Analysis of the Customs Supervision System in the Batam Free Trade Zone

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KEYWORDS	ABSTRACT
Customs; Batam Free Trade Zone; Customs Supervision; Fiscal Leakage; Domestic Market	*This study examines the weaknesses of the customs supervision system in the Batam Free Trade Zone (FTZ) and its implications for Indonesia's domestic market. As a free trade area with a high volume of imported goods, the Batam FTZ contains structural vulnerabilities that may be exploited for smuggling and the evasion of fiscal obligations. Using a qualitative approach, this research draws on interviews with customs officers, business operators, and customs service providers, complemented by a literature review to identify risk factors and supervisory gaps. The findings indicate that shortcomings in the supervision system stem from limited human resources, inadequate inter-agency data integration, the use of small and difficult-to-monitor ports, and significant information asymmetry between authorities and economic actors. These gaps contribute to increased risks of fiscal leakage and the circulation of unmonitored goods in the domestic market, which can disrupt price stability and fair competition. The study concludes that customs supervision in the Batam FTZ remains suboptimal and requires strengthened institutional capacity, enhanced internal controls, and the development of real-time, technology-based monitoring systems to reduce violations and maintain domestic market stability.*

INTRODUCTION

Customs is a state authority responsible for supervising the flow of goods entering and exiting the customs area, as well as ensuring the fulfillment of tax obligations and customs provisions (Gamaitarak, 2021; Iman et al., 2020; Kristinah et al., 2021; Sakti & Salsabila, 2024). As an institution that collects import duties, export duties, and excise taxes, the Directorate General of Customs and Excise (Direktorat Jenderal Bea dan Cukai — DJBC) plays a strategic role in enforcing compliance and preventing the circulation of illegal goods that have the potential to disrupt domestic market stability (Law No. 17 of 2006; Directorate General of Customs and Excise, 2024). This makes the effectiveness of the supervision system a determining factor in maintaining an orderly flow of cross-border trade (Nugraha et al., 2025).

In this context, it is essential to distinguish between supervision and the supervision system. Supervision refers to the activities of examining and monitoring compliance with applicable provisions, while the supervision system encompasses a set of procedures, mechanisms, technologies, and actors that operate in an integrated manner to support continuous oversight (COSO, 2013; OECD, 2023). Through the supervision system, Customs seeks to prevent the entry of illegal goods and minimize the risk of violations. However, various studies indicate that customs supervision in Indonesia still faces structural weaknesses,

including limited cross-agency coordination, suboptimal use of technology, and dependence on manual procedures (Milala & Ismail, 2022; Mu'tamirudin, 2025). These conditions create opportunities for customs violations through document manipulation and the use of illegal distribution channels that are difficult to detect (Kamarulah et al., 2023; Milala & Ismail, 2022; Putra et al., 2021).

In 2023, Customs recorded a potential loss of more than USD 500 million in state revenue due to the smuggling of goods such as used clothing and electronics (Kompas, 2023). This impact not only harms the country's fiscal system but also poses a threat to national economic growth (Hutasoit, 2020). To illustrate the scale of the issue, Table 1.1 presents an estimate of potential tax losses resulting from imported goods that escape supervision.

The weaknesses in supervision reveal that control gaps persist both in regulation and implementation. Previous studies have shown that air cargo terminals and major ports are not yet fully supported by adequate personnel and effective technology (Pramudyo & Arimbhi, 2018). Consequently, illegal goods can enter and circulate at lower prices, creating price distortions and unfair competition in the domestic market (Oktavira et al., 2024). This confirms that the issue of supervision not only leads to fiscal losses but also disrupts the structure and fairness of the national market (Hutauruk & Susanto, 2019).

When compared with other countries, Indonesia's supervisory challenges become increasingly apparent. Singapore has developed a real-time cargo monitoring system and implemented a National Single Window integrated across institutions (Panggabean, 2023), while South Korea utilizes an artificial intelligence-based risk engine to detect transaction anomalies quickly (Wibowo, 2025). In contrast, Indonesia still faces limitations in data integration, disparities between the number of officers and the volume of goods traffic, and a continued reliance on manual procedures that increase the risk of document manipulation and undervaluation (Kurniawan, 2024).

Additionally, inconsistent law enforcement further weakens business compliance (Bachtiar et al., 2025). Globally, the customs system refers to the concept of customs modernization, which emphasizes database integration, advanced detection technologies, and cross-authority coordination (OECD, 2023). Indonesia has implemented risk management through the CEISA 4.0 system, which includes the classification of green and red lanes (Putra et al., 2021). However, the effectiveness of this system faces particular challenges in Batam, which holds the status of a Free Trade Zone (FTZ)—a region where imported goods can enter without import duties and taxes (Florencia & Rasji, 2023). In practice, this condition opens opportunities for violations such as value manipulation, misuse of tax-free facilities, and the transfer of goods to the domestic market without official procedures (Prasetio & Suhito, 2022; WCO, 2022).

Batam is one of Indonesia's main entry points for imported goods. In 2023, approximately 62% of import flows to the Riau Islands entered through Batam's ports (BPS Riau Islands, 2024). Bandara Hang Nadim recorded more than 135 thousand tons of international cargo (Angkasa Pura I, 2024). Additionally, there are more than 90 official and unofficial ports, which increase surveillance vulnerability (BP Batam, 2024). Batam's geographical proximity to Singapore also makes it a primary transit route for illegal goods entering Indonesia's domestic market (BPS Riau Islands, 2024). Various studies show that

smuggling activities in Batam continue to occur via sea and air routes, especially through small ports with minimal supervision (Balkista, 2022; Prasetio & Suhito, 2022).

The Direktorat Jenderal Bea dan Cukai (DJBC, 2023) stated that the illegal flow of goods from Batam has significantly contributed to state revenue leakage. This situation is exacerbated by the Free Trade Zone (FTZ) status, which allows the entry of goods without import duties or taxes while within the area, but is often misused to channel goods illegally into the customs territory (Florencia & Rasji, 2023). Furthermore, common smuggling methods include under-declaration of value and misclassification of goods as document shipments. Given the high density of import traffic and limited personnel, such practices are difficult to detect during early inspection stages (Laksamana, 2013). Many of these illegal goods are discovered only after circulating in the domestic market (Adi, 2023; Edy & S.H., 2021).

This research focuses on the Batam Free Trade Zone as a strategic area that is also highly vulnerable to customs violations. The purpose of this study is to identify weaknesses within the supervisory system from regulatory, technological, and operational perspectives, and to formulate policy implications for strengthening national supervision. Customs supervision plays a vital role in ensuring compliance with tax regulations and customs procedures for imported goods entering Indonesia. However, in practice, this system still faces considerable challenges—particularly in controlling import flows and preventing illegal goods from entering the domestic market.

One of the main issues lies in the movement of goods from the Free Trade Zone (FTZ) to other parts of Indonesia without proper customs processes or tax inspections. This problem arises due to operational weaknesses, limited regulatory coverage, inadequate technological infrastructure, and weak inter-agency coordination. Such conditions result in market imbalances caused by the circulation of unverified imported goods and non-fulfillment of fiscal obligations. Therefore, this study aims to analyze the factors contributing to weak customs supervision in the Batam FTZ and assess its impact on domestic goods circulation. Moreover, it seeks to provide recommendations for improving the supervision system through regulatory enhancement, technology utilization, and operational refinement to increase oversight effectiveness and promote a more orderly domestic market.

METHOD

Types of Research

This study employs a qualitative method aimed at gaining an in-depth understanding of how the customs supervision system is implemented in the Batam Free Trade Zone (FTZ) and identifying its weaknesses. This method was chosen because it allows researchers to explore the processes, mechanisms, and surveillance dynamics occurring in the field, including how procedures are executed, how policies are implemented, and what factors influence the effectiveness of supervision.

Through the qualitative approach, the researcher analyzes relevant regulations, operational standard implementation, technology utilization, and patterns of interaction between Customs officers and stakeholders involved in the movement of goods. The research focuses on examining the extent to which the customs supervision system can prevent violations, as well as identifying the conditions that create loopholes or weaknesses in

supervision. This understanding becomes the foundation for formulating improvement recommendations so that the monitoring of imported goods can operate more effectively and in accordance with applicable regulations.

Data collection in this study was carried out through interviews with Batam Customs officers, business actors, and forwarder services involved in the shipment of goods from Batam to other regions in Indonesia. The selection of informants was conducted to ensure that the collected data reflected diverse perspectives from supervisory implementers, system users, and supporting actors within the goods distribution chain. The composition of informants was designed so that each group of actors engaged in the supervision system was proportionally represented, allowing the resulting analysis to depict the actual operational conditions in the field.

Interviews served as the main data collection technique to develop an understanding of how the customs supervision system operates within the Batam FTZ. This method enabled the researchers to gather direct insights from the parties responsible for supervision and those interacting with the system. Through these interviews, the researchers obtained information about how procedures are implemented, the challenges encountered in the field, and factors influencing the effectiveness of supervision over the flow of goods from Batam to other domestic areas.

The interviews were conducted in a semi-structured format with 14 informants, consisting of two Batam Customs officers, ten business actors who have utilized supervision loopholes in the Batam FTZ, and two forwarder service providers. The selection of informants was based on their relevance to the supervisory system. Customs officers provided information about operational mechanisms, the implementation of standard operating procedures (SOPs), and technical obstacles. Business actors offered perspectives on supervision practices from the user side, while forwarder service providers illustrated the flow of goods distribution and critical points in the supervision process. The following section presents the list of informants involved in the interviews:

Table 1. List of Interview Informants

Yes	Interview Focus	Report	Sum
1	Inspection mechanisms, implementation of supervision SOPs, use of technology, and technical constraints.	Batam Customs Officer (Reports 1-2)	2 people
2	Business actors' views on the implementation of supervision, the consistency of inspections at certain points, the identification of gaps in supervision SOPs, and experience in seeing variations in supervision enforcement in Batam FTZ.	Business Actors Who Take Advantage of Weaknesses in Supervision in Batam FTZ (Reports 3-12)	10 people
3	The flow of goods distribution, critical points of supervision in the delivery process, and interaction with officers at the inspection point.	Forwarder Services (Report 13-14)	2 people

Data obtained from the interview results were used to identify supervision patterns, potential system weaknesses, and both inhibiting and supporting factors in the implementation of the Customs supervision system in the Batam Free Trade Zone (FTZ). This information serves as the basis for analyzing how effectively the supervision system operates and how field conditions affect the entry of goods into the domestic market.

The research stages included the initial identification of problems through secondary data analysis, the preparation of interview guidelines, the selection of informants, the conduct of interviews, and the full transcription of interview results to maintain data accuracy. The findings were then compared with secondary data, such as regulations, Customs performance reports, and goods flow data, to verify and strengthen the conclusions through a triangulation process. This step ensures that the analysis is organized systematically and grounded in valid data.

The study employed qualitative data analysis techniques to understand the conditions and weaknesses of the Customs supervision system in the Batam FTZ. The analysis was carried out in several stages so that the data obtained from interviews and secondary sources could be systematically processed while remaining within the research scope—namely, the effectiveness and implementation of supervision over the flow of goods from Batam to other regions in Indonesia. The stages of data analysis used in this study include the following:

a. Data Reduction: After all interview data is obtained, the first step is to transcribe and sort the data in accordance with the focus of the research, namely the mechanism of the supervision system, the implementation of the examination, the use of technology, the point of prone to supervision, and operational obstacles faced by the officers. Data that are not relevant to the Customs surveillance system or are outside the scope of the study are eliminated. The reduction stage is carried out to ensure that the analysis is focused on the factors that affect the effectiveness of the surveillance system as well as its potential weaknesses.

b. Triangulation: Triangulation is carried out by comparing the results of interviews from Customs officers, business actors, and forwarder services with secondary data. The purpose of triangulation is to test the consistency of information, especially related to supervision procedures, prone points for inspection, and the application of operational standards. A finding is declared valid if it is supported by a data source, so that the results of the analysis become more reliable and can be accounted for methodologically.

c. Data Presentation: Data that has been reduced and verified will be presented in the form of a descriptive narrative. The presentation of data illustrates the main findings of the study, including the reality of inspection practices in Batam FTZ, weaknesses of the supervision system, and inhibiting factors of supervision. The presentation is done in a sequential manner to produce a complete picture of how the surveillance system is carried out and where the weaknesses lie.

d. Conclusion Drawn: Conclusions are drawn based on the analysis of the data that has been carried out. This stage results in an interpretation of the operational conditions that affect the control of the flow of goods in Batam FTZ, weaknesses in the supervision system, and factors that worsen the effectiveness of supervision. Conclusions are drawn objectively based on empirical data, so that the recommendations produced are within the limits of the research and relevant to the research objectives.

RESULTS AND DISCUSSIONS
Existing Customs Supervision System in Batam FTZ

Based on interviews with Customs officers in Batam, supervision within the Free Trade Zone (FTZ) is conducted using a risk management approach applied from the pre-arrival stage

of transport facilities to the process of distributing goods to domestic areas. In practice, each ship or aircraft must submit an arrival plan, followed by customs documents through the CEISA 4.0 system. The submitted data are then analyzed to determine the inspection channel. Some consignments are directed to physical inspection if categorized as high risk, while others undergo only document verification. In addition to port inspections, officers also carry out field surveillance at specific business locations if there are indications of inconsistencies between operational activities and the licenses held. These findings indicate that the supervision system is formally structured and technology-based, although its field effectiveness still depends on operational conditions (WCO, 2022).

Customs officers stated that the main challenge in supervision lies in the vast area of Batam and the large number of small ports and local docks actively used for goods distribution. Due to the limited number of officers, surveillance cannot be conducted evenly across all points of goods movement. Therefore, the strategy adopted includes regional mapping, determining supervision priorities, and allocating human resources based on risk levels. Under these conditions, surveillance cannot occur simultaneously at all points, making operational practices on the ground reliant on risk assessment, intelligence information, and officer experience. This demonstrates that the effectiveness of supervision is influenced not only by the formal system design but also by the organization's ability to manage limited resources effectively (OECD, 2023).

From a regulatory perspective, informants indicated that the main issue lies in the ever-evolving modes of violation. Smuggling patterns change alongside technological advancements and trade developments, causing surveillance policies to lag behind practical realities. Consequently, supervision tends to be reactive toward the emergence of new modes of violation. In enforcement practice, most cases are resolved administratively—either through a coaching approach for violations due to unawareness or via fines for intentional misconduct. This mechanism serves as the primary operational approach in supervisory practices within FTZ areas.

In terms of technology, the reporting system has been integrated and scanner-based inspection tools have been implemented at major ports, supported by data exchange between work units. Officers noted that this system allows for cross-sector monitoring and inter-agency coordination. However, limitations persist in smaller ports and local docks that are not yet connected to technology-based surveillance systems. At these points, supervision relies largely on field patrols that do not operate continuously, creating surveillance imbalances between major ports and informal distribution channels.

In contrast to the authorities' perspective, business actors view supervision as a predictable system. Based on interview results, business actors revealed that the intensity of surveillance is inconsistent—strict during certain periods and more relaxed during others. Their decision to distribute goods is driven more by risk calculation than normative compliance. Practices such as value understatement (undervaluation) and the use of intermediary shipping services (forwarder) are employed as strategies to minimize costs. From the perspective of business actors, supervision is regarded as an administrative barrier that can be circumvented rather than a binding legal obligation.

The informant from the forwarder service explained that the delivery of goods is generally carried out by sea from Batam to Tanjung Pinang, before continuing via land freight services to other regions of Indonesia. This route is considered safer than direct shipping through major ports. The main smuggling risk lies in interception, which is typically anticipated by delaying deliveries until conditions are deemed safe. According to the informant, the perceived legal risk is relatively low compared to the potential economic gains. The Batam Free Trade Zone (FTZ) is chosen as a strategic location due to its ease of entry for goods from abroad and the fiscal flexibility available during the initial stages of distribution.

The interview results reveal a gap between the formally structured supervision system and the operational reality characterized by numerous limitations. On the one hand, authorities rely on technology and risk management systems as the foundation of supervision. On the other, business and service actors—particularly forwarder services—interpret fluctuations in the intensity of supervision as economic opportunities. This situation illustrates that, although surveillance procedures appear administratively well-established, they have not yet been fully effective in controlling the flow of goods into domestic markets.

These field findings are further supported by secondary data showing that customs supervision in Indonesia remains concentrated at major ports, while smaller ports and local docks have not been optimally integrated into technology-based systems (Sasono, 2021). Other data confirm that weak system integration and limited monitoring coverage are the main challenges in managing the flow of goods within Free Trade Zones (Nursasi et al., 2024). Therefore, the gap between the designed system and supervision practices in the field is structural—stemming not only from the limitations of individual officers but from systemic weaknesses in institutional capacity and operational coverage.

Classification of Weaknesses in Customs Supervision in Batam FTZ

The weaknesses of the Customs supervision system in the Batam Free Trade Zone (FTZ) identified in this study are classified based on their vulnerability to violations of customs procedures. To clarify the variation in risk levels within the supervision system, these weaknesses are grouped into three categories: extreme, moderate, and low (COSO, 2013).

Weaknesses in the extreme category refer to supervisory gaps that have the greatest potential to cause direct procedural irregularities. This category includes conditions where some small ports and local docks remain unconnected to the surveillance information system, making the movement of goods unmonitored to the same extent as at major ports (Balkista, 2022). In addition, the limited number of Customs officers results in selective and uneven inspections (Mahardika & Ardiansyah, 2023). The lack of supervision at unofficial ports increases the possibility of goods being transported outside legal channels (WCO, 2022). These findings indicate that certain distribution activities still occur beyond the reach of formal supervision systems.

Weaknesses in the moderate category reflect issues that affect the consistency of supervision but do not directly create opportunities for large-scale violations. Informants from business actors revealed differences in inspection patterns between ports and variations in inspection standards among officers, allowing the intensity of supervision to be predicted. As a result, business actors adjust the timing of goods distribution according to inspection schedules

(Stiglitz, 2000). Furthermore, coordination among institutions remains unstandardized, affecting the overall effectiveness of supervision since not all inspection points apply uniform operational procedures (COSO, 2013). Weaknesses in this category reveal the existence of systemic operational problems despite ongoing supervision activities.

Weaknesses in the low category relate to administrative and technical aspects that do not directly result in unchecked goods movement but can gradually reduce the overall quality of supervision. These weaknesses include delays in data synchronization, differences in information systems between institutions, and high workloads among officers, which impact the speed and accuracy of document verification (Lestari & Wardhana, 2022). Although the impact may not be immediate, such weaknesses can accumulate over time if not addressed promptly.

The classification demonstrates that the supervision system in the Batam FTZ is not entirely ineffective but exhibits varying levels of vulnerability that must be addressed progressively according to risk level. Consequently, improvements to the supervision system should prioritize weaknesses in the extreme category, followed by those in the moderate and low categories, through institutional strengthening, system integration, and enhancement of supervisory resource capacity.

Compliance Dynamics in Customs Supervision Practices in Batam FTZ

This subchapter analyzes the dynamics of compliance in customs supervision practices in the Batam Free Trade Zone (FTZ), based on interviews with Customs officers, business actors, and forwarder service providers, using the theories of governmentality, asymmetric information, and the internal control system as analytical frameworks. The main focus of this analysis is on how business actors' compliance is formed in fulfilling import duty obligations, import taxes, and adherence to entry and exit procedures for goods in accordance with applicable customs regulations.

From the perspective of governmentality, the state seeks to build compliance through regulatory techniques that are not only authoritative but also administrative and normative, such as inspection procedures, risk management, and customs service routines (Burchell et al., 1991). However, interview results indicate that compliance in the Batam FTZ is situational and dependent on the presence of officers or specific inspection periods. One informant stated that goods distribution is deliberately postponed during the red line period and resumed when supervision becomes lax. This pattern suggests that state oversight mechanisms have not succeeded in fostering sustainable normative compliance, but instead produce a form of compliance by surveillance, which is easily abandoned when the perceived risk of violation is low (Gunawan, 2021).

This pattern implies that administrative compliance is not grounded in legal awareness, but arises merely as a response to supervisory pressure. Within governmentality theory, this reflects the state's failure to internalize compliance norms through stable and continuous administrative mechanisms (Burchell et al., 1991; Mitchell Dean, 2010). Such situational compliance aligns with findings that undervaluation and misdeclaration remain major challenges in customs systems of developing countries (Chalendard, 2020).

Weak fiscal compliance is not driven solely by individual behavior but also by the limited capacity of state supervision in building a consistent control system. Therefore, the compliance patterns identified in the Batam FTZ cannot be viewed merely as local phenomena; they also reflect structural deficiencies in cross-border trade governance. This interpretation aligns with Mailina (2023), who found that weak, continuous supervision encourages business actors to adapt behaviorally to inspection intensity.

From a regulatory perspective, the customs system normatively requires that every item moving from the Batam FTZ into the customs area be subject to import duties and taxes and be reported through valid customs documentation. The CEISA system and risk management approach are designed to establish consistent administrative control instead of reliance on intermittent supervision. However, interview findings reveal that business actors treat the intensity of supervision as the main variable in their distribution strategy. Regulations—which should guide long-term compliance—are, in practice, treated as negotiable operational boundaries. This shows that the supervisory system has not yet functioned as a binding regulatory regime.

The analysis becomes sharper when connected to asymmetric information theory. Business actors and forwarder services possess more detailed operational knowledge of inspection rhythms, vulnerable supervision points, and variations in SOP implementation at small ports compared to the information available to authorities (Stiglitz, 2000). Informants reported that deliveries are safer outside red line periods and via alternative routes. This information imbalance causes the state to lose its advantage in knowledge as a key component of effective supervision. Under this condition, violations arise not from weak regulations but from the state's limited control over field-level information. From a governmentality standpoint, this reflects weak knowledge infrastructure—an essential element for governing the modern economy.

When the state cannot produce and control information systematically, supervision loses its core capacity to maintain consistent control. The failure to ensure compliance is also linked to the suboptimal internal control system within the customs supervision structure. The COSO framework (2013) emphasizes that effective control requires a strong control environment, accurate risk assessment, consistent control activities, integrated information systems, and ongoing monitoring. Study results show that several small ports are not yet connected to the surveillance system, data integration across agencies remains incomplete, and limited human resources result in selective inspection practices (Mahardika & Ardiansyah, 2023). This demonstrates that weaknesses in supervision stem not only from individual officers but from deficiencies in the supervision system's design itself.

Together, these three theoretical perspectives reveal that the compliance problem in the Batam FTZ is systemic. Governmentality explains the failure of norm internalization; asymmetric information highlights the state's loss of informational superiority; and the internal control system exposes the weak structural foundation of oversight. Collectively, these frameworks indicate that deviations are products of a supervisory system incapable of establishing compliance as a binding social norm. If left unaddressed, this condition will have long-term and structural implications (Maulana, 2023), placing the state at risk of shifting from a strategic policymaker to a mere administrator of goods flows.

The Impact of Customs Supervision Gaps on State Revenue and the Domestic Market

Weaknesses in the implementation of customs supervision in the Batam Free Trade Zone (FTZ) have a tangible impact on state revenue and domestic market stability. The findings of this study indicate that the main problems lie in field-level supervision practices, including inconsistency in physical inspections, limited monitoring coverage at small ports, and weak inter-agency coordination. These gaps create opportunities for goods to enter the customs territory without undergoing proper verification processes. From a fiscal perspective, these conditions increase the potential for state revenue losses from import duties and taxes. Indeed, the effectiveness of supervision is a key determinant of fiscal compliance in cross-border trade (Bird & Zolt, 2019).

When supervision is inconsistent, business actors tend to maximize profits through manipulation of goods' declared values and avoidance of tax obligations. Weak verification processes and limited control over operational information heighten the risks of undervaluation and misdeclaration, which ultimately narrow the state's revenue base (Chalendard, 2020). This finding is supported by information from business actors and forwarder services who acknowledge using declaration depreciation and alternative distribution routes as strategies to reduce fiscal burdens. Thus, the results of interviews, empirical evidence, and the theoretical framework of tax avoidance reveal a direct link between weak supervision and growing fiscal leakage.

Beyond its fiscal impact, weak supervision also undermines the quality of national trade data. Accurate customs data are crucial as the foundation for trade and industrial policy formulation (OECD, 2023). When the recording and integration of goods flow data are suboptimal, the state loses the ability to map trade structures precisely. From a governmentality perspective, this reflects the state's failure to build a knowledge system as the basis for modern economic governance (Foucault, 1991; Dean, 2010). Fragmented data make it difficult for the state to monitor distribution patterns, import volumes, and product types circulating in the domestic market, leading to policy decisions that may not align with actual field conditions. Another visible effect of these weaknesses is their impact on price structures within the domestic market. Imported goods that enter without fiscal obligations can be sold at significantly lower prices than legally imported products, leading to distorted competition (Suhartono, 2016).

This cost disparity is one of the causes behind the declining competitiveness of the national industry (Czinkota et al., 2021). Information from business actors regarding the substantial price gap between illegal and legal goods reinforces findings of price pressures in the textile, electronics, and cosmetics sectors. In the long term, these conditions may reduce domestic production capacity and increase dependence on imported goods (S. Atmadja, 2014). Moreover, formal distribution chains suffer from declining price competitiveness, placing compliant business actors at an economic disadvantage. Uneven fiscal enforcement fosters a culture of non-compliance, where violations are perceived as a rational strategy for surviving market competition (Bird & Zolt, 2019). To clarify the connection between the forms of supervisory weaknesses and their corresponding impacts, Table 4.1 presents a summary of the key implications identified in this study.

Table 2. Impact of Supervisory Gaps on State Revenues and Domestic Markets

Aspects	Main Impact	Source
State revenue	The potential state revenue lost due to smuggling is around > USD 500 million per year (± Rp 7.7 trillion) from key commodities such as used clothes, textiles, and illegal electronics.	(DJBC, 2023); (Kompas, 2023)
Trading data	There is a significant difference between national import data and regional port registration data. BPS (2022) noted trade statistical anomalies in the Riau Islands which have an impact on the inaccuracy of regional import values.	(BPS, 2022)
Market price	Illegal goods are sold 20-40% cheaper than the official price, causing sectoral deflationary pressure on textile, electronics, and cosmetic products.	(Ministry of Trade, 2022); (*The Jakarta Post,* 2022)
Domestic industry	The textile and footwear industry has experienced a 30-40% decrease in production and the layoffs of thousands of workers due to the invasion of illegal imported goods.	(CNBC Indonesia, 2023); (Kompas, 2023)
Distribution	Illegal goods from Batam were identified as spreading to the Jakarta, Java, and Sumatra areas through non-formal channels and small logistics.	(Batamnews, 2023)

Source: *The Jakarta Post* (2022), BPS (2022), Batamnews (2023), CNBC Indonesia (2023), DJBC (2023), Ministry of Trade (2022), Kompas (2023),

The table shows that fiscal leakage is directly correlated with price distortions, the weakening of industrial competitiveness, and the disruption of official distribution channels. Therefore, customs supervision should not be viewed merely as an administrative procedure but as a strategic instrument for maintaining national economic stability. From a governmentality perspective, this condition reflects the absence of compliance as a norm embedded in the behavior of business actors (Hanif et al., 2022). Inconsistencies in supervision make compliance situational and dependent on the presence of authorities rather than on genuine legal awareness. In fact, the modern state operates through order, predictability, and the visibility of supervision—not merely through the imposition of sanctions (Dean, 2010). Consequently, strengthening supervision in the Batam Free Trade Zone (FTZ) should focus on ensuring inspection consistency, expanding monitoring coverage at vulnerable points, and enhancing inter-agency coordination, so that regulations become not only formally present but also practically effective.

CONCLUSION

This study concludes that the Customs supervision system in the Batam Free Trade Zone (FTZ) has not functioned optimally in controlling the flow of goods into domestic territory. Although supervision has been implemented through a risk management approach and a technology-based customs system, its effectiveness remains limited by operational constraints in the field—particularly the vastness of the supervision area, the number of small ports, and limited human resources. As a result, supervision tends to operate administratively but has not effectively controlled the overall movement of goods. The findings indicate that the main weaknesses stem from the limited number of officers, uneven technological coverage across small ports and local docks, and suboptimal information integration between institutions. These

factors create opportunities for goods to move outside official supervision channels. Meanwhile, business actors and forwarder services exploit inconsistencies in monitoring by adjusting distribution schedules and employing undervaluation strategies and alternative distribution routes. This pattern suggests that compliance is driven more by risk calculation than by genuine adherence to customs regulations.

Theoretically, these findings demonstrate that supervisory practices in the Batam FTZ have not succeeded in fostering normative compliance, as outlined in governmentality theory. The form of compliance observed is situational and heavily influenced by the intensity of supervision. From the perspective of asymmetric information, there exists a knowledge imbalance between the state and business actors, wherein operational information is more extensively controlled by economic agents than by authorities. Meanwhile, from the standpoint of the internal control system theory, the weaknesses in supervision reflect a lack of strong structural control foundations, particularly regarding system integration and monitoring mechanisms. This study concludes that the supervision problem in the Batam FTZ is both systemic and structural. Its impact extends beyond the loss of potential state revenue to include price distortions in the domestic market and a decline in national industrial competitiveness. Therefore, strengthening supervision should focus on improving system design, enhancing institutional capacity, and expanding the scope of surveillance to cover all goods distribution points.

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