ISSN 2809-8587

Analysis of Market Structure in the Form of Competition and Competitiveness in Various Business Sectors in Indonesia

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Market structure is an important aspect in determining the level of competition and competitiveness of a business sector. Each business sector has different market structure characteristics, ranging from perfect competition, monopolistic competition, oligopoly, to monopoly. These differences in market structure influence the behavior of business actors in determining prices, product quality, innovation, and marketing strategies. This article aims to analyze market structures in various business sectors in Indonesia and their implications for competitiveness. The method used is a literature study by reviewing various scientific sources, government reports, and national economic data. The results of the analysis show that the agricultural sector tends to approach perfect competition, the trade and micro-enterprise sectors have characteristics of monopolistic competition, while the telecommunications, automotive industry, and banking sectors exhibit an oligopoly structure. Competitive market structures encourage efficiency, innovation, and product quality improvements, thus contributing to increased national competitiveness.
Keywords: Market Structure, Business Competition, Competitiveness, Business Sector, Indonesia

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1. Introduction

Market structure describes the characteristics of a market based on the number of business actors, the level of concentration, barriers to entry and exit, product characteristics, and the ability of business actors to influence prices. From an industrial economics perspective, market structure is closely related to company behavior and market performance. The higher the market concentration, the greater the likelihood that a company will have market power in determining prices, output, and competitive strategies. Conversely, markets consisting of many business actors with relatively low barriers to entry tend to result in more intense competition. Research on the Indonesian manufacturing industry shows that the level of concentration and price-cost margins in many subsectors are relatively high, so the industry's characteristics tend towards a tight oligopoly (Setiawan & Effendi, 2016). This condition indicates that market structure is a crucial factor in determining the level of competition and company performance.

Market structure is also influenced by the ability of new firms to enter an industry. Barriers to entry can stem from large capital requirements, technological mastery, economies of scale, access to raw materials, distribution networks, regulations, and brand strength. Research by Satriawan and Wigati (2002) shows that changes in the concentration of the Indonesian manufacturing industry are influenced not only by the number of firms entering and exiting, but also by the market share and relative size of the firms entering the industry. This suggests that the number of business actors alone is not sufficient to reflect the level of competition, as new, small-scale firms may not be able to exert significant competitive pressure on established dominant firms.

This condition is crucial for the Indonesian economy because each sector has distinct characteristics. Trade, manufacturing, agriculture, transportation, financial services, telecommunications, energy, and mining

require different capital, technology, infrastructure, human resources, and regulations. These differences lead to varying forms of competition within each sector. In the manufacturing sector, for example, industrial concentration can impact market power and company efficiency. Research by Setiawan and Effendi (2016) on 410 Indonesian manufacturing subsectors found that most subsectors have relatively high levels of concentration and price-cost margins and tend to have tight oligopoly structures.

In the food and beverage industry, market structure also has a relationship with industry performance. Hurriyah et al. (2024) found that the Indonesian food and beverage industry has high industry concentration and price-cost margins, while market structure has a positive relationship with industry performance. This condition indicates that market structure characteristics need to be considered in analyzing industrial sector development because market concentration can influence firm behavior and industry efficiency levels. Previous research by Setiawan (2014) also showed that concentration in the Indonesian food and beverage industry is related to price-cost margins, technical efficiency, and price flexibility.

Competition also exhibits distinct characteristics in the service sector. In the Indonesian banking sector, Khoirunurrofik et al. (2020) analyzed the level of competition among the ten largest banks using the Panzar-Rosse approach. The results showed an increase in the H value after the global financial crisis and a move towards increasingly competitive conditions. These findings suggest that changes in the economic and regulatory environment can influence the structure and level of competition in the financial services industry. Meanwhile, in the domestic aviation sector, recent research indicates that the market structure remains highly concentrated, with CR4 consistently above 70% during the 2019–2024 period.

Healthy business competition fundamentally benefits the economy by encouraging companies to improve efficiency, productivity, product quality, and innovation. Setiawan (2023) demonstrated that measuring competition using the Structure-Conduct-Performance approach can provide a more comprehensive picture of the competitive conditions in the Indonesian manufacturing industry. The study found that the structural dimension makes a significant contribution to the competition index and that industry performance is influenced by firm structure and behavior. Therefore, the level of competition should not be assessed solely on the basis of the number of firms, but also on market concentration, firm behavior, productivity, and the dynamics of entry and exit of firms.

In addition to domestic market structure, competitiveness is also a crucial factor in determining the ability of the Indonesian business sector to face global competition. Sembiring et al.'s (2021) research on Indonesian natural rubber in the United States shows that market structure analysis can be combined with competitiveness indicators such as Revealed Comparative Advantage (RCA), Export Product Dynamics (EPD), and Porter's Diamond approach. Recent research on Indonesian Palm Kernel Oil and Refined Palm Oil exports to G20 countries also used CR4, HHI, RCA, and DRCA to analyze the relationship between market concentration and export competitiveness. This demonstrates that the competitiveness of the business sector is determined not only by domestic market conditions but also by the ability of Indonesian products to maintain their position in the international market.

Competitiveness is not only determined by a company's ability to offer low prices, but also by productivity, product quality, innovation, technological mastery, cost efficiency, human resource quality, market access, and adaptability to changes in the business environment. In the context of MSMEs, digitalization is becoming an increasingly important factor in increasing competitiveness. Sarwoko (2025) found that digitalization of MSMEs provides benefits in increasing competitive advantage, while entrepreneurial competencies also strengthen these capabilities. Research by Gotama et al. also shows that resources, capabilities, and digitalization are related to the competitive advantage of Indonesian MSMEs in facing the international market.

The use of digital technology can also improve the sustainability and market performance of MSMEs. Budiarto et al. (2023) showed that the application of digital technology and competitive advantage influence the sustainability and market performance of MSMEs in Indonesia. These findings are supported by research by Susanti et al. (2023), which shows that digital transformation and innovation are related to MSME performance through competitive advantage. Meanwhile, research on the dynamic capabilities of Indonesian MSMEs shows that digitalization plays a role in the relationship between dynamic capabilities and competitive advantage. Thus, digital transformation can be a strategic instrument to help businesses increase efficiency while expanding their markets.

The development of digitalization has also created new competitive patterns in the trade sector. The integration of physical stores and digital channels has transformed the structure and dynamics of Indonesian retail competition. At the same time, the ability to build a digital culture and creativity is increasingly crucial for MSMEs to gain a competitive advantage. Research on MSMEs in Riau shows that digital culture and creativity play a role in building a digital competitive advantage.

Thus, market structure and competitiveness are two interrelated aspects in determining the performance of the Indonesian business sector. A competitive market structure can encourage companies to improve efficiency, productivity, innovation, and product quality. Conversely, an overly concentrated market structure can increase market power and potentially reduce competitive pressures if not balanced with adequate oversight. Therefore, policies for developing the Indonesian business sector need to be directed at creating healthy competition, reducing unnecessary barriers to entry, increasing productivity, strengthening MSMEs, developing human resources, and accelerating digital transformation. With this approach, business competition will not only serve as a mechanism for maintaining market balance but also serve as an instrument for enhancing the competitiveness of Indonesian industry at the national and global levels.

2. Method

The study, entitled "Analysis of Market Structure in the Form of Competition and Competitiveness in Various Business Sectors in Indonesia," uses a descriptive qualitative approach. This approach was chosen because the study aims to understand and describe in depth the characteristics of market structure, forms of competition, and competitiveness in various business sectors in Indonesia. The study does not focus on statistical hypothesis testing, but rather on the process of interpreting various information related to competitive conditions and the business sector's ability to respond to changes in the business environment. The research subjects cover various business sectors that play a significant role in the Indonesian economy, including trade, manufacturing, agriculture, transportation and warehousing, financial services, telecommunications, energy, and mining and quarrying. These sectors were selected based on differences in characteristics such as the number of business actors, capital requirements, technological mastery, infrastructure, regulations, and barriers to market entry. These differences serve as the basis for comparing the forms of competition and levels of competitiveness between sectors.

The data used in this study is secondary data obtained from relevant and reliable sources. These sources include publications from the Central Statistics Agency (BPS), the Business Competition Supervisory Commission (KPPU), Bank Indonesia, the Financial Services Authority (OJK), relevant ministries, company annual reports, industry reports, scientific journals, and previous research findings. The collected data includes information on industry structure, number of business actors, production and trade developments, government policies, competitive conditions, innovation, technology utilization, and competitiveness indicators.

Data collection techniques were conducted through documentation and literature studies. The documentation study was conducted by reviewing official reports, policy documents, sectoral statistics, and industry development reports. Meanwhile, the literature study was conducted by reviewing books, scientific journals, and previous research relevant to market structure, business competition, competitiveness, industrial economics, and digital transformation.

Data analysis used the Miles, Huberman, and Saldaña model, which includes data condensation, data presentation, and drawing and verifying conclusions. The obtained data was first selected and grouped based on market structure, form of competition, and competitiveness. Next, the data was presented in descriptive form and compared across sectors to identify emerging patterns and trends.

Data validity was verified through source triangulation, comparing information from various official sources and scientific literature. The analysis focused on the number and characteristics of business actors, market entry barriers, concentration levels, competitive strategies, innovation, productivity, technology, market access, and the business sector's ability to face domestic and global competition. This method is expected to provide a comprehensive overview of the market structure and competitiveness of various business sectors in Indonesia and generate relevant recommendations for the development of healthy and sustainable business competition.

3. Results And Disccusion

Based on the results of a descriptive qualitative analysis of various secondary data sources, it was found that the market structure and level of competition in various business sectors in Indonesia exhibit diverse characteristics. These differences are influenced by the number of business actors, capital requirements, technological mastery, infrastructure availability, regulations, product characteristics, and barriers to market entry and exit. The study results indicate that there is no single form of market structure that applies uniformly to all business sectors. Some sectors are characterized by relatively high competition due to the large number of business actors, while others tend to be concentrated due to the need for large investments, specialized technology, and complex infrastructure.

In the trade sector, analysis shows that competition tends to be more open and dynamic. The large number of businesses, from micro, small, medium, and large corporations, leads to competition through price, product quality, product variety, location, service, promotion, and ease of transactions. The development of e-commerce further intensifies competition, allowing businesses to reach consumers beyond their operational areas. This situation provides opportunities for MSMEs to expand their markets, but simultaneously increases demands for digital capabilities, service quality, and distribution speed. Therefore, the competitiveness of the trade sector is increasingly determined by the ability of businesses to adapt to changing consumer behavior and technological developments.

In the manufacturing sector, the market structure exhibits a more complex level of competition. Manufacturing requires capital, technology, raw materials, skilled labor, and a relatively large distribution network. Studies show that companies with large production scales have advantages in cost efficiency and market dominance. Some manufacturing subsectors also show a tendency toward concentration among large companies, potentially leading to an oligopoly in the competitive structure. However, the presence of small and medium-sized enterprises (SMEs) continues to exert competitive pressure, particularly in the food, beverage, textile, craft, and various locally produced industries. The competitiveness of the manufacturing sector is strongly influenced by the ability to innovate, increase productivity, utilize technology, and produce products of a quality that meets domestic and international market standards.

In the agricultural sector, market structures tend to be characterized by a large number of business actors, but the majority are small-scale enterprises. The large number of farmers and business actors does not always indicate a strong bargaining position because access to markets, price information, capital, technology, and distribution networks remains limited. In certain supply chains, small business actors remain dependent on traders or intermediaries. This situation can reduce producers' ability to obtain optimal added value. Therefore, increasing the competitiveness of the agricultural sector requires strengthening farmer institutions, utilizing technology, increasing productivity, developing agricultural processing industries, and expanding market access.

In the transportation and warehousing sector, competition is influenced by infrastructure, distribution networks, operational costs, technology, and business scale. Digitalization has transformed competitive patterns through transportation applications, goods tracking systems, the use of logistics technology, and the integration of services with e-commerce. Businesses that can provide fast, safe, affordable, and accessible services have a greater opportunity to increase market share. However, capital requirements and network control can be barriers for new companies. Therefore, the competitiveness of this sector is closely linked to logistics efficiency and infrastructure quality.

In the financial services sector, the market structure exhibits competitive characteristics influenced by capital requirements, regulations, technology, and consumer trust. Banks and financial institutions must compete through service quality, interest rates, ease of transactions, security, product innovation, and the use of digital technology. The emergence of financial technology has also increased competitive dynamics by offering faster and more flexible services. However, strict regulations and high capital requirements create relatively high barriers to entry in this sector. Competitiveness is increasingly determined by the ability of financial institutions to develop digital services while maintaining security and consumer trust.

In the telecommunications sector, competition tends to be more concentrated because network development requires significant investment. Network infrastructure, spectrum, technology, and coverage are key factors determining a company's competitiveness. Competition occurs through tariffs, network quality, internet speed, service coverage, and digital product innovation. Although the number of business actors is not as large as in the trade sector, competition still occurs through improvements in service quality and efficiency. The development of digital technology requires telecommunications companies to continuously invest to maintain competitiveness.

In the energy sector, particularly electricity and gas, analysis shows a relatively concentrated market structure. This condition is related to the significant investment requirements, infrastructure development, network control, resource characteristics, and government regulations. High barriers to entry mean that not all companies can easily enter the market. Therefore, competition in this sector is determined not only by market mechanisms but also by government policies. The competitiveness of the energy sector is closely related to efficiency, energy availability, technological development, diversification of energy sources, and the ability to meet the needs of society and industry.

In the mining and quarrying sector, the market structure also exhibits characteristics with relatively high barriers to entry. Control of natural resources, significant capital requirements, mining technology, infrastructure, and licensing are factors that influence the industry structure. Companies with greater capital and technological capabilities have a stronger opportunity to dominate production activities. However, the competitiveness of the mining sector cannot be measured solely by the ability to produce mining materials. Developing downstream processing is a crucial factor in increasing added value and strengthening Indonesia's position in the global value chain.

Overall, the research results show that market structure, competition, and competitiveness are closely related. Sectors with more open competition tend to provide greater room for innovation and the entry of new business actors. Conversely, sectors with high barriers to entry tend to have greater levels of concentration, requiring stronger competition oversight and regulation. These structural differences indicate that competition policy cannot be applied uniformly across all sectors.

From a competitive perspective, it was found that technology, productivity, innovation, human resource quality, access to financing, infrastructure, and market entry capabilities are the primary factors determining a business's competitive position. Digitalization is becoming increasingly important because it can open market access and improve operational efficiency. However, digitalization can also increase concentration if it is dominated by a single company or platform.

Based on the triangulation of various sources, it can be concluded that increasing the competitiveness of Indonesia's business sector requires a balance between healthy competition and strengthening the capacity of business actors. The government needs to reduce unnecessary barriers to entry, strengthen oversight of anti-competitive practices, improve infrastructure quality, expand access to financing and technology, and strengthen MSMEs in the national supply chain. Thus, a healthy market structure can serve as a foundation for increasing productivity, innovation, investment, and the sustainable competitiveness of various Indonesian business sectors..

4. Conclusion

Based on the results of the descriptive qualitative analysis, it can be concluded that the market structure of various business sectors in Indonesia has diverse characteristics according to the number of business actors, level of concentration, capital requirements, technology, infrastructure, and regulations. The trade sector tends to have more open competition, while the manufacturing, telecommunications, energy, and mining industries have relatively high barriers to entry, resulting in more concentrated competition. The competitiveness of business sectors is influenced by productivity, innovation, human resource quality, technological mastery, efficiency, access to financing, and the ability to expand markets. Digitalization is a crucial factor in strengthening competitiveness while creating new challenges. Therefore, a healthy competition policy, strengthening MSMEs, improving infrastructure, developing technology, and improving the quality of human resources are needed to support the sustainable competitiveness of Indonesian businesses..

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