Boeing may be because the board of directors over-trusted their close friend, CEO McNerney, believing that he would voluntarily and rationally behave in the best interests of the company, board of directors, shareholders, customers, employees, and other stakeholders. On the contrary, he did not. Instead, McNerney deceived and persuaded the compensation committee to adopt the non-GAAP performance measure adjusted for perceived risk reduction in the future. This resulted in the failed launch of the 737 MAX, damaged Boeing's reputation, led to a shrinking customer base, reduced profit, and caused the loss of hundreds of lives. In Boeing's case, it is plausible that McNerney used stewardship to mislead the board of directors and benefit himself.

Goals and Incentive Systems

Kerr (1975, pp. 775–779) used vivid examples of a Midwest manufacturing company and an eastern insurance company to demonstrate a dysfunctional reward system in which the rewarded behaviors were not what the principal wanted and should have been discouraged. Several root causes were discovered by Kerr (1975), which led to this kind of behavior; for instance: (a) overly relying on quantifiable benchmarks or quantitative measures; (b) ignoring intangible behaviors such as team-building and creativity; (c) hypocrisy—saying one thing while doing another; saying such behavior should not be rewarded but rewarding the behavior; and (b) overcrowding the reward standards. Kerr (1975) proposed three measurements to combat the divergent behavior between the rewarder and the rewarded: (a) deploying a state-of-the-art selection and review process, (b) strengthening training and socialization of the employees to align the goals, and (c) recognizing the dysfunctionality of the reward system and revising it accordingly.

Moreover, Elson and Gyves (2003) found that well-intentioned, well-thought-out incentive plans could be better and entrenched by managers to their

benefit. CEOs are thought to be paid for good performance, but instead, the auditors are the ones who help to show high values behind the scenes. The malfunctioning incentive systems have intensified the greedy nature of some executives and corrupted the corporate culture with personal fortune makers (Peregrine & Elson, 2021). In Boeing's case, the CEO takes advantage of the dysfunctional incentive and reward systems that tie executive compensation to the non-GAAP performance measure adjusted for perceived future risk reduction from the 737 MAX. The malfunctioning CPS increases the CEO's pay but at the cost of long-term stakeholder interests and product safety.

Methodology

Business studies are constantly challenged for their practical relevance and progressive scientific achievements. Cooper and Morgan (2008) find that the case study approach not only helps researchers respond effectively to these challenges and contribute to relevant knowledge but is also a valuable tool for understanding complex phenomena (too complicated for a survey or an experiment to deal with causality) (Yin, 2014), testing existing theory, and generating new theory. Within the domain of a case study, close attention is paid to specific processes and outcomes of particular events, situations, organizations, or social units. Interviews, documents, observations, surveys, and other data are curated to deeply examine what is happening, why, how the processes interact, what the outcomes are, and what we can learn from the case. The case study approach is beneficial for understanding a phenomenon that is hard to quantify or lacks sufficient quantitative data (Schoch, 2016). Moreover, a case study's outcome often provides readers with a more practical lesson learned and an engaging experience. Since case studies are qualitative, they provide researchers with people's perceptions of a particular phenomenon (Merriam & Tisdell, 2015) and diverse data sources (Yin, 2014).

We employ a case study approach to closely examine the corporate governance failures and dysfunctional compensation incentive systems related to the 737 MAX launch. According to Yin (1989, 2014), case studies are thorough and appropriate when researchers ask and answer the "how," "why," "what," and "who" questions regarding phenomena and actions in an organization. In Boeing's 737 MAX case, we analyze: (a) How did Boeing launch the 737 MAX? (b) Why was it launched even though the 737's frame is unfit for modern jet engines? (c) What are the driving forces and motivations underpinning the deployment of the 737 MAX with a fatally flawed design? (d) Who is responsible and accountable for making the decisions about the 737 MAX launch? Moreover, (e) Who benefits or loses from the decision to launch the 737 MAX?

Even though the exploratory case approach has the advantages described above and is appropriate for our study, it does face certain disadvantages. For instance, the researchers might impose their preconceived biases, assumptions, or subjective opinions in data collection and analysis because researchers are highly engaged in qualitative studies during these two stages (Tufford & Newman, 2012). To mitigate this concern, the bracketing method is recommended by Tufford and

Newman (2012) to ensure that researchers' biases will not interfere with the studies. Also, case studies are complex and challenging, often requiring significant time and financial resources (Cooper & Morgan, 2008).

Governance of the 737 MAX Launch

Boeing's Announcement of the 737 MAX in 2011

In 2011, Boeing made a pivotal decision to redesign its long-standing 737 airplane model, rebranding it as the 737 MAX, instead of embarking on the development of an entirely novel aircraft to replace the half-century-old airframe. Subsequent events would lay bare the profound repercussions of this momentous choice, substantially escalating Boeing's operational and reputational risks. Boeing's management believed this decision would "significantly mitigate our business risk for the next decade." Leveraging the purported mitigation of business risk, the management successfully persuaded Boeing's compensation committee to revise the economic profit metric to calculate compensation performance scores.

Furthermore, in 2013, Boeing completed 737 MAX's engineering ahead of schedule, leading the compensation committee to recalibrate the economic profit measure again, incorporating "product development" considerations. This series of adjustments to the performance evaluation criteria was instrumental in driving a notable increase in the compensation of Boeing's CEO at the time, James McNerney. His average annual compensation, initially at \$19.6 million in the two years leading up to the 2011 launch of the 737 MAX, subsequently increased to an average of \$26.5 million over the following three years.

James McNerney subsequently retired from his role as CEO in 2016, passing the baton to Dennis Muilenburg, who confronted the daunting task of managing the fallout from the two catastrophic 737 MAX crashes in 2018 and 2019. The insights gleaned from our investigation underscore the potential for incentive-based compensation structures in industrial enterprises to yield adverse long-term consequences.

Policies on Executive Compensation at Boeing

Our study of Boeing's executive compensation practices indicates a pattern driven by self-serving motives, focusing on enhancing the CEO's benefits. This approach, unfortunately, had negative repercussions for the company and led to the tragic loss of lives. In the crucial year of 2011, when the 737 MAX was launched, James McNerney was the CEO of Boeing, a position he had held since 2005. Before Boeing, McNerney had worked closely with Jack Welch at General Electric (GE) and later led 3M. The timeframe of our analysis extends from two years before the introduction of the 737 MAX to three years after its launch, concluding with McNerney stepping down from his role as CEO and from Boeing's board of directors.

Figure 1 offers a graphical depiction of the analysis, showing that in the four years preceding the 2011 launch of the 737 MAX, the average annual compensation for the CEO was \$19.3 million. This figure experienced a conspicuous surge to \$23 million in the launch year. Subsequently, his average compensation stabilized at \$26.6 million for the ensuing three years.

Boeing's proxy statements include a section titled "Executive Compensation—Compensation Discussion and Analysis," which sheds light on the company's compensation policies. This section features "Performance Highlights" to justify the compensation awarded based on standard financial metrics such as revenues, operating cash flows, order backlog, and earnings per share. Notably, the CEO's pay is primarily determined by a CPS, which is based on a calculation of "economic" profit. A CPS above 1.0 indicates Boeing exceeding its annual economic profit targets. As defined by Boeing, economic profit is "after-tax profit minus a capital charge." As we discussed, this metric has influenced managerial decisions, contributing to the inadequate investment in the 737 MAX.

Our study's Table 1 presents data compiled from Boeing's proxy statements from 2007 to 2014. The 2008 statement was the first to outline company performance highlights, likely influencing the CPS calculation. In 2009, two years before the launch of the 737 MAX program, Boeing's CPS was 0.7, indicating a 30% shortfall from the target. However, in the subsequent years, the CPS consistently surpassed this benchmark, with highs of 1.6–1.7 recorded during 2011–2013. Recognizing that the CPS is Boeing's internal measure for gauging economic profit, calibrated against specific benchmarks, is crucial.

Boeing's financial performance demonstrated a significant increase in revenues in 2011, rising from \$69 billion to \$91 billion by 2014. This impressive growth was driven by the launch of the innovative Boeing 787, which experienced a dramatic rise in deliveries, escalating from just three units in 2011 to 46 in 2012, as reported in the 2012 annual report (p. 26).

Table 2 in our study vividly illustrates this growth, emphasizing that the increase in the order backlog was due to the rising demand for the 737 MAX. This aircraft program became the only one to experience an expansion in its backlog. Over three years, this backlog nearly doubled, reaching approximately 4,300 units, offsetting declines in other commercial aircraft programs.

In a 2011 conference call, Boeing CEO James McNerney highlighted the significant cost savings achieved by modifying the existing 737 model instead of developing a brand-new aircraft. The savings in R&D costs, particularly for engine modifications, were estimated to be between 85% and 90% compared to the \$11 billion projected for designing a new airplane. This decision, as analyzed, likely saved Boeing close to \$10 billion by avoiding the development of an entirely new design (Flight Global, 2012).

This strategy to reduce R&D expenses can be viewed as a form of earnings management, where curtailing such costs can enhance current earnings (Miller & Xu, 2019; Shi et al., 2021).

Boeing's internal evaluations suggested that this cost-conscious approach diminished business risks. Therefore, before any revenue or sales were generated from the 737 MAX program, the company lowered its risk profile. This had a dual

Table 2. Change in Backlog, 2011–2014.

	In Units, by Model					In Billions (\$)		
	737 (Includes MAX)	747	767	777	777X	787	Commercial Airplane	Total (Includes Space and Defense)
2014	4,299	36	47	278	286	843	440	502
2013	3,680	55	49	314	66	916	373	441
2012	3,074	67	68	365	–	799	317	390
2011	2,365	97	72	380	–	857	293	356
Change 2011–2014	82%	–63%	–35%	–27%	NA	–2%	50%	41%

Source: Boeing 2011 and 2014 annual reports.

Table 3. 2012 Proxy Statement on Key Drivers of the 2011 Company Performance Score.

Compensation Element	Goal	Actual Performance		Key Drivers of Actual Performance
		(%)	%	
2011 Annual Incentive Plan	\$1.252bn	\$1.932bn	160	Above-target performance due to strong, integrated performance across the company and better-expected mitigation of risks
2009–2011 Performance Awards	\$9.099bn	\$8.119bn	68	Below-target performance primarily due to delays and performance issues on development programs, the unexpected worldwide economic downturn beginning in late 2008, and continued challenges with the current U.S. defense budget and contracting environment

Source:

Table 4. Correlation Matrix: Company Performance and CEO Pay (2007–2014).

	CPS	EP	EP – Target	Revenues	Cash Flow	Backlog	EPS	CEO Pay
Company performance score	1.00							
Economic profit	(0.22)	1.00						
EP minus target	0.94	0.06	1.00					
Revenues	0.48	0.10	0.42	1.00				
Operating cash flow	0.58	0.28	0.72	0.69	1.00			
Backlog	0.32	0.31	0.29	0.91	0.47	1.00		
Earnings per share	0.69	0.29	0.72	0.69	0.53	0.79	1.00	
CEO pay	0.46	(0.11)	0.36	0.87	0.49	0.83	0.70	1.00

Table 5. Boeing CEO and 2011 Compensation Committee: Alumni from General Electric and McDonnell Douglas.

James McNerney: Career Overview

- General Electric Executive (1982–2000)
- Boeing Board Member (2000–2016)
- CEO of Boeing (2005–2016)

2011 Compensation Committee Overview

- John McDonnell and Kenneth Duberstein: McDonnell Douglas Alumni
 - o Board Members of McDonnell Douglas until 1997
 - o Boeing Board Members since 1997
 - o Compensation Committee Members at Boeing since 1999
- Mike Zafirovsky and David Calhoun: General Electric Alumni
 - o GE Executives: Zafirovsky (1978–2000), Calhoun (1981–2006)
 - o Boeing Board Members: Zafirovsky (since 2004), Calhoun (since 2009)
 - o Boeing Compensation Committee: Zafirovsky (since 2009), Calhoun (since 2011)

effect: first, it improved the actual economic performance against the set targets, and second, it significantly boosted the company's performance score for that year.

Boeing identifies the key factors that influence its actual performance. While the company's revenues and operating cash flows remained approximately consistent with the average of the preceding two years, Boeing perceived an improved mitigation of risks, exceeding expectations.

Table 4 outlines the correlation coefficients among several vital metrics: CEO compensation, CPS, economic profit, revenues, operating cash flows, backlog, and earnings per share (EPS). The primary focus of our analysis is on the factors that influence CEO compensation, CPS, and economic profit. Notably, despite its crucial role in the computation of the CPS, economic profit does not show a positive

correlation with the CPS. This discrepancy arises because the CPS evaluates economic profit relative to a predetermined target rather than in absolute terms.

The Linkage Between Boeing's Dysfunctional Compensation Incentives and Flawed MCAS

A jetliner that Boeing initially conceived in 2011 as a comprehensive success with minimal business risks ultimately transpired as a catastrophic failure, riddled with immeasurable business risks. Following the first 737 MAX crash but preceding the second one, the FAA conducted an assessment, revealing that the crash rate of the Boeing 737 MAX substantially exceeded that of previous Boeing models (Pasztor & Tangel, 2019). The FAA's internal risk assessment highlighted concerns with the 737 MAX design, indicating a potential for one fatal crash every two or three years. This assessment was in place even before the first crash occurred, when Boeing's engineers had already raised alarms about the design. This study will elucidate how Boeing's asserted "risk reduction" measures propelled the CEO's remuneration in 2011. Of paramount significance, the compensation committee within the board of directors played a pivotal role in fostering the perverse incentives that led to the budget-constrained launch of the 737 MAX, ultimately culminating in the MCAS debacle.

The MCAS in the 737 MAX aircraft was introduced as a solution to a significant design limitation. This issue stemmed from the original 737 airframe's inability to accommodate modern, larger jet engines due to limited ground clearance, a design choice tracing back to the post-World War II era when planes were boarded via movable staircases. This low clearance, once an advantage, became a liability in the era of jet bridges (Vartabedian, 2019). The MCAS was designed to offset the instability caused by the powerful engines positioned unusually low, forward, and inward on the wings.

This design choice was also influenced by the management's goal to reduce costs in aircraft development. Instead of designing a new aircraft similar to the Airbus A320 family or Boeing's discontinued 757, Boeing modified the existing 737 model.

Moreover, the MCAS feature needed to be fully disclosed to pilots or, to some extent, the FAA. The MAX was marketed on the premise that pilots certified on previous 737 models would not require additional training, thereby saving Boeing various costs related to training and adjustment (Rindfleisch & Heide, 1997; Shi & de Jong, 2020). This particularly appealed to airlines like Southwest, which operated a fleet of 737s (Gates, 2019). However, had the full capabilities of MCAS and its potential to take over control of the aircraft been disclosed, it would have necessitated additional pilot training.

Lastly, Boeing's executive compensation policies have incentivized cost cutting and lack of transparency, described above. This is supported by the CEO's letter to shareholders and the 2011 annual incentive assessment detailed in the 2012 proxy statement, as mentioned in the "Introduction" section.

Insufficient Independence of the Compensation Committee

Chairman and CEO, James McNerney

For a more comprehensive insight into the tight-knit relationship between McNerney and the compensation committee, it is beneficial to explore his professional history, as outlined in Boeing's 2012 proxy statement. This document reveals that McNerney's career began in 1982 with a series of management positions at the General Electric Company. His tenure at GE culminated in the role of president and chief executive officer of GE Aircraft Engines, a position he served from 1997 to 2000.

After his tenure at GE, McNerney assumed the CEO role at 3M, a company headquartered in Minneapolis, where he served from 2001 to 2005. Intriguingly, he concurrently held a position on Boeing's board starting in 2001. In a somewhat unconventional turn of events, McNerney took on the CEO role at Boeing, where he had been an external director. This transition prompted his departure from 3M in July 2005.

Boeing's proxy statement reveals that McNerney was a board member for both IBM and P&G. Interestingly, the statement omits specific details about his involvement in the compensation committees of these companies, particularly his position as the chair of the committee at P&G. This background in compensation committees is likely to have equipped McNerney with the expertise and insight to exert influence on Boeing's compensation committee.

Compensation Committee Overview

Three of Boeing's board members also held positions on Caterpillar's board, including Boeing's lead director, David Calhoun, who served in a similar role at Caterpillar; Boeing CEO and Chairman Dennis Muilenburg; and Susan Schwab, a professor at the University of Maryland School of Public Policy and former US Trade Representative during the second Bush administration. Furthermore, there were overlapping board memberships with Marriott International, where two directors, Lawrence Kellner (ex-CEO and chairman of Continental Airlines) and Susan Schwab, were also part of Marriott's board. Additionally, Schwab was a board member at FedEx.

Mike Zafirovsky: GE Alumnus

While McNerney might have been the inaugural GE alumnus to grace Boeing's board, he was no longer the final addition to this lineage. In 2004, he was joined by Mike S. Zafirovsky, a former associate from his days at GE. The presence of a trusted confidant on the board may have played a role in facilitating McNerney's appointment as CEO in 2005. According to the Boeing 2012 proxy statement:

Mr. Zafirovsky spent nearly 25 years with General Electric Company, where he served in management positions, including 13 years as President and Chief Executive Officer of five businesses in the consumer, industrial and financial services arenas, his most recent being President and Chief Executive Officer of GE Lighting from July 1999 to May 2000.

David Calhoun: GE Alumnus

McNerney was one of many Boeing board members with a background at GE. Mike S. Zafirovsky, a former GE colleague, joined the Boeing board in 2004, potentially influencing McNerney's CEO appointment in 2005. Boeing's 2012 proxy statement highlights Zafirovsky's extensive 25-year career at GE, including his final role as president and CEO of GE Lighting until May 2000.

In 2009, during McNerney's CEO tenure and after nine years on the board, another ex-GE colleague, Mr. Calhoun, was appointed. The 2012 statement documents Calhoun's long career at GE, with roles such as vice chairman, president, and CEO of various GE divisions, including infrastructure and aircraft engines.

Including two former colleagues on the board raises questions about their independence. Notably, by 2011, during the launch of the 737 MAX, both Zafirovsky and Calhoun were members of the four-person compensation committee that determined McNerney's salary, casting doubts on the fairness and neutrality of the compensation decisions.

John McDonnell and Kenneth Duberstein: McDonnell Douglas Alumni

Following Boeing's 1997 merger with McDonnell Douglas, board members John F. McDonnell and Kenneth M. Duberstein transitioned to Boeing's board. They both served as long-standing members of Boeing's compensation committee, each taking turns as a committee chair at various times until McDonnell's retirement in 2011.

The critical point is that the two committee members had long-standing professional relationships with McNerney, dating back well before their involvement with Boeing. Even though the non-GE alum members had established long-term associations, their close connections pose legitimate concerns about their ability to assess each other's professional decisions critically.

A 2018 news report highlighted the strong bond between McNerney and Calhoun, underscoring their close working relationship at GE. McNerney described Calhoun as an inclusive leader who values diverse perspectives and synthesizes them effectively (Lovegrove, 2018). This description raises questions about the suitability of such traits in a compensation committee member overseeing a CEO with whom they have a close professional history.

Zafirovsky, who shares a substantial professional relationship with McNerney and has reported to him at GE, also exemplifies a similar lack of independence (Lublin, 2007).

Ironically, in October 2019, Calhoun was appointed Boeing's non-executive chairman, a role previously held by CEO Muilenburg (Tangel et al., 2019). While Muilenburg was not involved in the initial development of the 737 MAX in 2011, Calhoun was instrumental in launching the 737 MAX with limited funding, highlighting a concerning overlap of responsibilities and relationships within Boeing's leadership.

Conclusions and Discussion

Numerous quantitative studies have explored the relationship between firm performance and CEO pay, such as those supporting a positive correlation (Kaplan, 2008; Tosi & Gomez-Mejia, 1989) based on agency or optimal contracting theory. Conversely, others indicate a weak relationship (Jensen & Meckling, 1976; Shleifer & Vishny, 1989; Tosi et al., 2000) rooted in managerial power or entrenchment theory. Additionally, research has been conducted considering the interplay between firm performance and CEO pay, including the hybrid application of optimal contracting theory, managerial entrenchment theory, and Hambrick and Mason's (1984) upper echelon theory (Shi et al., 2021). However, there is a gap in qualitative case studies focusing on the negative aspects of incentive pay and its impact on the ethical decision-making process.

Based on the agency theory (Kaplan, 2008; Tosi & Gomez-Mejia, 1989), the stewardship theory (Davis et al., 1997; Tosi et al., 2003), the managerial power theory (Bebchuk et al., 2002), and the managerial entrenchment and rent extraction theory (Jensen & Meckling, 1976; Shleifer & Vishny, 1989), we analyze the detrimental effects of the dysfunctional incentive pay and the weak non-independent board structure on management's decision-making processes regarding the Boeing 737 Max. Our study complements and extends Catchpole's (2020) finding that Boeing's cost-driven culture attributes to the demise of the 737 Max and Herkert, Borenstein, and Miller's (2020) study that examines the unethical engineering and commercialization processes of the 737 Max. Different from the perspective of organizational complexity and cultural influences (see Perrow, 1999, 2004; Vaughan, 1996; and the section "Beyond Complexity—Insights from the Corporate Governance and Executive Compensation Theories"), this article investigates other root causes (e.g., dysfunctional incentive pay, non-independent board) leading to the poor managerial decisions made toward the 737 Max crises.

Several insights are coming to light from this analysis. First and foremost, an in-house third-party oversight committee for executive compensation, rigorous engineering, and airplane safety is needed to deter opportunistic managerial behavior and fortify the monitoring mechanism to better serve stakeholders' and Boeing's long-term strategic goals. Second, we believe that a balanced corporate culture between meticulous engineering (i.e., rigorous R&D and testing) and production (i.e., high financial earnings), along with a less-hostile working environment, can discourage unethical opportunistic behavior and in turn help managers to focus on long-term goals instead of short-term earnings. Third, hiring an outsider CEO with expertise, engineering background, and on-flight experience in

Boeing airplanes will result in better understanding of airplane engineering and smoother communication with the engineers, test pilots, and FAA regulators. Recruiting an outsider CEO will also bring about fresh new ideas and changes needed to turn around the current culture driven by cost and earnings (Shi & de Jong, 2020). Moreover, an outsider CEO can help avoid conflicts of interest as well as strengthen the independence of the board. Fourth, incentive pay should be tied to strategic long-term success (Lin & Shi, 2020; Shi et al., 2021) instead of financial earnings easily manipulated and exploited by the CEO (see Bergstresser & Philippon, 2006; Murphy, 2013). We strongly suggest that the pay-for-performance incentive program be formed based on the fit between the CEO's strategic decisions and the core competency (i.e., in Boeing's case, strong, rigorous, efficient, and effective engineering). Fifth, the performance measure for the incentive pay must be objective and based on Boeing's strategic success rather than arbitrary measurements inflating executive compensations (see Jensen & Meckling, 1976; Shleifer & Vishny, 1989). As such, the performance measurement can be both quantitative and qualitative. We recommend that Boeing implement safety standards and rigorous testing into the compensation incentives, not just earnings. Sixth, the managerial decisions made have to be in the best interests of engineering safety, rigor, effectiveness, and efficiency while being strategically successful against the rival Airbus. This is achievable via the incentive pay program tied to strategic goals rather than mere financial earnings, as discussed in points 4 and 5). Seventh, we suggest that Boeing's communication channels among executives, engineers, test pilots, and regulators be transparent, straightforward, easy to navigate, and smooth and fluid to minimize the agency cost of information asymmetry from stalled information and non-transparency. Eighth, the CEO contract has to be incentivized by Boeing's long-term strategies and stakeholders' best interests rather than short-term earning goals.

Furthermore, our examination of the 737 MAX Jetliner case underscores the pivotal role played by Boeing's compensation committee's ineffective corporate governance. The functioning of this committee holds significance in ensuring prudent management within the company, thereby ensuring the delivery of safe products and the preservation of sustainable and consistent earnings. Our findings underscore the essential role of Boeing's compensation committee in shaping executive compensation. Consequently, the selection and composition of this committee are of paramount significance for achieving effective governance at Boeing. This naturally leads us to inquire about the composition of Boeing's compensation committee, the duration of their service, and the process by which they are appointed. Additionally, it is imperative to establish processes and policies that shield the compensation committee members from organizational political influences that could undermine their performance.

One cannot help but contemplate whether a more diverse compensation committee, encompassing a broader range of personal relationships and backgrounds, would have been more assertive in challenging the CEO's risk assessments. Ironically, Boeing's compensation committee did have a single female member at one point, but her tenure lasted just one year in 2010, after which she served on other committees. The similarities in professional backgrounds and prior

relationships among the committee members raise legitimate questions about the transparency and integrity of the selection process. The tightly knit and homogeneous nature of the committee in 2011 was not ideally suited for robustly scrutinizing the CEO's assertions regarding the reduced risk associated with the 737 MAX. In 2018, McNerney even commended committee member Calhoun, stating, "He appreciates others' perspectives more than his own in many cases and does a good job of synthesizing things." While such qualities may be commendable in personal relationships, they do not necessarily reflect independent oversight. Regrettably, Boeing has yet to learn from these lessons and take steps to enhance the diversity of the compensation committee, in terms of both personal relationships and professional backgrounds.

This study also offers valuable insights into business ethics. Fang and Slavin (2018) propose an adherence to "Golden Rule" ethics, rooted in the teachings of Confucius and monotheistic religions, which contrast with "ethical egoism," which focuses on self-interest. However, the Boeing case practically challenges applying the "Golden Rule" ethics. The mistakes made by Boeing's management and board would not have been quickly resolved by simply adopting this ethical approach. Instead, it required an organizational culture fostering "adversarial collaboration," a concept advocated by Kahneman and Klein (2009) and Tetlock and Mitchell (2009). Such a culture would encourage the board and its committees to critically scrutinize the management's claims about risk and potential rewards, challenging assumptions and decisions to ensure more ethical and practical outcomes.


Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding

The authors received no financial support for the research, authorship and/or publication of this article.

ORCID iD

Ngoc Cindy Pham  <https://orcid.org/0009-0004-3401-8695>

References

- Anderson, R. C., & Reeb, D. M. (2004). Board composition: Balancing family influence in S&P 500 firms. *Administrative Science Quarterly, 49*(2), 209–237.
- Arthurs, J. D., & Busenitz, L. W. (2003). The boundaries and limitations of agency theory and stewardship theory in the venture capitalist/entrepreneur relationship. *Entrepreneurship Theory and Practice, 28*(2), 145–162.
- Bebchuk, L. A., Fried, J., & Walker, D. (2002). Managerial power and rent extraction in the design of executive compensation. *The University of Chicago Law Review, 69*(3), 751–846.
- Bergstresser, D., & Philippon, T. (2006). CEO incentives and earnings management. *Journal of Financial Economics, 80*, 511–529.

- Boeing Company. (2007–2014). *Annual reports*.
- Boeing Company. (2008–2015). *Proxy statements*.
- Branscomb, L. M., & Auerswald, P. E. (2003). *Taking Technical Risks: How Innovators, Managers, and Investors Management Risk in High-tech Innovations*. MIT Press.
- Catchpole, D. (2020). *The forces behind Boeing's long descent*. Fortune. <https://fortune.com/longform/boeing-737-max-crisis-shareholder-first-culture/>
- Chrisman, J. J., & McMullan, W. E. (2004). Outsider assistance as a knowledge resource for new venture survival. *Journal of Small Business Management*, 42(3), 229–244.
- Chrisman, J. J., Chua, J. H., Kellermanns, F. W., & Chang, E. P. (2007). Are family managers agents or stewards? An exploratory study in privately held family firms. *Journal of Business Research*, 60(10), 1030–1038.
- Clough, R., & Melin, A. (2019, March 15). *Boeing increases CEO's pay 27% to \$23.4 million for last year*. Bloomberg News. <https://www.bloomberg.com/news/articles/2019-03-15/boeing-increases-ceo-s-pay-27-to-23-4-million-for-last-year>
- Cooper, D. J., & Morgan, W. (2008). Case study research in accounting. *Accounting Horizons*, 22(2), 159–178.
- Corbetta, G., & Salvato, C. (2004). Self-serving or self-actualizing? Models of man and agency costs in different types of family firms: A commentary on “comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence.” *Entrepreneurship Theory and Practice*, 28(4), 355–362.
- Cosgrove, E. (2019, October 30). *Boeing CEO grilled about salary, accountability in second day of congressional questioning*. CNBC. <https://www.cnbc.com/2019/10/30/boeing-ceo-grilled-over-salary-accountability-on-capitol-hill.html>
- Cruz, C. C., Gómez-Mejía, L. R., & Becerra, M. (2010). Perceptions of benevolence and the design of agency contracts: CEO-TMT relationships in family firms. *Academy of Management Journal*, 53(1), 69–89.
- Daily, C. M., Dalton, D. R., & Rajagopalan, N. (2003). Governance through ownership: Centuries of practice, decades of research. *Academy of Management Journal*, 46(2), 151–158.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Davis, Schoorman, and Donaldson reply: The distinctiveness of agency theory and stewardship theory. *Academy of Management Review*, 22(3), 611–613.
- Dibra, R. (2016). Corporate governance failure: The case of Enron and Parmalat. *European Scientific Journal*, 12(16), 283–290.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49–64.
- Eddleston, K. A., & Kellermanns, F. W. (2007). Destructive and productive family relationships: A stewardship theory perspective. *Journal of Business Venturing*, 22(4), 545–565.
- Eddleston, K. A., Kellermanns, F. W., & Zellweger, T. M. (2012). Exploring the entrepreneurial behavior of family firms: Does the stewardship perspective explain differences?. *Entrepreneurship Theory and Practice*, 36(2), 347–367.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57–74.
- Ellis, J. E. (2019, December 23). Where the 737 Max went off course. *Bloomberg Businessweek*, p. 15.
- Elson, C. M., & Gyves, C. J. (2003). The Enron failure and corporate governance reform. *Wake Forest Law Review*, 38, 855.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(2), 288–307.

- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *Journal of Law and Economics*, 26(2), 327–349.
- Fang, J., & Slavin, N. (2018). Ethics—Comparing ethical egoism with Confucius’s golden rule. *Journal of Business and Economic Studies*, 22(1), 17–31.
- Federal Aviation Administration. (2021, February 23). *Weakness in FAA’s certification and delegation processes hindered its oversight of the 737 MAX 8*. <https://www.oig.dot.gov/sites/default/files/FAA%20Certification%20of%20737%20MAX%20Boeing%20II%20Final%20Report%5E2-23-2021.pdf>
- Flight Global. (2012, January 27). *Boeing disputes 737 MAX development cost report*. <https://www.flightglobal.com/news/articles/boeing-disputes-737-MAX-development-cost-report-367504/>
- Gates, D. (2019, October 7). In scathing lawsuit, Southwest pilots’ union says Boeing 737 MAX was unsafe. *Seattle Times*. <https://www.seattletimes.com/business/boeing-aero-space/in-scathing-lawsuit-southwest-pilots-union-says-boeing-737-max-was-unsafe/>
- Gates, D., & Baker, M. (2019, June 22). The inside story of MCAS: How Boeing’s 737 MAX system gained power and lost safeguards. *Seattle Times*. <https://www.seattletimes.com/seattle-news/times-watchdog/the-inside-story-of-mcas-how-boeings-737-max-system-gained-power-and-lost-safeguards/>
- Gelles, D., & Kaplan, T. (2019, March 19). F.A.A. approval of Boeing jet involved in two crashes comes under scrutiny. *New York Times*. <https://www.nytimes.com/2019/03/19/business/boeing-elain-e-chao.html>
- Grant, B. (2014). Independent yet captured: Compensation committee independence after Dodd-Frank. *Hastings Law Journal*, 65(3), 761–810.
- Guest, N., Kothari, S. P., & Pozen, R. (2018). *High non-GAAP earnings predict abnormally high CEO pay* (Massachusetts Institute of Technology Working Paper). <http://covestreetcapital.com/wp-content/uploads/2019/04/SSRN-id3030953-1.pdf>
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as reflection of its top managers. *Academy of Management Review*, 9, 193–206.
- Herkert, J., Borenstein, J., & Miller, K. (2020). The Boeing 737 MAX: Lessons for engineering ethics. *Science and Engineering Ethics*, 26, 2957–2974.
- Isidore, C. (2019, November 5). *Boeing CEO Muilenburg won’t get most of his 2019 pay*. CNN. Retrieved from <https://www.cnn.com/2019/11/05/business/boeing-ceo-pay/index.html>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: A failure to disagree. *American Psychologist*, 64(6), 515.
- Kaplan, S. (2008). Are U.S. CEOs overpaid? *Academy of Management Perspectives*, 22, 5–20.
- Karra, N., Tracey, P., & Phillips, N. (2006). Altruism and agency in the family firm: Exploring the role of family, kinship, and ethnicity. *Entrepreneurship Theory and Practice*, 30(6), 861–877.
- Kerr, S. (1975). On the folly of rewarding A, while hoping for B. *Academy of Management Journal*, 18(4), 769–783.
- Lee, P. M., & O’Neill, H. M. (2003). Ownership structures and R&D investments of US and Japanese firms: Agency and stewardship perspectives. *Academy of Management Journal*, 46(2), 212–225.
- Lin, W. T., & Shi, J. (2020). Chief executive officer compensation, firm performance, and strategic cooperation: A seemingly unrelated regression approach. *Managerial and Decision Economics*, 41(1), 130–144.

- Lovegrove, R. (2018, March 20). David Calhoun: Finding a meaningful balance of success, family, and giving back. *Virginia Tech Daily*. <https://vtnews.vt.edu/articles/2018/03/calhoun.html>
- Lublin, J. (2007, January 2). In his rookie year, a CEO tests his limits. *Wall Street Journal*. <https://www.wsj.com/articles/SB116769757461264308>
- Main, B. G., & Johnston, J. (1993). Remuneration committees and corporate governance. *Accounting and Business Research*, 23(suppl 1), 351–362.
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative Research: A Guide to Design and Implementation*. John Wiley & Sons.
- Miller, D., & Xu, X. (2019). MBA CEOs, short-term management, and performance. *Journal of Business Ethics*, 154(2), 285–300.
- Mishra, D. P., Heide, J. B., & Cort, S. G. (1998). Information asymmetry and levels of agency relationships. *Journal of Marketing Research*, 35(3), 277–295.
- Murphy, K. J. (2013). Executive compensation: Where we are, and how we got there. In G. Constantinides, M. Harris & R. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 2, pp. 211–356). Elsevier Science.
- Nicas, J., Kitroeff, N., Gelles, D., & Glanz, J. (2019, June 1). Boeing built deadly assumptions into 737 Max, blind to a late design change. *New York Times*. <https://www.nytimes.com/2019/06/01/business/boeing-737-max-crash.html>
- Nicholson, N. (2008). Evolutionary psychology, organizational culture, and the family firm. *Academy of Management Perspectives*, 22(2), 73–84.
- Ntim, C. G., Lindop, S., Thomas, D. A., Abdou, H., & Opong, K. K. (2019). Executive pay and performance: The moderating effect of CEO power and governance structure. *International Journal of Human Resource Management*, 30(6), 921–963.
- Pasztor, A., & Tangel, A. (2019, December 11). Internal FAA review saw high risk of 737 MAX crashes. *Wall Street Journal*. <https://www.wsj.com/articles/internal-faa-review-saw-high-risk-of-737-max-crashes-11576069202>
- Peregrine, M., & Elson, C. (2021). *Twenty years later: The lasting lessons of Enron*. Harvard Law School Forum on Corporate Governance. <https://corpgov.law.harvard.edu/2021/04/05/twenty-years-later-the-lasting-lessons-of-enron/>
- Perrow, C. (1999). *Normal Accidents: Living with High Risk Technologies*. Updated Edition. Princeton University Press.
- Perrow, C. (2004). A personal note on “normal accidents.” *Organization & Environment*, 17(1), 9–14.
- Rhee, R. J. (2009). The Madoff scandal, market regulatory failure and the business education of lawyers. *Journal of Corporation Law*, 35, 363.
- Rindfleisch, A., & Heide, J. B. (1997). Transaction cost analysis: Past, present, and future applications. *Journal of Marketing*, 61(4), 30–54.
- Romero, J. (2020, September 18). *Tyco corporate scandal of 2002 (ethics case analysis)*. Panmore Institute. <http://panmore.com/tyco-corporate-scandal-2002-case-analysis>
- Ross, S. A. (1973). The economic theory of agency: The principal’s problem. *American Economic Review*, 63(2), 134–139.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67.
- Schaper, D. (2019, November 6). *Boeing CEO says he decided not to quit after 737 MAX crashes and gave up bonuses*. NPR. <https://www.npr.org/2019/11/06/777078013/boeing-ceo-says-he-decided-not-to-quit-after-737-MAX-crashes-and-gave-up-bonuses>
- Schoch, K. (2016). Case study research. In G. J. Burkholder, K. A. Cox & L. M. Crawford (Eds.), *The Scholar-Practitioner’s Guide to Research Design* (pp. 5886–6283, 1st ed.). Laureate Publishing.

- Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science*, 12(2), 99–116.
- Sharpe, N. F. (2017). Volkswagen's bad decisions & harmful emissions: How poor process corrupted codetermination in Germany's dual board structure. *Michigan Business & Entrepreneurial Law Review*, 7, 49.
- Shi, J., & de Jong, J. (2020). Insider or outsider? The separate and joint effects of firm performance and diversification on CEO recruitment. *Journal of Management and Governance*, 24(1), 91–115.
- Shi, J., Lin, W. T., & Pham, N. C. (2021). The relationships among managerial discretion, firm performance, and chief executive officer compensation: A simultaneous equations system approach. *American Business Review*, 24(1), 114–140.
- Shleifer, A., & Vishny, R. W. (1989). Management entrenchment: The case of manager-specific investments. *Journal of Financial Economics*, 25, 123–139.
- Stefano, T. D. (2005, August 19). WorldCom's failure: Why did it happen? *Commerce Times*. <https://www.ecommercetimes.com/story/45542.html>
- Tangel, A., Sider, A., & Gottfried, M. (2019, October 14). Boeing's new chairman is a boardroom force familiar with crises. *Wall Street Journal*. <https://www.wsj.com/articles/boeings-new-chairman-is-a-boardroom-force-familiar-with-crises-11571061169>
- Tetlock, P. E., & Mitchell, G. (2009). Implicit bias and accountability systems: What must organizations do to prevent discrimination? *Research in Organizational Behavior*, 29, 3–38.
- Tosi, H. L., Brownlee, A. L., Silva, P., & Katz, J. P. (2003). An empirical exploration of decision-making under agency controls and stewardship structure. *Journal of Management Studies*, 40(8), 2053–2071.
- Tosi, H. L., Jr., & Gomez-Mejia, L. (1989). The decoupling of pay and performance: An agency theory perspective. *Administrative Science Quarterly*, 34, 169–180.
- Tosi, H. L., Werner, S., Katz, J. P., & Gomez-Mejia, L. R. (2000). How much does performance matter? A meta-analysis of CEO pay studies. *Journal of Management*, 26, 301–339.
- Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work*, 11(1), 80–96.
- Vallejo, M. C. (2009). The effects of commitment of non-family employees of family firms from the perspective of stewardship theory. *Journal of Business Ethics*, 87(3), 379–390.
- Vartabedian, R. (2019, March 15). How a 50-year-old design came back to haunt Boeing with its troubled 737 Max jet. *Los Angeles Times*. <https://www.latimes.com/local/california/la-fi-boeing-max-design-20190315-story.html>
- Vaughan, D. (1996). *The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA*. University of Chicago Press.
- Wasserman, N. (2006). Stewards, agents, and the founder discount: Executive compensation in new ventures. *Academy of Management Journal*, 49(5), 960–976.
- Wiseman, R. M., Cuevas-Rodríguez, G., & Gomez-Mejia, L. R. (2012). Towards a social theory of agency. *Journal of Management Studies*, 49(1), 202–222.
- Yin, K. R. (1989). *Case Study Research: Designs and Methods*. Sage Publications.
- Yin, R. (2014). *Case Study Research: Design and Methods* (5th ed.). Sage Publications.
- Zahra, S. A., Hayton, J. C., Neubaum, D. O., Dibrell, C., & Craig, J. (2008). Culture of family commitment and strategic flexibility: The moderating effect of stewardship. *Entrepreneurship Theory and Practice*, 32(6), 1035–1054.

Book Review

BIMTECH Business Perspectives
4(2) 194–198, 2023
© 2023 Birla Institute of Management
Technology
DOI: 10.1177/22779779231207259
bsp.bimtech.ac.in



Srinath Sridharan and Arun Ganesh, *Time for Bharat: A Researched Conversation on Governance*. Notion Press, 2022, 366 pp., Price: 570. ISBN: 979-8-88805-368-3 (paperback), 979-8-88849-078-5 (Hardcase).

Reviewed by: Manoj Pareek, Associate Professor, Bennett University, Greater Noida, India.

The book “Time for Bharat: A Researched Conversation on Governance” stands as a remarkable endeavor, seeking to offer a profound and all-encompassing exploration into the intricate tapestry of policy formulation and governance in India across diverse sectors within the nation. Within its pages, readers will encounter a compilation of erudite essays, penned by distinguished authors, which collectively weave a comparative and conceptual framework, illuminating the nuanced landscape of governance in the country. Notably, this literary work assumes a timely significance, arriving on the scene precisely when governance issues have surged to the forefront of national discourse, a prominence that has been steadily mounting since the purported pivotal year of 2014.

Today, India as a nation is witnessing profound changes and challenges leading to contentious policy decisions and outcomes during the ongoing “Amritkal” on the completion of 76 years of Indian democracy. Whereby government policies vis-à-vis the governance needs of the nation need to be analyzed by experts and scholars. Thus, this book serves this objective effectively. The successful performance of the policy framework in core democratic institutions, such as the judiciary, executive, and administration, is a necessity for the future of the nation.

For decades, planned economic development under the much-celebrated five-year plans based on the Soviet model put undue emphasis on heavy industries requiring huge investments with long-term returns. This resulted in abysmally low growth and rising unemployment under the so-called license raj. Thus, governance took a back seat in those times. As the implementation of projects took a heavy toll on the resources. However, the real Indian story of sustained economic growth started in 1991, when the regulatory fetters were eased under then-Prime Minister PV Narasimha Rao and Finance Minister Dr Manmohan Singh. Initially, the



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed.

economic reforms gained good momentum but soon slowed down during the UPA-2 regime, due to poor governance, corruption, and a tendency toward risk aversion on the part of the government. The authors of the essays in this book have brilliantly tried to confer centrality to the issues of governance; credit goes to the editors and compilers *Shri Arun Ganesh and Shri Srinath Sridharan* through their meaningful selection of these essays penned by expert authors in a book format. India, today's most populous country, happens to be a multiparty democracy, unlike the second most populous country which effectively runs on the one-party system. Although at present competition with China seems like a distant goal, it will be achievable in a decade or so with the present GDP growth rate already being higher than China's. Therefore, we need to remove the barriers of red tape and complex bureaucratic procedures that give rise to delays and corruption. The ease of doing business is necessary to attract foreign investment in India. Thus, governance will ensure accountability on the part of various institutions of the country.

This book endeavors to dismantle the barriers obstructing India's path to growth by shedding light on the pivotal role of governance as an indispensable prerequisite for attaining the nation's ambitious growth targets. Beyond its focus on corporate governance, this book casts a wide net, encompassing an exhaustive spectrum of governance facets within the economic landscape of India. The essays within these pages venture into the intricate terrain of India's civilizational ethos, delving into critical areas, such as the economy, education, health care, and technology.

Yet, it is worth noting the conspicuous omission of a dedicated chapter on e-governance, digitalization, and artificial intelligence within this volume. This absence, albeit unintentional, leaves a noticeable gap in the comprehensive coverage of governance topics. It is my fervent hope that future editions of this book will rectify this oversight, enhancing its completeness by incorporating these essential dimensions of contemporary governance in India.

The book is right on track when it places emphasis on "transformational governance." Besides, the book has 17 chapters that contain a wealth of summarized discussion on a broad range of subjects. The reader of the book can start with any of the chapters randomly for his/her reading, as they happen to be independent per se.

To me, the very title of the book, *Time for Bharat*, is inviting for anyone who is interested in the subject of governance in a rising India. Almost 800 years of subjugation by foreign invaders tried to stifle aspirations, freedom, and potential. The last ones are the British colonialists, who wantonly looted the country, leaving it high and dry economically. On August 15, 1947, the Union of India came into existence as a sovereign republic, stepping into the world economic arena. It is still in the league of developing countries, marching fast to become a developed country by 2047 when it completes its 100 years of freedom. Governance issues will play a pivotal role in achieving this objective.

As we know, there has been an intense debate going on about the so-called "Idea of India" for three decades, spearheaded by Professor Sunil Khilnani. Khilnani's "Idea of India" is based on Nehruvian thought, but unfortunately, the issue of governance did not find a place in that debate. Moreover, Khilnani's celebrated essay on the "Idea of India" covered merely 50 years of emerging India, whereas today we are celebrating 76 years of our independence, aptly called

Amrit Mahotsav of the Indian economy. In this *Amritkaal*, India needs good governance in all spheres to make rapid strides in its economic transformation.

India, that is, the “Bharat” of today is no longer a prisoner of the past that used to be mired in the so-called “Hindu rate of growth” until 1991, whereas today the country is among the fastest growing economies in the world. It has achieved remarkable success in the renewable energy arena, leaving behind many of the developed nations. Of course, there are naysayers and prophets of doom about India’s rise to becoming a superpower by the mid of the century. However, India is already on a fast track to reaching that goal. Governance will play a significant role in achieving the said objective.

Coming to specifics, the essay on agricultural governance by the learned author Arun Ganesh brilliantly captures the importance of agricultural governance, which is crucial for India’s rise as an economic powerhouse. It considers the optimum use of soil, seeds, fertilizers, and research and development in the agricultural sector.

Besides, it also addresses the need for sound land laws and land reforms, including crop insurance, nutrition, and the emancipation of women’s labor in agriculture. Somehow the author seems to have overlooked the role of grassroots governance through the gram panchayats as envisaged in the Panchayati Raj institution. Thus, the agricultural sector needs major transformation in the broader rural landscape to become a vehicle for change in rural governance and administration.

Today, we are living in a fast-changing world socially, economically, and politically. Fast technological advances are changing the way we live, earn, work, and administer. The advances in digitalization and AI have created platforms like Chat GPT that are ahead of what we had in social media or other forums. These new technological tools are providing us with remarkable efficiency to solve our problems, including the governance challenges; thus, Swaminathan Mani and Rao have contributed an excellent chapter on technological governance.

The authors of these essays in the book have attempted a very meaningful dialogue following rich ancient Indian traditions of scriptures and treatises like *Upanishads*, *Mimansas*, *Sankhyas*, etc. Thus, the editors of the book have rightly said, “we must tear away from victimhood and fragility through our inner strength.” The efforts of the editors in compiling these gems of knowledge are indeed going to rekindle the spirit of inquiry and analysis to find solutions in the sphere of governance.

The book also serves the laudable purpose of bringing together the views of expert professionals, policymakers, and academia. This book has been published at an opportune time when India is hosting the G-20 summit under its presidency. Moreover, it is also a time when India’s startups are blossoming into unicorns, and there is remarkable progress in the field of homegrown entrepreneurship. To tap the huge opportunities for talented human resources, the country needs good governance in all the areas of national importance, like education, health care, energy, manufacturing, trade, commerce, taxation, etc. All of these have been effectively examined by the contributing authors in the pertinent essays.

The chapter dedicated to education governance, penned by Arushi, Anisa, and Sakate, offers a comprehensive exploration of the transformative potential embedded

in the New Education Policy (NEP) of 2020. This chapter underscores the pivotal role of education in shaping a nation's ethos and fostering national pride. It highlights an intriguing perspective on the taxation of not-for-profit schools, currently exempt from taxes, as a potential revenue source to support poor sections of society.

Furthermore, the authors have meticulously dissected the key facets of NEP 2020, encompassing its impact on both school education and higher education institutions, along with the imperative need for skill development. The chapter prominently addresses the pressing issue of bridging the chasm between conventional, theory-centric curricula and real-world problem-solving, a disparity that has hindered the employability of graduates.

However, it is important to note that the chapter opens with a somewhat critical view of India's education system pre-NEP 2020, characterizing it as dysfunctional. This critique, though valid in many respects, should be tempered with the acknowledgment that even under the previous system, individuals from middle-class backgrounds ascended to the highest echelons of global corporations, such as Microsoft and Google. It underscores that while the system may not have been perfect, it did have its merits and successes.

In the insightful chapter penned by Dr Chatteraj and Dr Jain, the spotlight falls squarely on health care governance. The authors underscore the imperative for increased health care spending, enhancements in medical education, and the critical implementation of the government's ambitious universal health care scheme. Their analysis delves into both the supply- and demand-side challenges confronting the health care sector, with a particular emphasis on the necessity to bolster primary-level infrastructure.

However, it is worth noting that the chapter could have further explored the dire conditions and strain faced by public hospitals, a situation that has compelled a significant portion of the population to opt for private health care facilities, eroding trust in the public health care system. Additionally, the authors could have considered the financial burden placed on the exchequer by universal health programs, which necessitate substantial budgetary allocations and escalating resource requirements year after year. Certain state governments have started the UHC scheme with a small contribution from each beneficiary, which has met with success in a large state of Rajasthan. This highlights that, even, individuals with limited means are willing to invest in government-run health care initiatives when they perceive tangible value in such programs.

In Srinath Sridharan's essay on urban governance, readers are treated with a wealth of insights concerning metropolitan planning and governance, with a particular focus on the transformative Smart Cities Mission, Amrut initiative, and Swachh Bharat campaign. While the essay offers valuable perspectives on these overarching national programs, it leaves an unexplored territory that could have provided a deeper understanding of urban governance, i.e., the role and functioning of urban municipal bodies.

Urban municipal bodies serve as the lifeblood of our cities, responsible for maintaining and delivering essential services that impact the daily lives of residents. These critical functions encompass a wide spectrum, ranging from sanitation and solid waste management to street lighting, sewage disposal, and

cleanliness. Although the author briefly touches on some of these facets, they do so without delving into the specific context of municipal governance.

A more comprehensive examination of the workings, challenges, and innovations within urban municipal bodies would have added a layer of depth to the reader's understanding of the intricate web of urban governance. It could have shed light on the practical aspects of delivering essential services in our cities and highlighted the vital role that these bodies play in shaping the urban landscape.

It is noteworthy that the editors have given quotes from revered Sadh Guru at the beginning of each essay that are relevant to the subject as well as inspiring. These quotes motivate the readers to read the essays attentively. Thus, the compilers have rightly stated that Bharat continues to evolve in order to march toward progress and prosperity, and it has been the most enduring civilization of the world, spanning thousands of years but unfortunately plundered and ruled by Western colonial powers. They have very rightly pointed out that the democratic spirit has been alive long before the colonizers came and occupied the land of Bharat. It was well governed by certain democratic kingdoms even 2000 years ago (Lichhawi Gan Rajya and the Gupt Empire). Thus, the book is a tribute to the eternal spirit of Bharat.

Manuscript submission

- The preferred format for your manuscript is MS Word.
- The journal does not consider a paper that has been published elsewhere or that is under submission to another publisher. Authors must attest to this at the time of submission. It is also author's responsibility to disclose any potential conflict of interests regarding their submitted papers.
- Authors will be provided with a copyright form once the contribution is accepted for publication. The submission will be considered as final only after the filled-in and signed copyright form is received.

Basic formatting of the manuscripts

The journal publishes the following article types:

- Original article – 6000–8000 words. This must be accompanied by an abstract of up to 150 words, and 4–6 keywords
- Review essay – 6000–8000 words
- Perspective/viewpoint – 3000–5000 words
- Interview – 2000–3000 words
- Book review – 2000–3000 words

Please refer to the Submission Guidelines on the journal website for details on formatting.

Spelling and numerical usages

- Consistent use of either British or American spelling is advised, but not both at the same time.
- Spell out numbers from one to nine, 10 and above to remain in figures. However, for exact measurements use only figures (e.g. 3 km, 9%). Please use 'thirteenth' instead of '13th century'; use '1960s' instead of 'nineteen sixties'.

Quotations, notes, tables and figures

- British English uses single quotation marks to indicate quotations or dialogue, double quotation marks for quotation inside quotation (nested quotation). American English flips that method and uses double quotation marks to indicate quotations or dialogue, and single quotation marks for nested quotations. Either British or American punctuation patterns should be used and it should not be a mix.
- Notes should be numbered serially and presented at the end of the article. Notes must contain more than a mere reference.
- Tables and figures must be cited in the text, and indicated by number separately (Table 1), not by placement (see Table below). Source details for figures and tables should be mentioned irrespective of whether or not they require permissions.
- All photographs and scanned images should have a resolution of minimum 300 dpi and 1500 pixels, and their format should be TIFF or JPEG. Due permissions should be taken for copyright-protected photographs/images.

References and their text citations

- References and their citations should be given in accordance with APA 7th edition.
- Please ensure that all references mentioned in the reference list are cited in the text and vice versa.

For detailed style guidelines, please visit <https://www.bsp.bimtech.ac.in/>

