


Analyzing Global Industry Dynamics Using Porter's Five Forces And Ratio Analysis Model

Evi Christy Waworuntu¹, Merry Yasuwito², Elvis Sumanti³

^{1,2,3}Pascasarjana, Universitas Klabat, Manado, Indonesia

Article Info	ABSTRACT
Keywords: Porter's five forces, Financial strategy, Ratio analysis, Global industry.	The importance of financial strategy in facing the ever-changing dynamics of the global market. Referring to Porter's Five Forces concept, this research highlights its influence on industry profitability and a company's ability to compete. The analysis reveals how external factors, such as globalization and technological transformation, impact the strategies and competitive positions of companies in specific industries. Accompanied by case studies, the research emphasizes the interconnectedness between financial analysis and the external environmental dynamics viewed through the lens of Porter's Five Forces. The objective is to identify changes in a company's financial strategy in response to shifts in the business environment and uncover the interactions between Porter's Five Forces factors and financial performance, both at regional and global levels. The study results underscore that the global industry presents high barriers for new entrants due to economies of scale and significant investments made by established companies. Financial ratio analysis also depicts the liquidity, solvency, and profitability of these companies, showcasing varying trends from one company to another. Factors influencing the global industry, such as high entry barriers, strong bargaining power of buyers, and the threat of substitute products, directly impact the financial conditions and profitability of companies. The ability of companies to manage risks and their financial strategies plays a key role in responding to challenges and opportunities in the dynamic business environment.
This is an open access article under the CC BY-NC license 	Corresponding Author: Evi Christy Waworuntu Pascasarjana, Universitas Klabat, Manado, Indonesia evichristywaworuntu@gmail.com

INTRODUCTION

In this ever-changing era, financial strategy has become a crucial cornerstone in addressing challenges and opportunities in the dynamic global market. Beyond financial strategy, understanding a company's position within the competitive landscape of an industry can assist in making strategic choices to shield itself from competitive threats or even emerge victorious in the competition (Prasasti, 2016). Porter's Five Forces serves as an influential industry analysis tool and forms the foundation for the strategic planning of many companies. According to Palepu and Healy (2013) and Porter (2008), industry profitability is influenced by Porter's Five Forces. Elsinah (2023) reveals that external analysis is necessary to detect the situation and operational environment of a company. Understanding the interplay

between company profitability and the dynamics created by Porter's Five Forces can aid companies in sustaining and thriving within the industry.

Globalization worldwide needs to move swiftly to keep pace with continuous technological advancements (Gwangwava et al., 2018). The emergence of a series of new technologies in response to digital transformation creates space for new business and production models that require high levels of efficiency and flexibility (Bogers et al., 2016). Shuang-cai and Yi (2008) explain that uncertainty in global business operations is increasing, where changes in the global business environment create the need for evolving and adaptable strategies to cope with pressures in the global business environment. Passemard and Kleiner (2000) elaborate that Porter's Five Forces is a model that aids companies in determining competitive strategies based on an in-depth analysis of the industry structure and evolution shaping competitive advantages for success on an international scale within a specific segment.

The Indonesian economy contracted by -2.1% in 2020 due to the impact of the COVID-19 pandemic (Muhyiddin & Nugroho, 2021). This situation was influenced by both internal and external factors, which need to be analyzed alongside the internal conditions of companies. Given the ongoing pandemic and rapid technological changes, Porter's Five Forces analysis helps companies assess industry attractiveness and their competitive positions within that industry (Stonehouse & Snowdon, 2007). Porter's Five Forces analysis is widely employed to evaluate the profitability of various industries such as transportation, agriculture, manufacturing, mining, and technology (Anastasiu et al., 2020; Isabelle et al., 2020; Kun et al., 2021; Wellner & Lakotta, 2020). Based on research conducted by Paramadita and Hidayat (2022) using the Five Forces model, during the COVID-19 pandemic, the aviation industry, education industry, and e-commerce industry experienced decline, stagnation, and improvement, respectively. This indicates the unique characteristics of each industry and varying responses to new entrants. It also highlights how industries focus their efforts on threats such as supplier bargaining power, the threat of substitute products, buyer bargaining power, and competition among existing rivals, which can have diverse impacts on the competitiveness of an industry.

Yang (2022) conducted a study on the Tesla market by analyzing Tesla's financial aspects and comparing them with competitors through ratio analysis. Additionally, the research delved into analyzing the strengths and threats posed to Tesla using Porter's Five Forces, thus revealing Tesla's position in the new energy vehicle industry and the form of threats posed by competitors in that industry. Besanko et al. (2000) explored the impact of Porter's Five Forces strategy model on the performance of telecommunications companies measured through return on assets and return on equity. A study by Siaila and Rumerung (2022) used ratio analysis as the basis for descriptive analysis to determine business unit development strategies through the formulation of Porter's Five Forces. The research compared various financial ratios, including the current ratio, acid-test ratio, cash ratio, and net profit margin, over eight consecutive years. The study provides an analysis of financial aspects and industry profitability concurrently.

Strategic management should be established as the standard or reference for decisions and actions taken by management, considering all levels of an organization, to determine the long-term activities of the organization (Hamed & Abbasi, 2008). Many possess a limited understanding of the structure of Porter's Five Forces and its application. Dias et al. (2023) and Zhao et al. (2016) elucidate that Porter's Five Forces model aids in positioning a company's strategy by evaluating industry competition and profitability. Meftahudin et al. (2018) researched how companies can enhance profitability by applying SWOT analysis and Porter's Five Forces model as the foundation for marketing strategy development. The most significant potential error lies in accepting analyses that are not comprehensive, accurate, and less useful, thereby impacting decision-making and organizational performance negatively. To avoid such errors, some previous studies adopted Porter's Five Forces model in the form of case studies, examining literature findings related to ongoing or recent events (Dias et al., 2023) (Paramadita & Desman, 2022). Dobbs (2014) developed a format for Porter's Five Forces in the form of a template that can be used as a basis for understanding each force. Saaty (1996) devised relevant quantitative methods for evaluating decision-making variances, taking into account feedback relationships.

The exploration of the interplay between Porter's Five Forces and financial analysis still exhibits gaps in the existing literature. Further research is needed to investigate the relationship between Porter's Five Forces analysis and financial innovation or novel approaches to financial management within companies. This study aims to uncover information obtained from Porter's Five Forces analysis that can be concretely implemented in the formulation of corporate strategies and financial decision-making, such as working capital management, capital structure, or investment decision-making. This research delves into a comprehensive understanding of the interconnection between financial analysis and changes in the external environment through Porter's Five Forces in the competitive global industry. Case studies are employed to examine how a company's financial performance is influenced by external factors viewed through Porter's Five Forces in the global industry, providing a tangible foundation for analysis.

The objective of this research is to identify how a company's financial strategy evolves over time in response to the dynamics of Porter's Five Forces within the business environment. Investigating the variables or elements involved in each aspect of Porter's Five Forces separately and understanding how these variables interact with financial performance is a key research goal. Research that is more focused on a particular financial sector, such as banking, insurance, investment, or other sub-sectors, can provide deeper insights into how Porter's Five Forces interacts with financial performance in that specific environment.

METHODS

The research method employed is descriptive qualitative research using a meta-analysis technique by reviewing, analyzing, and synthesizing prior studies through a systematic literature review that involves the collection of data from various sources such as books, journals, and scholarly articles that are related to the research topic (Novita et al., 2021) (Waworuntu et al., 2020). The research aims to examine the variables or elements involved

in each aspect of Porter's Five Forces separately and how these variables interact with financial performance.

Table 1 provides a list of journals and the number of articles supporting the research. Figure 1 illustrates the framework of the article selection process.

Table 1. List of journals and the number of articles supporting the research (N=44)

No	Journal Name	Number of Articles
1	4th International Conference on Wireless Communications,	1
2	Networking and Mobile Computing	1
3	Academy of Management Annual Meeting	1
4	Advances in Economics, Business, and Management Research	1
5	Decision Making with Dependence and Feedback, The Analytic Network Process	1
6	Econometrica: Journal of Econometric Society	1
7	Economics of Strategy	1
8	Elsevier: IFAC Proceedings Volumes	1
9	Elsevier: Journal of Accounting and Economics	1
10	Elsevier: Journal of Purchasing and Supply Management	1
11	Elsevier: Journal of Rail Transport Planning and Management	1
12	Elsevier: Media Jurnal Ilmiah Pendidikan	1
13	Elsevier: Procedia Computer Science	1
14	Elsevier: Renewable Energy	1
15	Elsevier: The Journal of High Technology Management Research	1
16	Elsevier: Applied Mathematical Modelling	1
17	Elsevier: Competitiveness Review	1
18	Elsevier: Management Research News	1
19	Financial Statement Analysis	1
20	Harvard Business Review	1
21	International Journal of Applied Research	1
22	International Journal of E-Entrepreneurship and Innovation	1
23	International Journal of Sustainable Transportation	1
24	Journal Economics, Management, Accounting and Technology	1
25	Journal of Economics and Accounting	1
26	Journal of Education, Humanities and Social Sciences	1
27	Journal of Global Marketing	1
28	Jurnal Administrasi Bisnis	1
29	Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya	1
30	Jurnal Renaissance	1
31	Manajemen Strategis: Keunggulan Bersaing dalam Organisasi	1
32	Proceedings of the 3rd Asia Pacific International Conference on Industrial Engineering and Operations Management	1
33	Research in Nursing and Health	1

No	Journal Name	Number of Articles
34	Sage Journals: Journal of Management Inquiry	1
35	Sage Journals: Journal of Marketing	1
36	Sosiohumaniora – Jurnal Ilmu-ilmu sosial dan Humaniora	1
37	SSRN Electronic Journal	1
38	Strategi Bersaing (Competitive Strategy)	1
39	Sustainability	1
40	Technological Forecasting and Social Change	1
41	Technology Innovation Management Review	1
42	The 3rd International Management Review	1
43	The Indonesian Journal of Development Plannihng	1
44	The International Journal of Bussiness & Management	1
		= 44

From Table 1, the 16 disciplines can be categorized into 6 groups based on their proximity and the number of journals in each discipline. Others, with the highest number of articles, can be classified as an independent category. The second category is Management. The third is Economic Accounting. The fourth is Technology, which encompasses a collection of journals. The fifth is Education. The sixth is the International Journal. Figure 3.1 illustrates the varying sizes of each category, starting with Others (27%, n=12) as the largest, followed by Management (25%, n=11), Economic Accounting (18%, n=8), Technology (16%, n=7), Education (7%, n=3), and the smallest being the International Journal (7%, n=3).

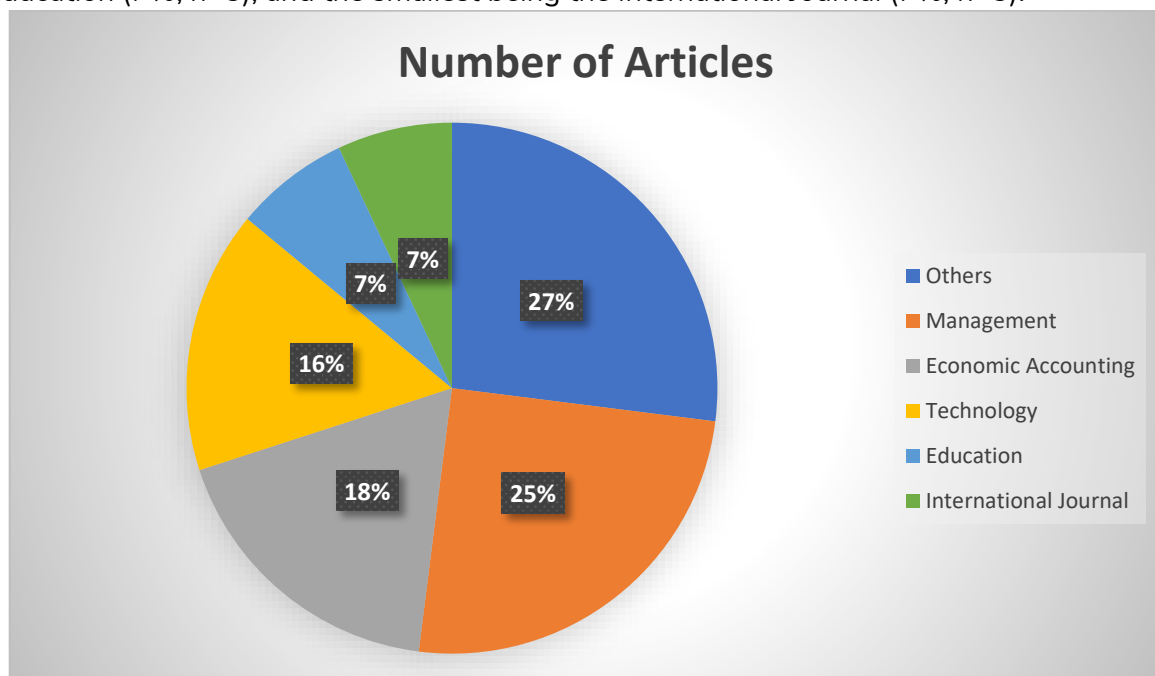


Figure 2. Pie Chart of Disciplinary Categories

RESULTS AND DISCUSSION

Porter's Five Forces Analysis

Threats of New Entrants

In an energetic and quickly advancing commerce environment, modern participants can still have an opportunity to succeed in case they contribute in inquire about and improvement and bring unused points of view, approaches, or items to the showcase. Be that as it may, the tall boundaries to passage made by economies of scale and capital necessities make it challenging for unused companies to compete with built up ones.

1. Economies of scale

Economies of scale achieve production on a larger scale (more output) at lower costs, resulting in cost savings. In the global industry with standardized products and continuously evolving brands, as well as barriers due to cultural differences, economies of scale can benefit brand development compared to price reduction (Whitelak & Pimblett, 1997). To sustain in an ever-changing market, economies of scale can assist established companies but pose a threat to smaller ones (Cioca et al., 2007). In the global industry, large companies usually have high fixed costs, leading to significant economies of scale. This is because the larger a business, the lower the cost per unit. Companies that benefit from economies of scale include Walmart, Samsung, ExxonMobil Corporation, United Parcel Service, Nike, and Intel Corporation (Alden, 2012) (MBA Skool Team, 2022) (Wu et al., 2022). Thus, in the global industry, there are high barriers for new entrants because established companies tend to already have economies of scale.

2. Capital requirements

Liu et al. (2022) explain in the global retail industry, large-scale companies require substantial initial capital to establish and operate their business. Established companies hold a significant market share with unique business models and complete supply chains to control product quality and attract customers with competitive prices. The necessary business capital may also include investments in infrastructure, technology, procurement, marketing, etc. The fact that some established companies have dominated a considerable market share indicates that these companies have made significant investments to achieve their current status. This raises barriers for new entrants to operate in the industry. Yang (2022) states that in a dynamic and rapidly evolving business environment, sustained economic development, the emergence of new technologies, and innovative ideas can lead to the entry of new competitors who bring new perspectives, approaches, or products to the market. Thus, new entrants have an opportunity if they invest in research and development.

Bargaining Power of Suppliers

The bargaining power of suppliers is affected by components such as provider dominance and exchanging costs within the worldwide industry. Provider dominance alludes to the degree of control that providers have over the advertisement and their capacity to impact costs and item quality. Companies working all inclusive with a supply chain methodology spread over different nations have a solid position against providers, as they

have to get to a more extensive extent of providers and can arrange way better costs and item quality. The capacity of suppliers to offer a wide run of administrations and facilitate care over diverse settings and specialties is pivotal for moving forward care coordination and lessening pointless costs related with divided care. Companies working all inclusive with a supply chain technique spread over distinctive countries have a solid position against suppliers, as they have get to to a more broad extend of suppliers and can arrange superior costs and item quality with providers. This permits them to offer more comprehensive care to their clients whereas keeping up cost-effectiveness.

1) Supplier Dominance

Apple manages a highly complex supply chain distributed globally across several countries, including the United States, China, Japan, Mexico, Brazil, and others, resulting in limited supplier bargaining power over Apple (Pratap, 2017). Companies operating globally with a supply chain strategy spread across various countries have a strong position against suppliers. For instance, Nike, which has numerous suppliers worldwide providing rubber, cotton, synthetic leather, etc., has a practice of collaborating with manufacturers in the regions where it operates its business. This reduces overall raw material costs since most of these manufacturers exclusively cater to Nike as their primary client (MBA Skool Team, 2022). Thus, the supplier bargaining power over Nike can be considered weak. Samsung's supply chain is also related to more than 27000 suppliers in different countries where Samsung is a significant source of income to most of its suppliers (Wu dkk., 2022). The strategy of having a supply chain spread across various countries weakens the supplier's position for negotiation, providing the company with a strong position due to having more supplier options that benefit the company in terms of cost.

2) Switching Cost

Having suppliers spread across many places or countries gives a global company relatively low switching costs, especially since the supply is not concentrated on one or a few suppliers.

Bargaining Power of Buyers

The bargaining power of buyers is impacted by cost affectability and exchanging costs within the worldwide industry. Cost affectability alludes to the degree to which clients are willing to pay for an item or benefit based on its cost. At a certain level, worldwide client requests are versatile and price-sensitive, meaning that clients may switch to alternative items in case the prices are too high. This may lead to expanded competition among companies, as they endeavor to offer competitive costs to pull in and hold clients.

1. Price Sensitivity

Yang (2022), Kabeyi (2022), Yurdadon et al. (2022), Gao et al. (2017), and Djajadikerta (2017) explain that at a certain level, global customer demand is elastic and price-sensitive. Gao et al. (2017) found that customers are willing to pay a higher price to support local products compared to global products, making them less price-sensitive to local products.

2. Switching Cost

In the global industries of smartphones, automotive, athletic footwear, and sportswear, customers can easily switch due to the broad scope of businesses, which means there are more diverse product offerings and services available. This provides customers with various alternatives to choose from, especially with the transparency and ease of accessing services and products digitally (Kabeyi, 2018) (Liu dkk., 2022) (Yang, 2022) (Discounted Cash Flow, 2023).

Threat of Substitute Products or Services

The risk of substitute items or administrations may be a critical figure within the worldwide industry, as advancements and innovative headways can lead to the advancement of various businesses and the development of modern items and administrations. Within the car division, challenges related to fuel are being confronted, and the smartphone and portable workstation businesses are confronting challenges from tablet advancements.

1. Replacement Products

With the rapid development of technology, innovations are occurring in the retail industry, leading to the evolution of canteens and entertainment. In the automotive sector, challenges related to fuel are being faced, among other developments (Yang, 2022) (Liu dkk., 2022). The smartphone and laptop industries are facing challenges from tablet innovations, although smartphones still appear to be preferred (Kabeyi, 2018).

2. Buyer's Price Sensitivity

Based on the study on sensitivity to global product pricing, if there is a substitute product with a lower price, buyers may be more inclined to shift their preferences to the alternative product that can meet their needs and desires in a similar way and at a lower price, especially if the price difference is significant.

3. Buyer's Switching Cost

Based on the study regarding the low costs, time, and energy that customers need to invest in switching, substitute products can compete and become the customer's choice due to the low switching costs for customers to switch to substitute products.

Rivalry Among Existing Firms

Competition among existing firms could be a noteworthy figure within the worldwide industry, as companies compete to secure effective and broad dispersion channels to reach their target markets. Companies with broader access to distribution channels have a bigger market presence. In any case, exit obstructions can also affect the competition among existing firms. These boundaries can incorporate ventures in investigation and improvement, substantial resource speculations, and all costs related to existing the industry.

1. Industry growth

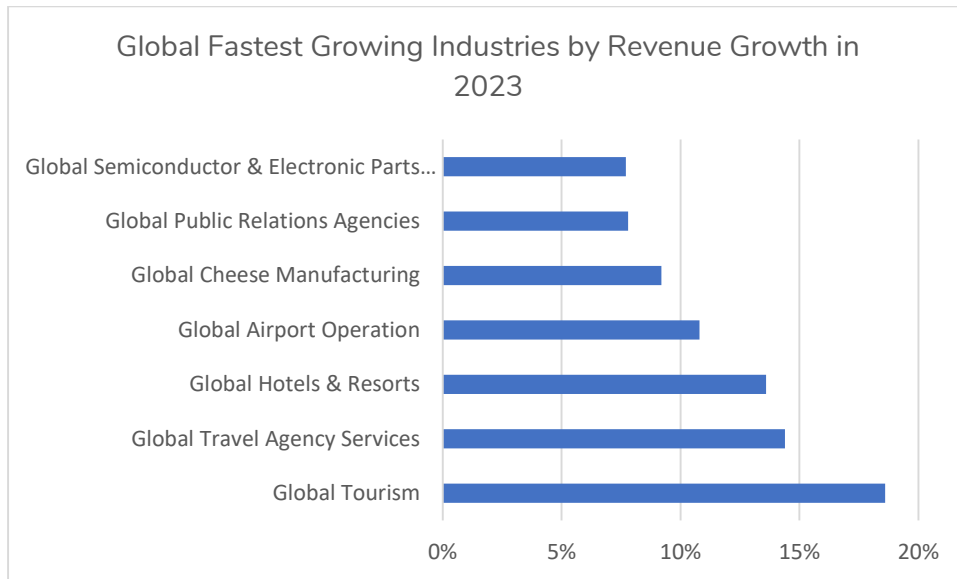


Figure 6. Global Fastest Growing Industries by Revenue Growth in 2023 (IBISWorld, 2023)

The global market is projected to experience a substantial increase during the forecast period, between 2023 and 2030, with stable growth observed in the year 2022 (360 Research Reports, 2023).

2. Exit Barriers

Exit barriers can be observed in investments in research and development of products/services and tangible asset investments (Hoyt & Sherman, 2004). Companies must continue to innovate to compete in the ever-changing dynamics of the global market, necessitating investments in research and development. Research and development typically result in significant sunk costs. These costs arise and cannot be recovered if the company decides to exit the market. The higher the investment in research and development, the greater the associated sunk costs of exiting the industry. The specific utility and limited adaptability of resources from companies like Samsung, coupled with their notably high costs, contribute to an escalation in exit expenses, rendering the choice to withdraw inefficient (Wu dkk., 2022).

3. Access to Distribution

Global companies compete to secure efficient and extensive distribution channels to reach their target markets, including partnerships with retailers, wholesalers, online platforms, and e-commerce. Companies with broader access to distribution channels have a larger market presence.

Ratio Analysis

Ratio analysis is conducted using the financial statements released by the global companies for the period 2020-2022.

Liquidity

Table 2. Current Ratio

Company	2022	2021	2020
IKEA	1.46	1.74	1.74
Walmart Inc.	0.93	0.97	0.79
Tesla Inc.	1.53	1.38	1.88
Nike Inc.	2.63	2.72	2.48
Adidas Inc.	1.27	1.56	1.38
Apple Inc.	0.88	1.07	1.36
Samsung Electronics	2.79	2.48	2.62

IKEA, Tesla, and Adidas maintained a current ratio above 1 for three consecutive periods. Nike and Samsung Electronics maintained a current ratio above 2. This indicates a strong financial position, potentially enabling the companies to handle unforeseen expenditures or capitalize on investment opportunities. However, for Walmart and Apple, there has been a decline in the ratio over three consecutive years, with the ratio falling below 1, indicating potential challenges for the companies in meeting short-term obligations with current assets.

Table 3. Acid-test Ratio

Company	2022	2021	2020
IKEA	0.77	1.07	1.04
Walmart Inc.	0.26	0.26	0.20
Tesla Inc.	0.94	1.99	1.49
Nike Inc.	1.65	1.85	1.39
Adidas Inc.	0.48	0.76	0.77
Apple Inc.	0.71	0.91	1.22
Samsung Electronics	2.01	1.92	2.11

The acid-test ratio indicates a company's ability to meet short-term obligations with its most liquid assets. Despite fluctuations, Samsung Electronics maintains a relatively high Acid-test Ratio compared to some other companies. The ratio in 2020 and 2022 is particularly strong, at 2.20 and 2.12, respectively. Nike demonstrates good liquidity with a consistently above-1 ratio. IKEA, Tesla, and Apple experienced a decline from 2020 to 2022, falling below 1, indicating a limited ability to cover short-term obligations with available assets. The ratios for Walmart and Adidas during the period 2020-2022 are below 1, signaling potential challenges in covering short-term obligations with their quick assets.

Capital Structure and Solvency

Table 4. Debt-to-Equity Ratio

Company	2022	2021	2020
IKEA	1.49	1.08	1.18
Walmart Inc.	1.38	1.57	1.54
Tesla Inc.	0.82	1.01	1.28

Company	2022	2021	2020
Nike Inc.	1.29	1.50	2.20
Adidas Inc.	2.79	1.82	2.15
Apple Inc.	5.96	4.56	3.96
Samsung Electronics	0.26	0.40	0.37

The debt-to-equity ratio provides information about how much debt a company has compared to its equity. IKEA shows a consistent increase in the debt-to-equity ratio, reaching 1.49 in 2022 from 1.18 in 2020, indicating an increasing reliance on debt to finance its operations. Walmart Inc., Tesla Inc., and Nike Inc. experienced a decrease in the debt-to-equity ratio, reflecting strategic efforts to reduce financial leverage. However, Walmart Inc. and Nike Inc. still exhibit a significant reliance on debt. Adidas Inc. and Apple Inc. also demonstrate a dependence on debt with significant volatility, where the debt-to-equity ratio surged to 2.79 and 5.96 in 2022 from 1.82 and 4.56 in 2021, signaling potential changes in capital structure and financial risk. Samsung Electronics witnessed a declining trend in the debt-to-equity ratio, reaching 0.26 in 2022 from 0.40 in 2021, indicating a decrease in financial leverage and increased financial stability.

Table 5. Long-term Debt to Equity Ratio

Company	2022	2021	2020
IKEA	0.56	0.54	0.63
Walmart Inc.	0.38	0.47	0.54
Tesla Inc.	0.12	0.12	0.15
Nike Inc.	0.58	0.74	1.17
Adidas Inc.	1.06	0.68	0.83
Apple Inc.	2.92	2.57	2.34
Samsung Electronics	0.04	0.11	0.10

During the period 2020-2022, the analyzed global industry companies exhibited variation in the long-term debt-to-equity ratio. IKEA maintained stability with a relatively stable ratio, while Walmart experienced a decrease, indicating reduced financial risk. Tesla remained conservative with a low ratio, signaling a more cautious approach to debt. Nike successfully reduced the ratio after 2020 but remained relatively high, raising concerns about the company's debt level. Adidas and Apple experienced a significant increase in the ratio, requiring further monitoring regarding the company's ability to cover debt obligations. Apple's long-term debt-to-equity ratio during the period 2020-2022 reflects the company's policy to use more debt as a financing source. However, if the company has a high level of profitability and a solid ability to repay debt, Apple may effectively manage financial risks. Meanwhile, Samsung Electronics demonstrated a highly conservative financial structure with a low ratio, indicating lower financial risk. This analysis highlights the diversity of financial strategies and financial risks among various global industry companies.

Profitability

Table 6. Return on Assets Ratio

Company	2022	2021	2020
IKEA	0.04	0.08	0.10
Walmart Inc.	0.06	0.05	0.06
Tesla Inc.	0.16	0.10	0.03
Nike Inc.	0.15	0.16	0.08
Adidas Inc.	0.04	0.10	0.03
Apple Inc.	0.29	0.28	0.18
Samsung Electronics	0.12	0.09	0.13

The Return on Assets (ROA) analysis from 2020-2022 highlights the operational efficiency and profitability of the companies. IKEA shows a declining trend in ROA, decreasing from 0.1 in 2020 to 0.04 in 2022, indicating a decrease in its ability to generate profits from its assets. Walmart Inc. maintains a relatively stable ROA, ranging around 0.06, reflecting consistent efficiency in leveraging its assets to generate profits. Tesla Inc. and Nike Inc. experienced substantial increases in ROA, soaring to 0.16 and 0.15 in 2022 from 0.03 and 0.08 in 2020, indicating a significant improvement in profitability and operational efficiency. Adidas Inc. exhibits fluctuations in ROA, with a significant decline in 2022 to 0.04, signaling a decrease in profitability. Apple Inc. shows consistent ROA improvement over three years, reaching 0.29 in 2022, indicating increased efficiency in utilizing assets to generate profits. Samsung Electronics experiences slight fluctuations in ROA but remains relatively stable at 0.12 in 2022, demonstrating sustainable ability in profit generation.

Table 8. Return on Common Equity Ratio

Company	2022	2021	2020
IKEA	0.07	0.14	0.18
Walmart Inc.	0.15	0.16	0.19
Tesla Inc.	0.28	0.19	0.04
Nike Inc.	0.40	0.45	0.32
Adidas Inc.	0.12	0.28	0.07
Apple Inc.	1.97	1.50	0.88
Samsung Electronics	0.16	0.13	0.10

The Return on Equity (ROE) analysis from 2020-2022 reveals the patterns of companies' abilities to generate profits for shareholders. IKEA shows a declining trend in ROE, decreasing from 0.18 in 2020 to 0.07 in 2022, indicating a significant decline in the company's profitability compared to shareholders' equity. Walmart Inc. also exhibits a decline in ROE from 0.19 in 2020 to 0.15 in 2022. Tesla Inc. experiences a substantial increase in ROE, rising from 0.04 in 2020 to 0.28 in 2022, signifying a significant improvement in the company's profitability concerning its equity base. Nike Inc. consistently demonstrates strong ROE, reaching 0.40 in 2022, reflecting its sustainable ability to generate profitable returns for shareholders. Adidas Inc. shows fluctuations in ROE, with a significant decline in 2022 to

0.12, indicating potential challenges in maintaining previous levels of profitability compared to equity. Apple Inc. and Samsung Electronics show consistent increases in ROE over three years, indicating improvements in the companies' profitability and efficiency in leveraging equity to generate profits.

Table 9. Gross Profit Margin

Company	2022	2021	2020
IKEA	0.14	0.17	0.21
Walmart Inc.	0.24	0.24	0.24
Tesla Inc.	0.26	0.27	0.20
Nike Inc.	0.46	0.45	0.43
Adidas Inc.	0.47	0.95	0.50
Apple Inc.	0.43	0.42	0.38
Samsung Electronics	0.37	0.40	0.39

During the period 2020-2022, the gross profit margins of global companies exhibited diverse trends, reflecting the dynamic nature of their respective industries. In particular, the furniture retail giant IKEA experienced a decline in gross profit margin from 0.21 in 2020 to 0.14 in 2022, indicating potential challenges or shifts in the competitive landscape. Conversely, the retail giant Walmart Inc. and technology pioneer Apple Inc. maintained stable gross profit margins of 0.24 and 0.43, respectively, demonstrating resilience and stability in their operations. Tesla Inc. saw a slight increase from 0.20 to 0.26 in 2022, suggesting improved operational efficiency or a favorable market environment. Nike Inc. and Adidas Inc. showed varying trends, with Nike's margin increasing from 0.43 to 0.46, while Adidas experienced fluctuations and decreased to 0.47 in 2022. However, Adidas experienced the highest gross profit margin in 2021 compared to other companies through the period 2020-2022. Samsung Electronics maintained a relatively stable gross profit margin ranging from 0.37 to 0.40, indicating its ability to navigate market fluctuations.

Table 10. Net Profit Margin

Company	2022	2021	2020
IKEA	0.03	0.06	0.07
Walmart Inc.	0.02	0.02	0.03
Tesla Inc.	0.19	0.13	0.04
Nike Inc.	0.13	0.13	0.07
Adidas Inc.	0.03	0.01	0.02
Apple Inc.	0.25	0.26	0.21
Samsung Electronics	0.18	0.14	0.11

The analysis of Net Profit Margin (NPM) from 2020-2022 provides insights into the profitability of companies. IKEA exhibits a declining and relatively low NPM, dropping from 0.07 in 2020 to 0.03 in 2022, indicating a decrease in the percentage of revenue translated into net profit. Walmart Inc. consistently maintains a low NPM in the range of 0.02, suggesting thin profit margins compared to its revenue. Tesla Inc. experiences a significant

increase in NPM, rising from 0.04 in 2020 to 0.19 in 2022, indicating improved profitability and cost management. Nike Inc. has maintained an NPM of around 0.13 in the last two years, demonstrating a stable ability to convert revenue into net profit. Adidas Inc. shows a slight increase in NPM, going from 0.02 in 2020 to 0.03 in 2022. Apple Inc. displays a consistent NPM ranging from 0.21 to 0.26, reflecting a strong ability to generate profit compared to its revenue. Samsung Electronics experiences a consistently moderate increase in NPM, reaching 0.18 in 2022, indicating improved efficiency in converting revenue into net profit.

CONCLUSION

From the findings of Porter's five forces analysis, the global industry faces high barriers to new entrants, primarily because established companies have leveraged economies of scale and made significant investments. Large corporations such as Walmart, Nike, and Intel enjoy substantial economies of scale, creating barriers for new entrants. Substantial initial capital is required to compete in the global industry, especially in global retail and businesses with complex supply chains. Both factors pose a moderate to low threat for new entrants. Companies with strong economies of scale, such as Nike Inc. and Samsung Electronics seem to be able to manage liquidity effectively as they have higher liquidity ratios compared to other firms, enabling them to face unforeseen expenses and seize investment opportunities. The high capital investments made by established companies act as barriers for new entrants. However, positive trends in ROA and ROE indicate that these investments yield fruitful results. Supplier bargaining power varies, but effective supply chain strategies can benefit companies. Studies on supplier bargaining power found that companies with supply chains spread across multiple countries, as in the global industry, have higher bargaining power and low switching costs, facilitating ease of supplier transition and providing flexibility in negotiations. A decentralized supply chain strategy gives companies a strong position and reduces supplier bargaining power, reflected in stable profitability. A dispersed supplier network lowers switching costs, resulting in low supplier bargaining power and positively influencing profitability. Companies with more stable capital structures, such as Samsung Electronics, can face lower risks associated with price fluctuations or supply disruptions. Meanwhile, companies with volatility in capital structures, like Apple Inc., may encounter higher financial risks. From the study of buyer bargaining power, it is found that global market customers tend to be price-sensitive, and low switching costs for customers enhance their bargaining power, thereby driving competition in the global industry. Buyers wield significant power, particularly concerning prices and ease of switching. According to Hampton and Stratopoulus (2015), the bargaining power of buyers or suppliers is reflected in the gross profit margin, and a lower gross profit margin is indicative of high bargaining power from buyers and suppliers. IKEA and Walmart were found to have lower gross profit margins compared to other companies, and given their application of the cost leadership strategy, this suggests that the primary pressure on the gross profit margin stems from the buyers. The lower gross profit margins may signify that these companies are operating in markets where customers hold significant influence, demanding lower prices and pushing the companies to prioritize cost efficiency in response to the strong bargaining power of buyers.

REFERENCE

- 360 Research Reports. (2023). Global Market Size In 2023: Growth Opportunities and Future Outlook 2030: <https://www.linkedin.com/pulse/global-market-size-2023-growth-opportunities-future/>
- Alden, M. (2012). Dividend Monk Disciplined Dividend Stock Research. 7 Companies with Unrivaled Economies of Scale: <https://www.dividendmonk.com/7-companies-with-unrivaled-economies-of-scale/>
- Ali, F. A. (2019). Garuda Indonesia: A turbulent journey to global expansion. *Management Practices in Asia*, 49-63. doi:https://doi.org/10.1007/978-3-030-19662-2_5
- Anastasiu, L., Gavris, O., & Maier, D. (2020). Is human capital ready for change? A strategic approach adopting Porter's five forces to human resources. *Sustainability*, 12(6). <https://doi.org/10.3390/su12062300>
- Bal, M., & Pawlicka, K. (2021). Supply chain finance and challenges of modern supply chains. *Scientific Journal of Logistic*, 17(1), 71-82.
- Besanko, D., Dranove, R., & Shanley, M. (2000). *Economics of Strategy*. New York: Wiley.
- Bogers, M., Hadar, R., & Bilberg, A. (2016). Additive manufacturing for consumer-centric business models: Implications for supply chains in consumer goods manufacturing. *Technological Forecasting and Social Change*, 102, 225-239. <https://doi.org/10.1016/j.techfore.2015.07.024>
- Bruil, G. H. (2018). The relevance of Porter's five forces in today's innovative and changing business environment. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3192207>
- Business Insider. (2016, January). Business Insider. Retrieved from How IKEA Creator Ingvar Kamprad Built The World's Largest Furniture Retailer and a \$39 Billion Fortune: <https://www.businessinsider.com/ingvar-kamprad-10th-richest-2016-1>
- Carlton, D., & Perloff, J. (1994). *Modern Industrial Organization*. Cambridge, MA: The MIT Press.
- Cioca, L., Bogdan, L., & Cioca, A. (2007). Production flexibility and adapting to market changes. *IFAC Proceedings Volumes*, 40, 777-782. <https://doi.org/10.3182/20070927-4-RO-3905.00128>
- Demsets, H. (1997). *The Economics of the Firm: Seven Critical Commentaries*. Cambridge: Cambridge University Press.
- Dias, S., Pedro, E., & Matos, F. (2023). A Porter's five forces model proposal for additive manufacturing technology: A case study in Portuguese industry. *Procedia Computer Science*, 217, 165-176. <https://doi.org/10.1016/j.procs.2022.12.212>
- Discounted Cash Flow. (2023, November 28). Discounted Cash Flow. Diambil kembali dari What are the Porter's Five Forces of NIKE, Inc. (NKE): <https://dcf.fm/blogs/blog/nke-porters-five-forces-analysis>
- Djajadikerta, N. F. (2017). Will implementing the Android operating system into BlackBerry Limited's products provide them with the much-needed support to improve their financial situation? *The International Journal of Business & Management*, 5(5), 127-132.

- Dobbs, M. E. (2014). Guidelines for applying Porter's five forces framework: a set of industry analysis templates. *Competitiveness Review*, 24(1), 32-45. <https://doi.org/10.1108/CR-06-2013-0059>
- Elsinah, Zahrudin, & Maftuhah. (2023). Analysis of Porter's five strengths in SD Shoppers Indonesia. *Media Jurnal Ilmiah Pendidikan*, 13(6), 1033-1041. <https://doi.org/10.35335/cendikia.v13i6.3836>
- Gao, H., Zhang, Y., & Mittal, V. (2017). How does local-global identity affect price sensitivity? *Journal of Marketing*, 81(3), 62-79. <https://doi.org/10.1509/jm.15.0206>
- Gwangwava, N., Ude, A. U., Ogunmuyiwa, E., & Addo-Tenkorang, R. (2018). Cloud-based 3D printing business modeling in the digital economy. *International Journal of E-Entrepreneurship and Innovation*, 8(2), 25-43. <https://doi.org/10.4018/IJEEI.2018070103>
- Hamed, F., & Abbasi, A. (2008). Applying integrated strategic planning and RADAR technique to find optimal course delivery policy in a virtual learning system. *The 3rd International Conference on Virtual Learning* (hal. 169-176). ICVL.
- Hampton, C., & Stratopoulus, T. C. (2015). Financial reports based proxies for bargaining power of buyers and sellers. *Academy of Management Annual Meeting*. Vancouver, Canada: Academy of Management. <https://doi.org/10.5465/AMBPP.2015.18930abstract>
- Hartmann, S. (2022). EV industry report: Are advancements in battery technology priced-in? *Nova School of Business & Economics*.
- Hoyt, J., & Sherman, H. (2004). Strategic groups, exit barriers and strategy decision constraints in high-tech companies. *The Journal of High Technology Management Research*, 15, 237-247. <https://doi.org/10.1016/j.hitech.2004.03.005>
- Hultman, J., Johnsen, T., Johnsen, R., & Hertz, S. (2012). An interaction approach to global sourcing: A case study of IKEA. *Journal of Purchasing and Supply Management*, 18, 9-21. <https://doi.org/10.1016/j.pursup.2011.11.001>
- IBISWorld. (2023, December 29). IBISWorld. Diambil kembali dari Global Fastest Growing Industries by Revenue Growth (%) in 2023: <https://www.ibisworld.com/global/industry-trends/fastest-growing-industries/>
- Isabelle, D., Horak, K., McKinnon, S., & Palumbo, C. (2020). Is Porter's five forces framework still relevant? A study of the capital/labor intensity continuum via mining and IT industries. *Technology Innovation Management Review*, 10(6), 28-41. <https://doi.org/10.22215/timreview/1366>
- Kabeyi, M. J. (2018). Michael Porter's five competitive forces and generic strategies, market segmentation strategy and case study of competition in global smartphone manufacturing industry. *International Journal of Applied Research*, 4(10), 39-45. <https://doi.org/10.13140/RG.2.2.12388.01922>
- Karuna, C. (2007). Industry product market competition and managerial incentives. *Journal of Accounting and Economics*, 43, 275-297. <https://doi.org/10.1016/j.jacceco.2007.02.004>