

The Role of PT Pindad in Increasing Economic Growth

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Abstract: The role of PT Pindad in the national economy is often overlooked and considered to only contribute to the defense sector. However, PT Pindad has greater potential as a locomotive of the country's economy. The purpose of this study is to analyze the role of PT Pindad in increasing economic growth in Indonesia based on Biddle & Thomas' role theory including Role Behavior, Role Conflict and Role Ambiguity. This research method is a qualitative description using literature review. The results showed that PT Pindad plays an important role in increasing national economic growth and other industrial sectors. There are complex dynamics in PT Pindad's role behavior such as role conflict between business and defense missions. Role ambiguity arises due to dependence on government budgets. To achieve the independence of Indonesia's defense industry, it is recommended that the government focus more on encouraging PT Pindad's market expansion globally.

Keywords: Defense Industry, Economic Growth, PT Pindad, Role Theory

A. Introduction

Economic growth is defined as a process of economic transformation that occurs in a country or region on an ongoing basis. This transformation is indicated by changes for the better over a certain period of time. The economy of a country or region can be said to be growing if the economic activity of its people has a direct impact on increasing the production of goods and services (Putri & Wahyudi, 2022). Economic growth is a critical metric for evaluating the success of a nation's development in the future. Between 2019 and 2022, Indonesia's economic growth exhibited several substantial fluctuations, which were indicative of domestic and global economic conditions. The following data set provides an overview of Indonesia's economic growth from 2019 to 2022.

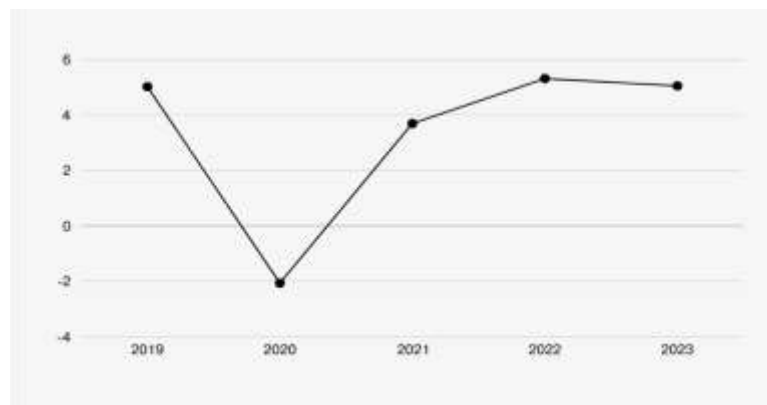


Figure 1. Indonesia's Economic Growth Data in 2019-2022
Source : Indonesia Central Bureau of Statistics (2024)

The graph above illustrates that Indonesia encountered an economic recession reaching -2.07% due to the impact of the novel Coronavirus (Covid-19) in 2020. In the subsequent years of 2022 and 2023, Indonesia's economic growth exhibited figures surpassing 5%, with notable increases of 5.31% and 5.05%, respectively. This signifies that the economy underwent a recovery process and demonstrated stability following the pandemic, despite the presence of challenges stemming from global conditions and international economic uncertainty (Badan Pusat Statistik, 2024).

Amidst the stabilizing economic climate, the government initiated a strategic shift in its economic policy focus, prioritizing the enhancement of various sectors, including the defense industry. This initiative was underpinned by the observation that nations with robust defense capabilities, such as the United States, Russia, France, and the United Kingdom, who possess advanced military equipment, have demonstrated their economic strength in the global marketplace. The defense industry's interconnection with a nation's economic landscape is a salient factor, and Indonesia, with its abundant resources, is poised to be a significant economic power (Amarilia et al., 2023). The defense industry is a critical component of a nation's economic strategy, playing a pivotal role in bolstering security and propelling national economic growth (Fride & Achnaf, 2024). The role of the industrial sector in national defense extends beyond its function as a source of military strength; it also plays a pivotal role in driving economic growth. The question of whether to prioritize the development of the industrial sector or to focus on military expenditures can be addressed by examining the "guns or butter" paradigm (Balitbang Kementerian Pertahanan RI 2024).

The presence of domestic raw materials has been demonstrated to have a significant impact on the development of a robust defense industry supply chain. This, in turn, has been shown to have a multifaceted effect on economic growth, job creation, and technological advancement. The importance of an autonomous defense industry within a nation is underscored by these observations (Situmorang & Andreas Navalino, 2023). Integrating and cooperating between stakeholders, where the

government is considered the consumer user and the defense industry is regarded as the producer, will increase competitiveness quickly in determining the development of the defense industry as a support for national economic growth (Agustina et al., 2020). The development of the defense industry as an economic sector has been shown to have a beneficial effect on defense capabilities, which in turn can lead to an increase in the overall economic projection of power. Furthermore, technological advancement has been identified as a significant factor in the advancement of the defense industry in the context of addressing security challenges, with a consequential impact on economic growth (Danielyan, 2023).

As a developing country, Indonesia has been the 16th largest arms importer worldwide from 2012 to 2021. When compared to other ASEAN countries, Indonesia ranks at the top in terms of importing weapons equipment. However, the trend in the value of Indonesia's arms equipment exports has fluctuated sharply and is significantly lower. A decline in exports was observed between 2010 and 2015, followed by a substantial increase from 2016 to 2017, driven by the acquisition of SSV.212 ships and CN-235 aircraft by the Philippines and Senegal, respectively. In 2021, a transaction of 17 million US dollars from Senegal for the repurchase of the CN-235 was recorded (Sabana et al., 2023). A thorough examination of Indonesia's export patterns reveals that the nation's defense industry possesses both competitiveness and the capacity to penetrate new markets by offering superior export products. Despite the current imbalance in its trade balance, with imports exceeding exports, Indonesia possesses the potential to augment the capacity of its defense industry by capitalizing on prospects within the collaborative arms procurement process with foreign industrial entities.

The defense industry is defined as a national industry comprising state-owned enterprises and private-owned enterprises. These entities, either individually or in groups designated by the government, are tasked with the partial or complete production of defense and security equipment, as well as the provision of maintenance services. The primary objective of this industry is to fulfill strategic interests in the realm of defense and security within the territorial boundaries of the Republic of Indonesia (Law of The Republic of Indonesia 16 of 2012 about Defense Industry, 2012). Initially, the defense industry in Indonesia was only managed by state-owned enterprises, but after the 2021 Job Creation Law, privately-owned enterprises were allowed to participate in the development of the country's defense forces. One of the State-Owned Enterprises whose business is engaged in the defense industry is PT Pindad (Persero) (Yulian et al., 2022).

PT Pindad, founded on February 11, 1983, is a manufacturer of security and defense products, including weapons, munitions, and specialized vehicles. In addition to its primary military-oriented offerings, PT Pindad also produces industrial products that support other sectors, such as transportation and commercial explosives (Pindad, 2023). PT Pindad's advancement as a defense industry has been demonstrated

through its positive development, albeit at a relatively slow pace. A comparison of PT Pindad's revenue to that of PT Dirgantara Indonesia and PT PAL Indonesia reveals that PT Pindad generated the highest revenue, with a value of Rp 3.3 trillion in 2019. This indicates that PT Pindad is the largest defense industry in Indonesia and plays a significant role in national economic growth by contributing to the independence of the defense industry in Indonesia (Sabana et al., 2023)

However, the role of PT Pindad in the context of national economic growth is often overlooked or only assessed from the perspective of its contribution to the defense sector. In fact, PT Pindad possesses significant potential to contribute more to the country's economy. This indicates a discrepancy between PT Pindad's substantial potential as a defense industry and the limited understanding of its impact on national economic growth. Consequently, there is a compelling need to undertake a more profound examination of PT Pindad's role in enhancing economic growth in Indonesia. The objective of this research is to analyze how PT Pindad, as the foremost defense industry entity in Indonesia, contributes not only to the fortification of military capacity but also to the enhancement of the national economy. This analysis will be evaluated using the role theory of Biddle & Thomas, with three indicators – Role Behavior, Role Conflict, and Role Ambiguity – serving as the primary means of assessment. The research questions guiding this study are as follows: 1) How does PT Pindad's role, as defined by Biddle & Thomas's Role Theory, contribute to national economic growth? 2) What challenges and opportunities do PT Pindad face in enhancing economic growth and global industrial competitiveness?

B. Methods

Approach and Methods

The present research employs a qualitative description approach, emphasizing exploration and in-depth understanding of PT Pindad's role in promoting economic growth in Indonesia. This approach entails sequential analysis of data to formulate cogent responses to the research questions, informed by pertinent literature. The research utilizes a literature review method, leveraging diverse secondary data sources, including books, journal articles, news articles, official reports, policy documents, and agency websites (Hastami & Abidin, 2023).

Data Collection Instrument

The data collection stage was executed through a comprehensive search and collection of materials pertinent to the theory of economic growth, the defense industry, PT Pindad's performance report, and Biddle Thomas' Role Theory, derived from diverse literatures. Subsequently, the collected materials were meticulously filtered and categorized to align with the designated topic, thereby ensuring a more structured and systematic presentation of the research findings.

Data Analysis Process

Following the collection of all pertinent data, the subsequent stages of analysis and synthesis are initiated. In this phase, the collected data is meticulously examined and explored in depth to extract detailed information. The final stage of the data analysis process involves the presentation of the research's novel findings and the formulation of conclusions. (Safitri et al., 2024). The present study is characterized by an absence of direct respondents, as it is predicated on secondary data obtained from extant literature and reports through a desk-based approach. This methodological approach ensures a thorough examination of PT Pindad's role in enhancing Indonesia's economic growth, providing a comprehensive and quality understanding of its potential and challenges in line with the objectives of this study.

C. Results and Discussion

PT Pindad Profile

PT Pindad is a strategic industry in Indonesia, operating under the form of Persero. Strategic industries are regarded as pivotal for the state, as they are capable of meeting the needs of the general public, augmenting the value of strategic natural resources, and pertain to the requirements of numerous individuals' lives concerning state security (Rafsanjani MR et al., 2023). PT Pindad, a state-owned enterprise, engages in the manufacturing, services, and trading of defense and security products, as well as industrial products under the Pindad brand. The company's vision is to become a top 100 global defense company by 2024. It aims to achieve this objective by offering high-quality product solutions through innovation and strategic partnerships.

In the military industry, PT Pindad is a prominent manufacturer of combat vehicles, munitions, and firearms. The company's flagship products, including the SS2-V5 rifle, exhibit the highest TKDN value of 51%, signifying its leadership in the Indonesian defense industry. Notably, the 5.56mm caliber small munition demonstrates a commendable TKDN value of 44%, underscoring PT Pindad's technological prowess. Furthermore, the Anoa 6x6 combat vehicle, a first-generation product, exhibits a TKDN value of 41%, signifying its significant contribution to the domestic production of defense equipment.

PT Pindad's headquarters are situated in Bandung, while its representative office is located in Jakarta and its Munitions Division is based in Malang. The company has one subsidiary, PT PEI, which operates within the manufacturing, commercial, and general services sectors. Additionally, PT Pindad has three grandchildren companies: PT PMU, which specializes in healthcare services, including medical support and pharmaceutical installations; PT PIL, which provides services; and PT PGST, which engages in trade and services. The company's workforce comprises 2,086 employees, with a board of commissioners consisting of eight individuals and a total board of

directors comprising eight members (Pindad, 2023).

Economic Growth Theory

Economic growth is frequently utilized as an indicator of the successful development of a nation or region. This theory typically addresses the components that possess the capacity to determine the increase in output per capita in the long term. It also elucidates how these components can interact with each other to engender a growth process (Aji et al., 2023). Economic growth is influenced by production and distribution activities associated with transportation and logistics systems. These systems facilitate the movement of large volumes of raw materials and commodities around the world, a process referred to as "trade." Military activity also exerts an influence on economic growth, which in turn affects the surrounding environment (Jorgenson et al., 2023).

A research journal mentions two theories of economic growth that have been developed by experts, among others. The first theory is Kaldorian Industrial Growth Theory, this theory posits that the manufacturing industry sector can help drive the growth of several other sectors while increasing economic growth. From this theory, it shows that PT Pindad as a defense industry has an influence on national economic growth and influences and opens opportunities for other sectors that partner with PT Pindad. The second theory is Neokeynes Economic Growth Theory, the seminal contributions of Roy Harrod and Evsey D. Domar lie in their recognition of the pivotal role of investment in stimulating production capacity and aggregate demand, underscoring its significance in propelling economic growth. According to the Neokeynes school of thought, investment functions as a crucial barometer in ensuring the attainment of robust economic growth. The government's role in this process is particularly noteworthy. As the 100% capital owner of PT Pindad, the government's substantial capital and guarantee provide a significant incentive for PT Pindad to pursue business opportunities, thereby facilitating the development of its defense industry (Aji et al., 2023).

Economic growth is the term used to express the expansion of the production capacity of an economy. It occurs if there is an increase in Gross National Product (GNP). In this case, PT Pindad, a defense industry operation, carries out the activity of producing goods for the needs of Indonesia's military armaments. This aspect provides information related to the process of economic activity, which has implications for the goods and services produced by economic actors. Consequently, the economy of a country grows or develops if there is an increase in Gross National Product (Syaiful et al., 2022).

Role Theory

In role theory, actors engage in behaviors that align with established cultural norms.

This theoretical framework posits that role expectations constitute shared understandings that facilitate behavior in everyday life. An individual assumes a role when they exercise their rights and obligations in a manner consistent with their position. Role theory draws from a range of orientations, theories, and disciplines (Rafsanjani, 2021). According to Biddle & Thomas, role theory is a social science theory that aims to elucidate the social roles individuals assume within society. The theory's fundamental tenets encompass the following: role explanation, role expectations, role behavior, role conflict, and role ambiguity (Biddle 1979).

According to Sarwono (1999), the following indicators of behavior with roles have been identified:

1. Expectations. Role-related expectations are defined as the expectations of others regarding appropriate behavior.
2. Norms are a form of expectation. According to Secord & Backman (2002), expectations are divided into the following categories: predictive expectations, role expectations, performance, evaluation, and sanctions (Saputro et al., 2021).

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In accordance with the aforementioned growth theory and role theory, PT Pindad, as the leading Indonesian defense industry, plays a pivotal role in enhancing national economic growth. This study will utilize Biddle & Thomas' role theory to analyze three key indicators: role behavior, role conflict, and role ambiguity.

1. Role Behavior

In role theory, roles are embodied in behavior by actors and are real, not merely expectations. Role behavior is usually classified based on the origin of the behavior and its purpose, not the specific behavior itself. Therefore, the form of role behavior can be interpreted as the work or performance of an actor (Rafsanjani, 2021). In the context of an organization, such as PT Pindad, the role behavior is defined by the manner in which the company carries out its functions and duties in accordance with performance planning in various activities, responsibilities, and partnership relationships. PT Pindad's role behavior is reflected in its various business activities.

Firstly, PT Pindad plays a pivotal role in addressing national defense imperatives by manufacturing high-quality military and non-military equipment. Beyond the production of defense equipment and military armaments, PT Pindad has diversified its production into the non-military industrial sector, encompassing the manufacture of heavy equipment and transportation, thereby generating substantial revenue and contributing to the economic growth of diverse sectors.

Secondly, PT Pindad is committed to the continuous development of innovation and technology, resulting in the production of new products for both the defense

and commercial sectors. This commitment fosters enhanced competitiveness within the market and stimulates the growth of associated supporting industries. A notable illustration of this commitment is evident in PT Pindad's waste management innovations, including the installation of rotary cooling drums as a substitute for shake out drums and dust collectors for Forging & Cast products. This innovation contributes to environmental improvement in the form of absolute 3R Hazardous Waste results of 0.8 tons and financial savings of up to Rp142.56 million, while reducing the impact of toxicity and exposure to the environment and workers.

Thirdly, PT Pindad plays a pioneering role in encouraging dependence on defense equipment imports by conducting strong defense country partnerships through technology transfer. This initiative aligns with the government's policy objective of fostering domestic industries within the country, which is expected to enhance Indonesia's GDP and contribute to economic growth.

A review of PT Pindad's 2023 Sustainability Report reveals that the company paid a total tax of Rp260.54 billion and recorded a net profit of Rp120.7 trillion. This indicates that PT Pindad contributes to the augmentation of tax revenue and the state treasury as non-tax state revenue, thereby directly supporting Indonesia's economic growth (Pindad 2023).

Furthermore, role behavior at PT Pindad in improving company performance is strongly influenced by organizational culture and leadership. A robust organizational culture can encourage employees to behave proactively and contribute more to company goals (Jayendra et al., 2022). Employees who demonstrate a comprehensive understanding of the company's vision and mission are more likely to exhibit high organizational citizenship behavior, which, in turn, has a positive impact on company performance (Wijaya et al., 2024)

2. Role Conflict

Conflict typically arises from a disparity between expectations or aspirations and the actual conditions that prevail. Expectation can be defined as the belief that anticipated outcomes will be realized or positive events will transpire in the future. The indicators of the expectation dimension include goals and strong desires. Role conflict can be categorized as either internal or external, depending on whether the conflict is experienced within or outside the company (Djafar et al., 2024). PT Pindad, a company operating within the defense industry, faces a number of challenges in the course of conducting its business. These challenges can be divided into two categories: internal and external. The impact of these challenges on national economic growth is significant.

In the context of internal conflict, PT Pindad is obligated to meet the government's demand for enhanced business productivity, with the objective of becoming a

weapons and equipment exporter. Concurrently, the company is required to maintain stringent safety standards, despite the limitation of competent human resources. Furthermore, PT Pindad is tasked with achieving a balance between its national defense mandate and its commercial objectives. The company must ensure that the production of defense equipment does not interfere with the production of commercial products that are also important for the national economy, which can affect the allocation of resources and production priorities. PT Pindad is also required to be economically efficient, even though most of the defense equipment procurement needs are still imported. Meanwhile, in external conflicts, Indonesia, as a developing country, must compete with developed countries with strong defense industries. The dynamics of government policy and global geopolitics exert a profound influence on international trade, a context in which PT Pindad has yet to establish a competitive presence in the global market.

In addition to internal governmental conflicts and external conflicts with the international community, role conflicts at PT Pindad can arise due to different demands from various stakeholders, including customers and the community. Role conflicts that are not properly addressed have the potential to reduce job satisfaction and employee productivity (Permata et al., 2021). Consequently, it is imperative for PT Pindad's management to identify sources of role conflict and implement effective strategies to manage them.

3. Role Ambiguity

Ambiguity can be defined as vagueness or confusion about what should be done in a role or situation. Role ambiguity can be defined as the state of having unclear or overlapping expectations for a role or situation. PT Pindad's role ambiguity in improving national economic growth can be seen from various perspectives, including the company's contribution to the defense sector, industrial development, and its impact on Micro, Small and Medium Enterprises. As a State-Owned Enterprise operating within the defense industry, PT Pindad is entrusted with not only meeting the demands of the nation's primary weapon systems, but also producing commercial goods that contribute to the nation's economic growth. However, ambiguity emerges when roles are not clearly delineated, both within the framework of government policy and in practical implementation.

A salient aspect of PT Pindad's role ambiguity pertains to its marketing strategy and government relations. Empirical evidence indicates that PT Pindad employs an Integrated Marketing Communication strategy that prioritizes government relations and lobbying at the bilateral level, with the objective of augmenting sales of defense equipment products (Oktora, 2017). While this strategy has the potential to augment the company's revenue, its impact on national economic growth is not immediately apparent. To date, the majority of Pindad's revenue is derived from government purchases of defense equipment, thereby rendering the company highly dependent on government budget policies. Alterations in

budgetary policies have the capacity to exert a substantial influence on Pindad's performance. Despite endeavors to diversify its product offerings, PT Pindad continues to confront substantial challenges in the realm of non-military product development. This creates ambiguity regarding the extent of PT Pindad's contribution to increasing Gross Domestic Product, especially when compared to other companies that focus on sectors that more directly contribute to economic growth, such as tourism or the manufacturing industry.

Furthermore, PT Pindad's involvement in the development of Micro, Small, and Medium Enterprises (MSMEs) is noteworthy. MSMEs constitute a pivotal segment within the Indonesian economy, contributing meaningfully to employment opportunities and income generation (Tri Amanat Sari & Wajuba Perdini Fisabilillah, 2021). However, ambiguity arises when PT Pindad's support for MSMEs is not well integrated within broader government policies. While PT Pindad possesses the potential to empower MSMEs, the absence of attention and legal protection for the sector may impede the growth and sustainability of small businesses. This suggests that while PT Pindad plays a significant role, its contribution to national economic growth may be constrained by external factors that are not entirely within its control.

Furthermore, PT Pindad's ambiguous role is evident in the context of innovation and technology. As a defense company, PT Pindad has the potential to invest in research and development (R&D) that can improve efficiency and productivity. However, if these investments are not clearly directed to support national economic growth, then their impact will be difficult to measure. Well-managed investments in R&D can contribute to broader economic growth and national development.

Challenges and Opportunities of PT Pindad in Improving National Economic Growth and Global Competitiveness

PT Pindad, a state-owned enterprise (SOE) specializing in the defense industry, confronts a range of challenges and opportunities in its pursuit of enhancing economic growth and industrial competitiveness on a global scale. The company faces a combination of internal and external factors that impact its performance and sustainability. A significant challenge lies in the constraints on technological innovation and development. While PT Pindad possesses the capacity to allocate resources towards research and development (R&D), constraints in adequate resources and policy support may impede the company's agility in adapting to the dynamic shifts in global markets (Al Aidhi et al., 2023). In addition to the aforementioned challenges, the company's competitiveness is also influenced by management and marketing factors. To expand its market share and enhance its economic contribution, PT Pindad must enhance its marketing strategy and product distribution network to reach a more extensive international market.

Conversely, the company possesses significant opportunities to bolster its competitiveness. One such opportunity is the rising global demand for defense and security products, particularly in the rapidly expanding Southeast Asia region. By leveraging its international network and forging strategic partnerships, PT Pindad stands to expand its market share and enhance its contribution to national economic growth. Furthermore, Indonesia's ongoing defense modernization program presents opportunities to augment sales within the domestic market. Technological innovation plays a pivotal role in exploring opportunities beyond the defense industry, such as the demand for heavy equipment or specialized vehicles. Collaboration with MSMEs and other industrial sectors represents an additional opportunity that merits exploration. By forging such strategic alliances, PT Pindad aims to fortify the defense industry ecosystem, thereby enhancing its overall production capacity. This, in turn, is expected to contribute to the economic growth of both local and national levels, while concurrently elevating the industry's overall competitiveness. In conclusion, the array of challenges and opportunities confronting PT Pindad in its pursuit of enhancing economic growth and industrial competitiveness on a global scale necessitate a holistic and integrated approach. By addressing the prevailing challenges and capitalizing on available opportunities, PT Pindad stands to play a more substantial role in the national economy, thereby fortifying its position in the global market.

D. Conclusions

The findings of the research indicate that PT Pindad, a state-owned defense industry, plays a pivotal role in supporting other economic sectors that contribute to Indonesia's national economic growth. This conclusion is supported by the role theory of Biddle & Thomas, which categorizes roles into three aspects: role behavior, role conflict, and role ambiguity.

The role behavior of PT Pindad in contributing to national economic growth is evident in its fulfillment of production needs for military and non-military equipment, development of sustainable innovation and technology for market competitiveness, promotion of reliance on defense equipment imports through technology transfer, and enhancement of tax revenues and non-tax state revenues. However, PT Pindad faces role conflicts in managing its operations, including internal conflicts arising from government demands to balance its dual role as a business entity and a defense entity. Externally, demands for trade competition with defense equipment exporting countries have emerged. PT Pindad's revenue is predominantly derived from the purchase of defense equipment by the government, and the company's capital is also provided by the government in full, leading to a high degree of government budget policy dependency.

The findings of this study suggest that the government should prioritize the

encouragement of PT Pindad to maximize the utilization of domestically produced defense equipment and should make concerted efforts to expand exports to foreign markets. Furthermore, there is a need for innovation in the development of technology through the implementation of a technology transfer program for all defense human resources, with the objective of enhancing their skills and gradually reducing the reliance on imported defense equipment, thereby achieving independence in the defense industry.

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