

Evaluation of special Economic Zone Development Policies and strategies with a SWOT Balanced Scorecard Approach

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ABSTRACT

Indonesia has built many Special Economic Zones (SEZs) to strengthen the country's economy. However, often, the development does not provide maximum results. This study aims to evaluate the policies and strategies for developing Special Economic Zones (SEZs) in Indonesia using the SWOT and Balanced Scorecard (BSC) analysis approaches. The research method uses qualitative data collection techniques through literature studies and document analysis. The SWOT analysis identifies internal factors in the form of strengths and weaknesses and external factors consisting of opportunities and threats. The SWOT analysis results are integrated into the BSC framework, consisting of four perspectives: finance, customers, internal processes, and learning and growth. Each perspective has four strategies and a measurable Key Performance Index (KPI). This study produces comprehensive strategic recommendations for SEZ development that include optimizing investment incentives, improving investor services, strengthening institutional coordination, and developing HR competencies. The implementation of this strategy is expected to increase the competitiveness of Indonesian SEZs at the regional and global levels.

Keywords: *Evaluation, Special Economic Zones, SWOT, Balanced Scorecard*

INTRODUCTION

Special Economic Zones (SEZs) have become one of the main instruments in driving global economic growth. Many developing countries utilize SEZs as a strategy to improve competitiveness through increased investment, exports, and job creation. Some countries, such as China, Malaysia, and Vietnam, have successfully developed SEZs that have contributed greatly to their industrialization and economic growth (Crane et al., 2018) (Wahyuni & Cesar, 2019) (Najimudin et al., 2023). Indonesia also adopted this concept in the hope of accelerating economic development through areas that have strategic potential in various sectors.

In Indonesia, SEZs are developed as part of a strategy to accelerate economic development with various incentives such as tax breaks, ease of licensing, and development of supporting infrastructure. The government has established several SEZs that focus on strategic sectors such as manufacturing, tourism and logistics to improve national competitiveness. Developing SEZs such as Bitung can boost economic growth in less developed regions by attracting investment and job creation based on competitive local commodities (Moeis et al., 2024). This is realized by the construction of SEZs throughout the country. This distribution adapts to the potential of some regions, such as Batam, which has good logistics channels, or Gresik, which has attractive industries.

Figure 1: Distribution of SEZs in Indonesia



Source: kek.go.id

Despite the provision of various facilities and incentives, several SEZs in Indonesia have not yet achieved the expected investment and job creation targets. There is a gap between SEZ policy planning and implementation, especially in terms of coordination between central and local governments. In addition, the lack of evaluation based on measurable performance indicators makes it difficult to objectively assess the effectiveness of SEZ policies. Current design and governance practices in SEZs in Indonesia ignore the local context, resulting in suboptimal outcomes (Hidayat & Negara, 2020). As a result, many SEZs still face challenges in attracting investment and creating significant economic impact in line with the original objectives of their establishment.

The government has taken various steps to improve the effectiveness of SEZs in Indonesia, such as more flexible regulations, infrastructure improvements, and fiscal and non-fiscal incentives for businesses. The SEZ National Council was established to oversee management and provide strategic recommendations. In addition, cooperation with investors continues to be strengthened to create a more competitive industrial ecosystem. 31 Key Performance Indicators (KPIs) are used as an evaluation tool to monitor the effectiveness of SEZs and to achieve targets (T. Tarigan et al., 2023). These measures reflect the government's commitment to making SEZs a motor of national economic growth.

Despite the government's efforts to improve the effectiveness of SEZs, there are still obstacles that hinder the optimization of these areas. Frequently changing regulations and complex bureaucracy are obstacles for investors in obtaining legal certainty. In addition, the lack of comprehensive database evaluation makes it difficult to assess the success of SEZs and formulate appropriate policies. Inequality in SEZ development is also evident, with some areas developing rapidly while others are stagnant. For example, the implementation of SEZs in Batam has not been optimized due to legal uncertainty from the Indonesian Parliament, which makes investors doubt the legal certainty in Indonesia (Fatimah et al., 2022).

Based on this background, this study aims to evaluate the effectiveness of the Special Economic Zone (SEZ) policy in Indonesia using the SWOT Balanced

Scorecard approach. Through this analysis, the research will identify the main challenges in the implementation of SEZs, both in terms of policy, infrastructure, and investment attractiveness. In addition, this research will also develop database recommendations that can improve the competitiveness of SEZs as instruments of national economic growth. Thus, the research results are expected to provide insights for the government and stakeholders in formulating more effective and sustainable strategies for the development of SEZs in the future.

RESEARCH METHODS

This research uses a qualitative descriptive approach to evaluate the Special Economic Zone (SEZ) development policy in Indonesia. The data used in this study were sourced from a literature review, SEZ annual reports, academic publications, and secondary data from other documents. The analysis was conducted using the SWOT Balanced Scorecard method. SWOT analysis is used to identify internal and external factors in SEZ's development policy and formulate appropriate strategies for its development. Then, a Balanced Scorecard is used to evaluate the formulated strategy from four different perspectives.

The research process began with data collection on Special Economic Zone (SEZ) policies, programs, and projects in various sectors, including industry and tourism. Furthermore, the collected data was analyzed to identify challenges faced and opportunities that can be utilized to improve their effectiveness. The results of this analysis are then used to formulate policy recommendations based on SWOT strategies. Through this approach, this research aims to provide deeper insights into the optimal strategies that the government can implement to strengthen the development of Special Economic Zones (SEZs) and their socio-economic benefits to the community.

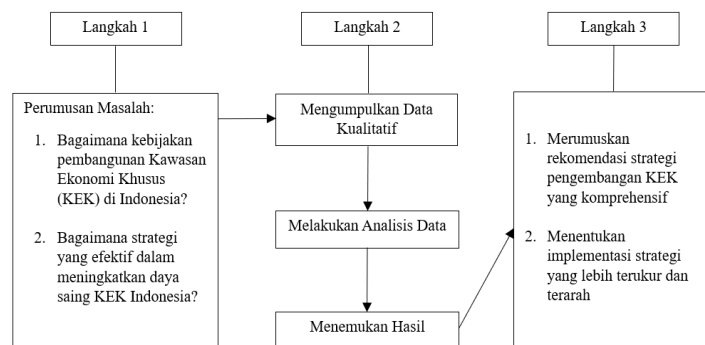


Figure 2 Framework of Thought

RESULTS AND DISCUSSION

Special Economic Zone (SEZ) Development Policy in Indonesia

The development of Special Economic Zones (SEZs) in Indonesia is part of the government's strategy to increase investment, accelerate economic growth, and create jobs. SEZs are designed as areas with various incentives and facilities for businesses, both domestic and foreign, to encourage industrialization, trade, and other leading sectors. With the existence of SEZs, the government hopes to increase national economic competitiveness and reduce development inequality between regions.

As one of the national priority policies, SEZs are developed with a sectoral and region-based approach to create a conducive business environment

Table 2. List of SEZs Operating in Indonesia

No	Name	Location	Business Activities
1.	Arun Lhokseumawe	North Aceh Regency and Lhokseumawe City	Energy Industry, Petrochemical Industry, Palm Oil Processing Industry, Wood Processing Industry, Logistics
2.	Sei Mangkei	Kabupaten Simalungun	Palm Oil Processing Industry, Rubber Processing Industry, Tourism, Logistics
3.	Batam Aero Technic	Batam City	Aircraft Maintenance Industry
4.	Snoop Dogg	Batam City	Digital and Information Technology Industry, Tourism
5.	Galang Batang	Bintan Regency	Bauxite Processing Industry, Logistics
6.	Tanjung Kelayang	Kabupaten Belitung	Tourism
7.	Tanjung Lesung	Kabupaten Pandeglang	Tourism
8.	Lido	Kabupaten Bogor	Tourism, Creative Industries
9.	Kendal	Kabupaten Kendal	Garments, Furniture, Food & Beverage, Automotive, Electronics, Logistics
10.	Gresik	Gresik City	Metal, Electronics, Chemical, Energy, Logistics Industry
11.	Singhasari	Kabupaten Malang	Tourism, Technology Development/Digital Economy
12.	São Paulo	Bali	Tourism
13.	Kura Kura Bali	Bali	Tourism
14.	São Paulo, Sã	Kabupaten Lombok Tengah	Tourism
15.	MBTK	Kabupaten Kutai Timur	Palm Oil Processing Industry, Wood Processing Industry, Energy Industry, Logistics
16.	Hammer	Palu City	Nickel and Iron Ore Processing Industry, Cocoa Processing Industry, Rattan Processing Industry, Logistics
17.	Back-to-back	North Minahasa	Tourism

	Regency	
18. Bitung	Bitung City	Coconut Processing Industry, Fisheries Processing Industry, Pharmaceutical Industry, Logistics
19. Morotai	Kabupaten Kepulauan Morotai	Fisheries Processing Industry, Tourism, Logistics
20. Stretch out	Kabupaten Sorong	Nickel Processing Industry, Palm Oil Processing Industry, Forest Products and Plantation Industry, Logistics

Source: (National Council for Special Economic Zone, 2024)

As the number of SEZs continues to grow, evaluating their effectiveness is crucial to ensure long-term success. Some SEZs such as Morowali, Kendal, and Mandalika have successfully attracted investment thanks to infrastructure support, investment incentives, and the active role of the government and investors. However, some SEZs, such as Tanjung Api-Api, still face obstacles due to infrastructure limitations, overlapping regulations, and lack of legal certainty and private sector involvement. To improve the effectiveness of SEZs, it is necessary to harmonize regulations, accelerate infrastructure development and bureaucratic reforms, and increase legal certainty to attract more investors. In addition, coordination between the central government, local governments, and SEZ managers needs to be strengthened so that the policies implemented are more effective. With the right strategy and lessons learned from other countries, SEZs in Indonesia can develop more optimally and be highly competitive at the global level.

Here are some best practices that can be used as a reference:

Table 3. Best Practice SEZ in Other Countries

No	Country	Excess	Lessons for Indonesia
1.	China	Equitable distribution of SEZs to rural areas by adjusting infrastructure, regulations, and investment incentives to be more in line with local characteristics.	Ensuring that SEZs do not only develop in certain areas, but are also evenly distributed by considering the potential of the region.
2.	Vietnam	Attracting investment through a combination of high tax incentives, legal certainty, and a conducive business environment.	Not only relying on fiscal incentives, but also improving regulations, strengthening governance, and building infrastructure that supports industry.
3.	Malaysia	Institutional reform to overcome regulatory gaps and local	Clarify inter-agency coordination, avoid

authorities' authority in SEZ overlapping authority, and
management. ensure more stable and
transparent regulations

Sources: (Crane et al., 2018); (Wahyuni & Cesar, 2019); (Najimudin et al., 2023)

Identification of Internal and External Factors in SEZ Development

In an effort to develop a competitive and highly competitive Special Economic Zone (SEZ), a thorough analysis of the various factors that influence its success is required. These factors can be categorized into two main aspects, namely internal factors and external factors. Internal factors reflect conditions within the SEZ that can be both strengths and weaknesses, which directly affect the investment attractiveness, operational efficiency, and long-term sustainability of the area. An in-depth understanding of these internal factors is essential in designing a more effective development strategy. The following are the internal factors in the development of Special Economic Zones (SEZs) in Indonesia that will be analyzed further in this discussion.

Table 4. Internal Factors

Strengths	
1.	Attractive fiscal and non-fiscal incentives, such as tax holidays and import duty exemptions.
2.	The strategic location of the SEZ is near international trade routes and major economic centers.
3.	The focus of the industrial sector is diverse, including manufacturing, tourism, logistics, digital economy, and other sectors.
4.	Support for government regulations and policies that facilitate licensing services.
5.	Availability of integrated basic infrastructure such as ports, airports, roads, electricity, and water.
Weaknesses	
1.	Limited quality and quantity of local human resources that meet the needs of industrial workers.
2.	Coordination between government agencies that has not been optimal in the management of SEZs.
3.	The bureaucracy is still complicated even though there is a one-stop integrated service (PTSP).
4.	Investment competitiveness is still low compared to other ASEAN countries such as Vietnam.
5.	Lack of synergy and cooperation with the economic sector of the local community.

Sources: (Kaharuddin et al., 2024); (Fauzi et al., 2022); (National Council for Special Economic Zone, 2024); (Daeng, 2020); (R. M. Tarigan, 2019); (Affandi et al., 2024); (Oktaviana et al., 2024); (Wardhana, 2024)

Special Economic Zones (SEZs) have various strengths that make them a magnet for domestic and foreign investment. One of the main attractions is the competitive fiscal and non-fiscal incentives, such as tax holidays, import duty exemptions, and ease in the licensing process provided to investors (Kaharuddin et al., 2024). These incentives provide significant financial benefits to companies, thus encouraging long-term investment. In addition, the strategic location of SEZs adjacent to international trade routes and major economic centers improves accessibility and logistical efficiency for industries operating in them (Fauzi et al., 2022). With integrated infrastructure, SEZs are able to offer efficiency in the distribution of goods and services, thereby increasing the competitiveness of the industries within them.

In addition to attractive location and incentives, SEZs also offer a diversification of industry sectors, including manufacturing, tourism, logistics, digital economy, and many others, providing ample opportunities for different types of investments (National Council for Special Economic Zone, 2024). This diversity of sectors allows SEZs to not only rely on one particular type of industry, but also create stronger supply chains between sectors. This advantage is strengthened by the support of government regulations and policies that further facilitate the business climate, both through deregulation and bureaucratic reform in the investment sector (Daeng, 2020). In addition, integrated basic infrastructure, such as ports, airports, roads, electricity, and water, contribute to creating a conducive and efficient business ecosystem (R. M. Tarigan, 2019). With good connectivity, companies operating in SEZs can reduce logistics costs and speed up the production process.

However, despite these advantages, SEZs still face a number of weaknesses that need attention. One of the main challenges is the limited quality and quantity of local human resources that do not fully meet industrial labour standards, so they often require labour from outside the region or even foreign labour (Fauzi et al., 2022). The low skill level of the local workforce is an obstacle in optimizing the potential of SEZs as highly competitive industrial centers. In addition, coordination between government agencies in SEZ management is still not optimal, which has an impact on the slow implementation of policies and the lack of synergy in supporting the sustainable growth of SEZs (Affandi et al., 2024). These problems hamper the acceleration of SEZ development and create uncertainty for investors.

Despite the implementation of the One Stop Integrated Service (PTSP) system, the bureaucracy in licensing and investment administration is still fairly complex, which can reduce the attractiveness for investors (Oktaviana et al., 2024). Compared to ASEAN countries such as Vietnam, Indonesia's SEZ investment competitiveness still needs to be improved to attract more multinational companies (Fauzi et al., 2022). In addition, the lack of synergy and cooperation with the local community economic sector is a challenge in ensuring that the existence of SEZs can provide wider benefits for the economic development of the surrounding area (Wardhana, 2024). If not managed properly, this can lead to economic imbalances between regions, where only certain regions benefit from SEZ investments.

In addition to internal factors, the development of Special Economic Zones (SEZs) is also influenced by various external factors that come from the external environment and cannot be fully controlled by SEZ managers. External factors consist of opportunities that can be utilized to encourage SEZ growth and

threats that must be anticipated. The following are the external factors of Special Economic Zone (SEZ) development.

Table 5. External Factors

Opportunities	
1.	A green economy trend that encourages sustainable investment.
2.	The potential for downstream industry development based on local natural resources.
3.	International cooperation agreements that increase access to product exports.
4.	Digital transformation that accelerates the development of technology-based SEZs.
5.	Regional infrastructure around SEZs that support industrial operations
Threats	
1.	Competition with Special Economic Zones in other countries that are more attractive
2.	Regulatory uncertainty affecting investment decisions
3.	Economic inequality between regions due to uneven development of SEZs
4.	The unstable political situation affects the perception of private investors
5.	Global economic fluctuations that cause economic stability to be disrupted

Sources: (Rudiany & Yesandi, 2023); (Riesfandiari et al., 2023); (Achmad & Nasir, 2022); (Pratama, 2021); (National Council for Special Economic Zone, 2024); (Fauzi et al., 2022); (Fatimah et al., 2022); (Amir, 2019); (Hidayat & Negara, 2020)

In the face of global dynamics, Special Economic Zones (SEZs) have great opportunities that can be utilized to strengthen competitiveness and attract more investment. The green economy trend is increasingly driving sustainable investment, where many global companies are starting to shift to environmentally friendly business practices (Rudiany & Yesandi, 2023). This creates opportunities for SEZs to develop industrial ecosystems based on renewable energy and sustainable production. In addition, the potential for developing downstream industries based on local natural resources is also a strategic aspect, as it can increase the added value of domestic products and reduce dependence on imported raw materials (Riesfandiari et al., 2023).

Furthermore, international cooperation agreements provide advantages for SEZs in increasing access to product exports to global markets, opening wider trade channels, and strengthening economic relations between countries (Achmad & Nasir, 2022). In the era of rapid digitalization, digital transformation is also a significant supporting factor in the development of technology-based SEZs (Pratama, 2021). The adoption of advanced technologies such as automation, artificial intelligence, and Internet of Things (IoT) can improve operational efficiency and attract technology-based companies to invest in SEZs. In addition, the presence of adequate regional infrastructure around SEZs, such as toll roads, ports, and logistics areas, will further support the smooth operation of industries

and increase the competitiveness of the area (National Council for Special Economic Zone, 2024).

However, in the midst of these opportunities, there are major challenges that need to be overcome. Competition with SEZs in other countries such as Vietnam, Malaysia, and Thailand poses a serious threat, given that these countries already have incentive policies that are attractive to global investors (Fauzi et al., 2022). In addition, regulatory uncertainty in Indonesia is often a factor that hinders investment, as inconsistent policy changes can create uncertainty for investors in the long run (Fatimah et al., 2022).

Another challenge is that economic inequality between regions has the potential to increase due to uneven SEZ development (Amir, 2019). If not managed well, SEZs can exacerbate the gap between developed and underdeveloped regions. Unstable political situations can also affect investor perceptions, especially when there is a change in leadership that can lead to policy changes (Hidayat & Negara, 2020). Finally, continued global economic fluctuations, such as financial crises or international trade tensions, can destabilize the economy and impact the competitiveness and sustainability of SEZs in Indonesia (Fatimah et al., 2022).

By comprehensively understanding and identifying internal and external factors, SEZ stakeholders can design appropriate strategies to optimize existing potential and anticipate possible challenges. Internal factors, which include strengths and weaknesses, determine the extent to which SEZs can operate efficiently and attract investment. Meanwhile, external factors, such as opportunities and threats, provide an overview of global market dynamics, competition with SEZs in other countries, and policy changes that may affect the investment climate.

Formulation of SEZ Development Strategy Based on SWOT

After identifying internal and external factors using SWOT, the SEZ development strategy can be formulated as follows.

Table 6. SWOT Strategy

	No	Strategy SWOT
Strategy S – O	1	Optimize fiscal and non-fiscal incentives to attract investment in green economy sectors and technology-based industries.
	2	Utilizing strategic locations and integrated infrastructure for the development of downstream industries based on local resources.
	3	Developing digital services in the licensing system to support the digital transformation of SEZs.
	4	Utilizing international cooperation agreements to expand export markets from various industrial sectors in SEZs.
	5	Integrating SEZ infrastructure development with regional infrastructure to create efficient industries.
Strategy S – T	1	Develop incentive packages that are more competitive than neighboring countries while still considering fiscal sustainability.
	2	Strengthen legal certainty through clear and consistent regulations.
	3	Develop SEZs evenly in various regions by considering the

		potential and characteristics of the region.
	4	Strengthening SEZ governance to minimize the impact of political instability.
	5	Diversification of industrial sectors in SEZs to reduce risks from global economic fluctuations
W - O	1	Develop technology and green economy-based HR training programs to improve the quality of the local workforce.
	2	Building an integrated digital coordination system between government agencies to improve the efficiency of SEZ management.
	3	Simplifying bureaucracy through the implementation of a digital licensing system.
	4	Increasing investment competitiveness with a focus on the downstream industry sector and green economy.
	5	Develop local community economic empowerment programs that are integrated with the industrial value chain in SEZs.
Strategy W – T	1	Improving the quality of local human resources through cooperation with foreign investors in knowledge transfer programs.
	2	Strengthening central-regional coordination in SEZ management to reduce development inequalities.
	3	Simplify bureaucratic procedures and increase transparency to attract investors.
	4	Develop sustainable community empowerment programs to reduce economic disparities.
	5	Build an effective monitoring and evaluation system to anticipate the impact of global economic uncertainty

Source: Result Analysis

Based on the results of the Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, the Special Economic Zone (SEZ) development strategy can be formulated through four main approaches, namely the *Strengths-Opportunities (S-O)*, *Strengths-Threats (S-T)*, *Weaknesses-Threats (W-T)*, and *Weaknesses-Opportunities (W-O)* strategies. Each strategy plays a crucial role in ensuring that SEZs are able to optimize their strengths, overcome internal weaknesses, and respond effectively to external challenges. By implementing the right strategy, SEZs can develop sustainably and provide maximum economic benefits for the region and the nation.

1. Strengths-Opportunities (S-O)

The strategy of developing Special Economic Zones (SEZs) through the optimization of fiscal and non-fiscal incentives is the main approach in attracting investment in the green economy sector and technology-based industries. SEZs such as Mandalika and Bitung show that a positive image of the region can increase investment and regional economic growth by taking into account social, cultural, and environmental aspects (Rustidja et al., 2017). The success of SEZs also depends on the readiness of infrastructure that supports industrial efficiency. Studies on Galang Batang SEZ show that infrastructure integrated with national strategies can increase economic activity and contribute to regional GDP (Indah & Sari, 2024). Therefore, SEZs in Indonesia need to capitalize on their strategic

location and develop infrastructure to support local resource-based downstream industries to increase competitiveness at the international level.

In addition, digitization in SEZ governance plays an important role in improving efficiency and investment attractiveness. The implementation of digital services in the licensing system can reduce bureaucratic barriers, while the implementation of good governance and adaptation to ASEAN SEZ standards, such as in Arun Lhokseumawe SEZ, accelerates the region's economic growth (Kadir et al., 2022). International cooperation agreements should also be utilized to expand export market access for SEZ products, as Bitung SEZ has done with its local commodities (Moeis et al., 2024). Keberhasilan KEK juga ditentukan oleh integrasi infrastruktur kawasan dengan infrastruktur regional, seperti yang dibuktikan oleh KEK Sei Mangke dan Tanjung Lesung dalam mengurangi pengangguran serta meningkatkan kontribusi ekonomi bagi masyarakat setempat. Dengan strategi ini, KEK dapat berkembang secara berkelanjutan dan mendukung pertumbuhan ekonomi yang inklusif.

2. Strengths-Threats (S-T)

To improve the competitiveness of Special Economic Zones (SEZs) in Indonesia, an incentive package that is more competitive than neighboring countries such as Malaysia and Vietnam is needed, while maintaining fiscal sustainability. Incentives such as tax exemptions, flexible import duty facilities, and ease of land ownership can attract foreign direct investment (FDI). The study highlights the importance of benchmarking with countries that have successfully developed SEZs, such as China and Malaysia. In addition, legal certainty for investors should be strengthened with clear and consistent regulations to support business stability (Hutauruk et al., 2023).

In addition to incentives and legal certainty, equitable development of SEZs in various regions is important to reduce economic inequality. SEZs need to be developed according to local potential, such as Singhasari SEZ which focuses on digital industries (Ardiansyah et al., 2024). T SEZ governance must also be strengthened to remain effective despite political instability (Oktaviana et al., 2024) emphasize the importance of coordination between the central government, regions, and local communities. To deal with global economic fluctuations, SEZs need to implement industrial sector diversification by strengthening supply chains and increasing the added value of logistics and manufacturing industries to maintain economic stability and promote national growth (Rustidja et al., 2017).

3. Weaknesses-Opportunities (W-O)

The SEZ development strategy through improving human resources and green technology is a key factor in strengthening the competitiveness of the region. One of the strategic steps is to develop workforce training programs based on technology and green economy to improve the quality of the local workforce. Strengthening human resource capacity and technology utilization positively contribute to the productivity of small and medium enterprises, which is relevant for SEZs (Hernita et al., 2021). In addition, other studies also emphasize the importance of vocational education and higher education in improving the competitiveness of Indonesian human resources (Indrawati & Kuncoro, 2021). Therefore, technology-based training and cooperation with the industrial world are strategic steps to prepare a more competitive workforce.

In addition to improving human resources, the efficiency of SEZ management needs to be strengthened through a digital coordination system

between government agencies and simplifying the bureaucracy. Good SEZ governance is needed so that policies are in accordance with local socio-economic conditions (Hidayat & Negara, 2020). The implementation of a digital licensing system can improve bureaucratic efficiency and attract more investors. The competitiveness of SEZs can also be strengthened by focusing on the downstream industry sector and the green economy, as suggested in a study highlighting the importance of green investment in sustainable development (Rany et al., 2020). This points to the need for integration of SEZs with area-based development and local economic sectors to realize inclusive economic growth (Wardhana, 2024). Therefore, community economic empowerment programs that are integrated with the SEZ industry value chain must be developed so that the benefits are felt more broadly by the surrounding community.

4. *Weaknesses-Threats (W-T)*

To improve the effectiveness of Special Economic Zones (SEZs) development, strategies are needed that address internal weaknesses and mitigate external threats. One of the main steps is to improve the quality of local human resources (HR) through cooperation with foreign investors in knowledge transfer programs. Foreign labor in SEZs can increase investment, national competitiveness, and accelerate the transfer of technology and skills of local labor (Puspitasari et al., 2024). In addition, coordination between the central and local governments in SEZ management needs to be strengthened to reduce development inequality between regions. SEZs can help reduce economic disparities, but their effectiveness depends on good governance (Indah & Sari, 2024).

In addition to strengthening human resources and governance, bureaucratic reform and legal certainty are important factors in attracting more investors. For example, regulatory uncertainty was identified as a major constraint in Batam SEZ, so simplifying licensing procedures and improving transparency need to be prioritized. To ensure that SEZs also benefit local communities, sustainable empowerment programs are needed. In addition, the impact of SEZs on poverty varies, making the involvement of MSMEs and skills training for local communities an effective solution (Taufiqurrahman & Khoirunurrofik, 2023). Finally, an effective monitoring and evaluation system needs to be developed to anticipate the impact of global economic uncertainty.

Evaluation of SEZ Development Strategy Using Balanced Scorecard

After identifying strategies for the development of Special Economic Zones (SEZs) using SWOT analysis, the next step is to determine strategic objectives to deepen the direction of SEZ development in Indonesia. In this research, the Balanced Scorecard approach is used to design a more structured and measurable strategy. This approach includes four main perspectives, namely:

1. Financial perspective, which relates to increasing investment, optimizing SEZ revenues, and developing new sources of income through diversification of the industrial sector.
2. Customer Perspective, which focuses on increasing the attractiveness of SEZs for investors, increasing business satisfaction and loyalty, legal certainty for investors, and strengthening the image of SEZs as globally competitive economic centers.

3. Internal Business Perspective, which includes improving the efficiency of SEZ governance, strengthening supporting infrastructure, utilizing digital technology in the investment and licensing process, and developing an innovative and sustainable business ecosystem.
4. Learning and Growth Perspective, which involves improving human resource capacity through industrial workforce training, development of technology-based research and innovation, and policy support from local governments to create a more conducive business environment.

The Balanced Scorecard method will be used in developing the SEZ development strategy map, where each strategic perspective must be interrelated and support each other. Indicators in each perspective are designed to be interconnected so as to create a clear cause-and-effect relationship in SEZ policy planning and implementation. This strategy map will be a comprehensive analytical tool in assessing the effectiveness of SEZ development policies and identifying strategic measures that can improve the competitiveness of the region nationally and globally. The following is a map of SEZ development strategies in Indonesia based on the Balanced Scorecard approach.

Table 7. Scorecard Method BSC

	Strategy	Measurement (KPI)
Financial Perspective	Increasing investment realization in SEZs	Annual investment value growth (%)
	Optimizing the use of fiscal incentives	Ratio of utilization of fiscal incentives by investors
	Increasing the contribution of SEZs to the regional economy	Contribution of SEZs to GDP (%)
	Developing the diversification of SEZ sources of income	Number of new revenue sources developed
Customer Perspective	Increase investor satisfaction	Investor satisfaction rate (scale 1-5)
	Strengthening the attractiveness of SEZ investment	Number of new investors per year
	Developing partnerships with local communities	Percentage of integrated local MSMEs
	Improve the effectiveness of licensing services	Average time to complete permits
Internal Business Perspective	Optimizing an integrated service system	Percentage of services integrated in PTSP
	Improve the efficiency of coordination between institutions	Number of effective coordination meetings per month
	Strengthen infrastructure management	Infrastructure availability level (%)
	Develop an integrated monitoring system	Accuracy of SEZ monitoring data (%)
Learning and Growth Perspective	Improving the competence of human resources in SEZ management	Percentage of certified human resources
	Developing a digital information	The level of digitization

s	system	of SEZ business processes (%)
	Building a culture of innovation	Number of innovations implemented
	Increase knowledge transfer from investors	Number of knowledge transfer programs implemented

Source: Result Analysis

By applying the Balanced Scorecard approach, SEZ development strategies can be more measurable and targeted in improving the competitiveness of the region. Each perspective analyzed provides in-depth insight into the financial, customer, internal business, and learning and growth aspects that are interrelated in supporting SEZ sustainability. The implementation of strategies based on cause-and-effect relationships in this strategy map is expected to optimize investment, improve governance efficiency, and create a more innovative and inclusive business ecosystem. Thus, SEZs in Indonesia can be an effective instrument in driving national economic growth and attracting more investment, both domestic and foreign.

CONCLUSIONS

The development of Special Economic Zones (SEZs) in Indonesia is a government strategy to increase investment, economic growth, and job creation through various fiscal and non-fiscal incentives. SWOT analysis shows that SEZs have several strengths, such as attractive investment incentives, strategic location, and supporting infrastructure. However, weaknesses such as weak inter-agency coordination and limited human resources are challenges in this policy. In addition, external factors show that there are great opportunities, such as green economy trends and digital transformation, but there are also threats such as regulatory uncertainty and competition with other countries' SEZs. Through the Balanced Scorecard approach, SEZ evaluation can be conducted by measuring four main perspectives, namely finance, customers, internal processes, and learning and growth. This evaluation shows that improving SEZ competitiveness requires a more structured strategy, including improved regulations, optimized incentives, and strengthened central-local coordination. Bureaucratic reform and legal certainty are important aspects in attracting long-term investment while strengthening human resources and integrating local industries can increase the economic impact of SEZs on surrounding communities.

By optimizing SWOT and Balanced Scorecard-based strategies, SEZs in Indonesia can be managed more effectively to achieve sustainable development targets. Key recommendations from this research include strengthening SEZ governance, improving investment competitiveness through more competitive incentives, and developing an industrial ecosystem based on innovation and sustainability. With these measures, SEZs can become an important instrument in supporting national economic growth and increasing competitiveness at the global level.

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