Internal Control Analysis on Anti-Dumping Duty Exemptions HS 72 in Batam

Kalika Dianti Franconnie[1]*

AFFILIATION:
[1]Faculty of Economics and Business, Universitas Padjadjaran

*CORRESPONDENCE :
kal.franconnie@gmail.com

THIS ARTICLE IS AVAILABLE IN:
https://e-journal.umc.ac.id/index.php/JPK

DOI: 10.32534/jpk.v12i4.7947

CITATION:
Franconnie, K. D. (2025). Internal Control Analysis on Anti-Dumping Duty Exemptions HS 72 in Batam. Jurnal Proaksi, 12(4), 591–608. https://doi.org/10.32534/jpk.v12i4.7947

ARTICLE HISTORY:
Received:
August 31, 2025

Reviewed:
September 17, 2025

Revised:
September 22, 2025

Accepted:
October 16, 2025

Abstract

Main Purpose - This study analyzes the internal control of KPU BC Batam as a Free Trade Zone and Free Port, particularly in relation to Anti-Dumping Duties HS 72.
Method - This study provides an in-depth analysis using descriptive qualitative method with NVIVO 15 and literature review.
Main Findings - Findings reveal that, despite achieving optimal tax revenue and Organizational Performance Value (NKO), challenges remain, such as limited facilities and infrastructure, low public awareness, competency gaps, particularly in risk management and integrity, system disruptions, increasingly complex smuggling methods and the presence of unregistered ports.
Theory and Practical Implications - Strengthened governance, human resources, digital systems and enhanced coordination with relevant authorities are pivotal in mitigating smuggling risks.
Novelty - This study extends governance and risk management literature by addressing the oversight challenges related to anti-dumping duty exemptions and proposing solutions to improve inter-agency accountability within Batam Customs and Excise.
Keywords: Anti-dumping Duty, Free Trade Zone, HS 72, Internal Control, Smuggling

Abstrak

Tujuan Utama - *Penelitian ini menganalisis sistem pengendalian internal pada KPU BC Batam sebagai kawasan pedagangan bebas dan pelabuhan bebas, khususnya berkaitan dengan Bea Masuk Anti-dumping HS 72.*
Metode - *Penelitian ini menggunakan metode kualitatif deskriptif dengan memanfaatkan NVIVO 15 dan kajian literatur untuk analisa mendalam.*
Temuan Utama - *Hasil penelitian menunjukkan bahwa meskipun penerimaan perpajakan dan Nilai Kinerja Organisasi (NKO) optimal, hambatan tetap ada, antara lain keterbatasan sarana dan prasarana, rendahnya kesadaran masyarakat, kesenjangan kompetensi, gangguan sistem, metode penyelundupan yang semakin kompleks, serta keberadaan pelabuhan tidak resmi.*
Implikasi Teori dan Kebijakan - *Penguatan dalam pengelolaan, peningkatan kemampuan sumber daya manusia, penerapan sistem digital dan koordinasi antar lembaga merupakan faktor penting untuk mengurangi risiko penyelundupan.*
Kebaruan Penelitian - *Penelitian ini memperkaya literatur mengenai tata kelola dan manajemen risiko dengan menjelaskan tantangan pengawasan pada pembebasan bea masuk antidumping serta mengajukan solusi untuk meningkatkan akuntabilitas antar lembaga di Bea Cukai Batam.*
Kata Kunci: *Bea Masuk Anti-dumping, Kawasan bebas, HS 72, pengendalian internal, penyelundupan*

INTRODUCTION

Batam as one of Indonesia's Free Trade Zones and Free Ports (FTZs) receives fiscal facilities such as exemptions from import duties, VAT, income tax, and excise, as well as ease in conducting trade activities. The objective is to enhance international trade and attract investments, particularly from abroad. This is supported by Batam's highly strategic location which situated along international trade routes as part of the growth triangle between Singapore, Malaysia, and Indonesia as stated by Sparke et al. (2004) and Bunnell et al. (2011).

Figure 1. Singapura-Johor-Riau Growth Triangle
Source: Sparke et al, 2004

Batam does not impose anti-dumping duties (BMAD) on dumped goods from abroad. This has led to a high volume of steel imports in Batam (Cnbcindonesia, 2021), amounting to 107,000 tons in 2015 and increased 115% to 400,000 tons in 2019. Local steel production from the 400,000 tons only covered 24%, while the remaining 76% had to be imported. Widodo Setiadarmadji, Executive Director of IISIA (Indonesian Iron & Steel Industry Association), stated that the exemption of anti-dumping duties (BMAD) in Batam negatively affects the domestic steel industry, mainly within shipyard businesses (Cnbcindonesia, 2021). He stressed the need for strict oversight to prevent smuggling and tax evasion, noted that the current policies do not align with the objectives of DGCE (Directorate General of Customs and Excise) which are to facilitate trade and protect national industries (Kompas, 2022). Krugman and Wells (2015) argue that a nation must safeguard its local providers of goods to guarantee national security and foster job opportunities.

Under mercantilism, protectionism refers to a trade policy where nations use various strategies to restrict imports, such as raising tariffs, setting import quotas, and applying other restrictive measures to lower the volume of goods coming in (Matondang, 2024). Protectionism aims to limit foreign control over domestic markets and businesses, creating a more balanced environment for local producers. A reduction in imports helps strengthen the domestic market, as local goods and services become more widely available. This also improves productivity by making better use of technology and human resources, which in turn supports the faster development of local industries.

BMAD issue has drawn government attention and created a conondrum by the impression of frequently changing regulations. Initially BMAD is exempted if processed into finished goods but was eventually enforced even after processing through a conversion mechanism. Later, the government went back to the original exception for processed HS 72 after the Supreme Audit Agency (BPK) pointed out its inefficiency (Kompas, 2019). Implementation of good governance based on Hill & Hupe (2021) is not just a technical procedure, rather it is a complicated interaction of many factors that affect how policies are carried out that include various actors, levels, and modes of control.

Regulations are intended to enhance state revenue by considering a variety of factors during their development (Yuswanto, 2023). The shadow economy activities present substantial challenges to sustainable development by decreasing state revenue (Thanh et al., 2024). According to OECD (2017), smuggling or the exchange of contraband goods that have not been subjected to import duties, or counterfeit goods that are sold unofficially or through established businesses, is an example of illicit trade which is part of shadow economy practice.

This research intends to analyze how KPU BC Type B Batam addresses the issues brought forward by the local iron and steel industry concerning the exemption of anti-dumping duties (BMAD) on imported iron and steel products that are entering Batam. Examines how KPU BC Batam adjusts to changes in regulations, especially those concerning the enforcement of BMAD on imported iron and steel. Furthermore, the research examines how KPU BC Batam applies internal control systems to oversee imported iron and steel products that are subject to BMAD, in order to avert unlawful smuggling into other areas within the customs territory (TLDDP). Finally, it highlights the main difficulties encountered by KPU BC Batam in overseeing the transfer of these imported goods from Batam to TLDDP.

The aim of this study is to analyze the response of KPU BC Batam to the BMAD issue, review how internal control systems are put into practice, and identify the primary obstacles faced in monitoring the flow of dumped iron and steel as part of smuggling prevention efforts. This study provides an academic contribution by modifying and broadening the ideas of internal control and governance in the setting of FTZ. Although these zones benefit from lenient fiscal policies, they still necessitate strong oversight measures. It underscores the significance of adaptive control systems and multi-tiered governance that includes different parties to tackle the dangers associated with unlawful practices and shadow economy activities.

LITERATURE REVIEW

The Free Trade Zone and Free Port (FTZ) or Kawasan Perdagangan Bebas dan Pelabuhan Bebas (KPBPB), is a specific area in Indonesia that is not subject to value added tax, luxury goods tax, income tax, import duties, and excise taxes, as outlined in Ministry of Finance Regulation No. 34/PMK.04/2021 and Government Regulation No. 41/2021. Areas that are not part of the FTZ, Bonded Zones (TPB), or Special Economic Zones (SEZ/KEK) are categorized as Tempat Lain Dalam Daerah Pabean (TLDDP), in accordance with Ministry of Finance Regulation No. 173/2021. Free trade zones are created with several goals, such as increasing income from international trade, encouraging technological progress, enabling the sharing of knowledge, drawing in investments, improving competitiveness in overseas markets, supporting the industrial sector, encouraging the growth of various local businesses, generating job opportunities, and helping to increase GDP growth (Alansary & Ansari, 2023). According to Henning (2015), free trade zones are areas officially recognized by the government to support international trade and attract foreign investment, which in turn helps drive economic growth, especially in developing countries, through benefits like tax breaks, reduced duties, and customs advantages.

The shadow economy, also known as the underground economy, includes economic activities that are not reported or tracked in GDP measurements. These activities can involve both legal and unlawful business practices (Schneider & Enste, 2000). The reason people engage in smuggling is to avoid paying taxes, tariffs, and government regulations on the sale of specific goods. This activity is often linked to other illegal acts like fraud and bribery (Buehn & Farzanegan, 2011). Importing, exporting, and shipping between islands becomes unlawful if these actions do not follow the legal requirements or customs procedures set by the law. Dumping is a trade method where exporters sell their products in international markets at prices that are lower than the prices they charge in their own country (Nurcahyo et al., 2020). Dumping practices negatively impact local producers in the importing country, as cheaper foreign products can outcompete domestic producers, making it difficult for local businesses to remain viable (Siregar, 2022). This can lead to job losses, higher unemployment rates, and even business failures in the affected sectors. To provide protection, many countries have introduced regulations and tariffs aimed at shielding domestic industries from such practices. Anti-dumping regulations are established to defend domestic industries from harmful dumping practices. The implementation of these policies starts with an investigation carried out by the Indonesian Anti-Dumping Committee (KADI), which gathers evidence on imported goods suspected of being dumped, as outlined in Government Regulation No. 34 of 2011 (Akmaliya et al., 2023).

Nurcahyo et al. (2020) showed that there is a statistically significant difference in the volume of tinplate imports prior to and following the introduction of anti-dumping tariffs. There has been a decrease in imports from China and Taiwan, but imports from Korea have kept rising even though anti-dumping duties have been applied. This situation is because Korea has been able to stay competitive by using the tariff benefits provided through free trade agreements. Mahmud et al. (2022) stated that organizational culture is essential for improving performance through digital transformation by focusing on involving stakeholders, encouraging teamwork, and helping individuals grow. The way work is structured and carried out is a key element that affects how knowledge is shared and how successful the digital transformation is. Additionally, digital transformation acts as a link between a flexible organizational culture and the sharing of knowledge, which greatly helps in improving the overall performance of the organization. Identifying the root causes of strategic gaps and developing strategic initiatives are crucial for improving customs control as part of the national financial security system, based on risk management principles (Petruk et al., 2022).

RESEARCH METHOD

This research is qualitative research that takes a descriptive stance. As noted by Walidin and Tabrani (2015), qualitative research seeks to explore human or social events by forming a detailed and nuanced depiction. Typically, descriptive qualitative studies utilize an inductive analysis method, hence emphasizes the processes and interpretations from the subjects' perspectives (Fadli, 2021). The following figure 2 outlines the conceptual framework for this research.

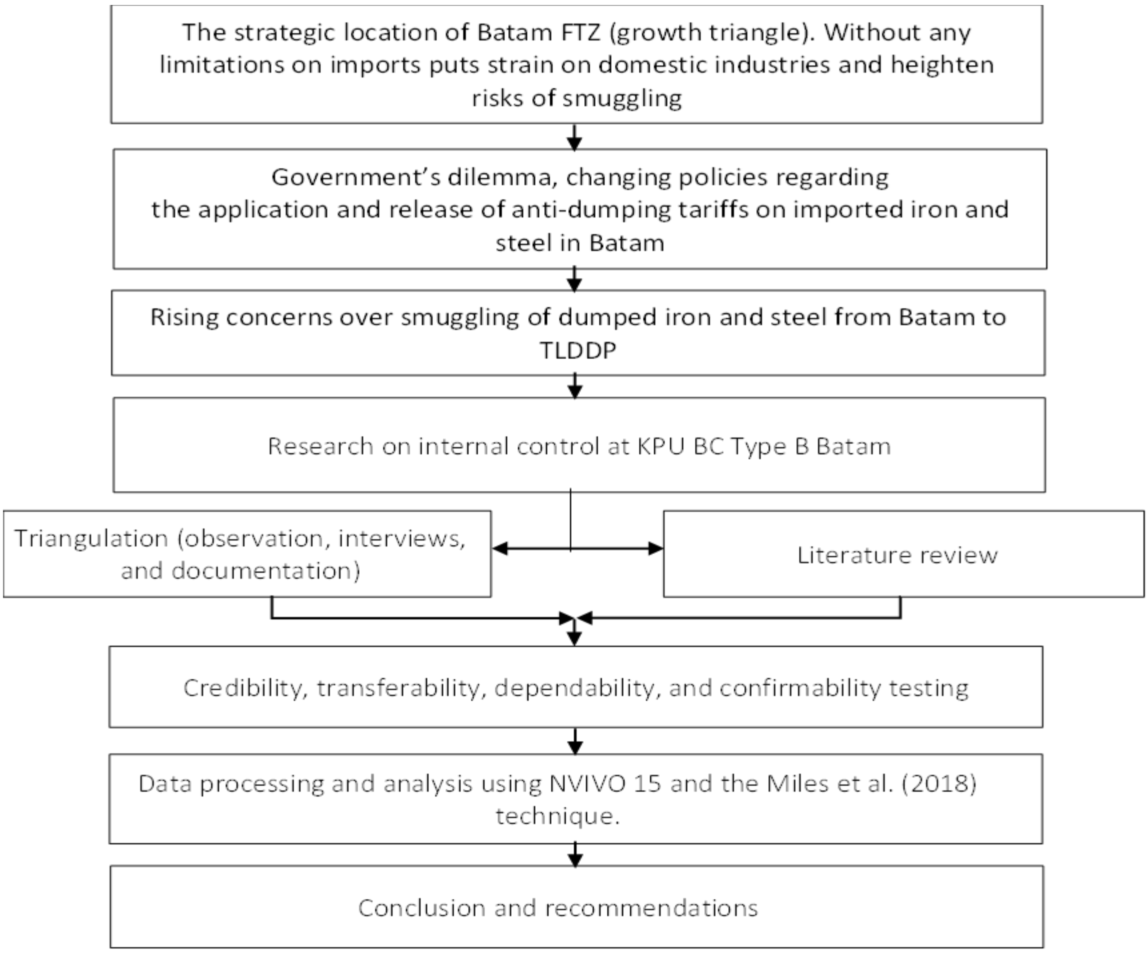


Figure 2. Conceptual Framework
Source: the author, 2024

To collect data, this study combines documentation, interviews and observation or triangulation (Sugiyono, 2015), as well as literature review and for data processing and analysis, the researcher utilized NVIVO 15. NVIVO is a type of computer-assisted qualitative data analysis software (CAQDAS) created especially to improve the validity and efficiency of the analysis procedure and research findings obtained from qualitative data (Séror, 2021). The interview lasted up to 45 minutes per informant using phone as audio recorder. The observation took place five consecutive days, with a total up to five hours each day. Transcription done using NVIVO. The three-step data analysis method of Miles et al. (2014), data reduction, display, and conclusion drawing/verification also applied by the researcher. Credibility, transferability, dependability, and confirmability test were adopted to verify the validity of the qualitative data prior to data processing and analysis using NVivo 15 and the Miles et al. (2014) technique.

The research subjects were informants from KPU BC Batam, located at Kuda Laut road, Batu Ampar, Kota Batam, Kepulauan Riau province, Indonesia, post code 29432. This research took place from March 2024 until it was concluded, therefore the information collected untill 2023. Utilized purposive sampling to choose informants based on criteria relevant to the research objectives (Sekaran & Bougie, 2016). Table 1 shows the list of four informants which each of the participants was carefully selected due to their position of authority and direct engagement in the processes being examined, guaranteeing that the information gathered represents authoritative viewpoints crucial for the analytical depth of the study. Other divisions are expected to give similar replies since they all report to the Head of the Internal Compliance Division for evaluation.

Table 1. List of Informants

No.	Informant	Position
1	Informant 1	Head of Section for KPT Services and Administration
2	Informant 2	Head of Internal Compliance Guidance Division
3	Informant 3	Staff of Enforcement and Investigation Division 1
4	Informant 4	Staff of Enforcement and Investigation Division 2.

Source: the author, 2024

This study selects KPU BC Type B Batam as the sole source of information because it has the main responsibility overseeing the regulations, monitoring, and tracking of imported iron and steel products, especially those distributed to various areas within TLDDP. They are accountable under the Directorate General of Customs and Excise. Focusing on this organization allows the research to examine closely the challenges it faces in operations, the systems of internal control, and the strategies for good governance.

The concept operationalization provides a definition of the dimension and indicator of the primary concepts covered in this study which is shown in table 2.

Table 2. Concept Operationalization

Concept	Dimension	Indicator
Monitoring of iron and steel products subject to anti-dumping duties (BMAD)	1. Policy compliance	a. Implementation of duties and internal control
	2. Structure	a. Segregation of duties

		b. Transfer of knowledge and communication
	3. Process	a. Prevention measures
		b. Detection
		c. Respond
		d. Monitoring and evaluation
	4. Resources	a. Human resources
		b. Information technology
		c. Budget

Source: the author, 2024

RESULTS

Interview transcripts from multiple informants, including the Head of the Section for KPT Services and Administration, the Head of the Internal Compliance Guidance Section and two staff members from the Enforcement and Investigation Division as well as the findings of observations were imported to NVivo 15 in order for the data to be processed and analyzed.

Data from observations and interviews were linked to a parent-child coding framework based on KMK No. 323/KMK.09/2021 as shown in figure 4. Policy compliance served as the parent code, with task implementation and internal control as the child code. Structure, which includes communication, knowledge transfer, and separation of duties. Process, which includes detection, response, monitoring, and evaluation and lastly resources, which includes human resources, information technology and budget.

It is the same process as importing data in coding for cases. By choosing "explore", "Maps" and then "Project Maps", the researcher can visualize the data after codes and cases have been arranged. Once Project Maps has been selected, choose "Add Project Items", select "Cases Subfolder" and all the "Descendant Codes". Adding "Associated Items" is the last step to improve the mapping. The relationships between each coding item are then shown by adding it to the project map. The next figure displays the style of visualization that the researcher employed after the connector labels were eliminated for clarity.

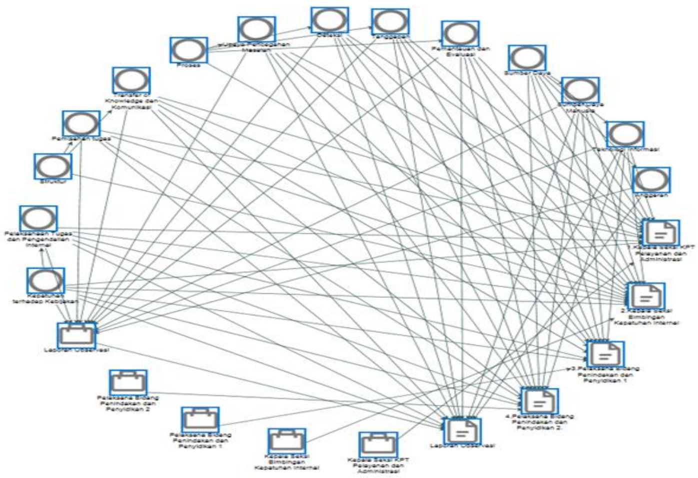


Figure 4. Project Map NVIVO 15
Source: processed data using NVIVO 15, 2024

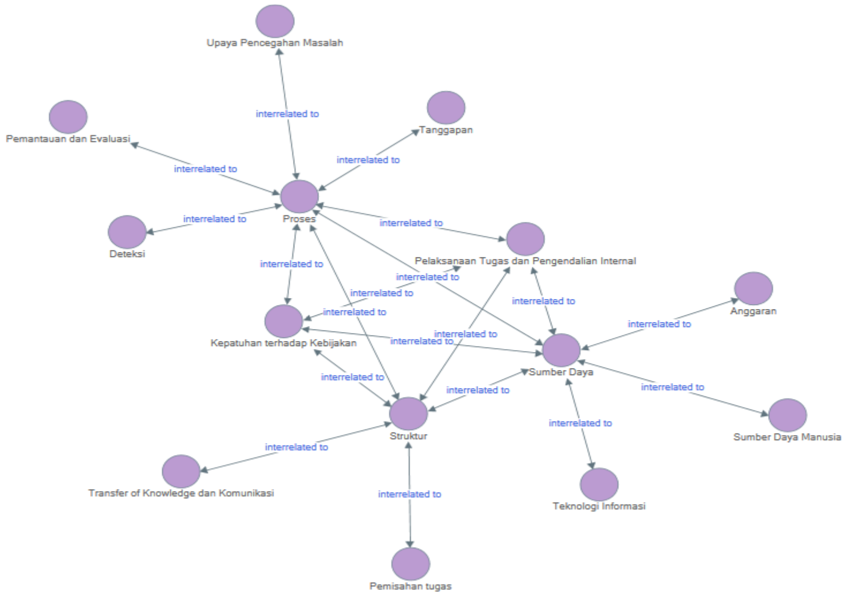


Figure 5. Tree Nodes NVIVO 15
Source: processed data using NVIVO 15, 2024

Policy compliance, structure, process and resources, including the child codes are interrelated to each other, therefore, this study take into account all the related themes when analyzing particular theme or topic.

Table 3. NVIVO 15 Coding Summary

Theme	Files	References
Policy compliance		
Implementation of duties and internal control	5	13
Structure		
Segregation of duties	5	6
Transfer of knowledge and communication	5	7
Process		
Prevention measures	5	18
Detection	5	7
Respond	5	13
Monitoring and evaluation	5	10
Resources		
Human resources	5	15
Information technology	5	5
Budget	1	1

Source: processed data using NVIVO 15, 2024

Head of Internal Compliance Guidance Division stated "menurut analisis beban kerja di KPU BC Batam, jumlah SDM yang ada saat ini tidak sebanding dengan area pabean, luas wilayah yang harus diawasi, serta kondisi geografis yang rumit, khususnya petugas bidang penindakan dan penyidikan. The workload analysis at KPU BC Batam shows that the current number of staff is insufficient compared to the size of the customs area, particularly for officers in enforcement and investigation division. The informant also stated that "Kami juga memahami pentingnya pengelolaan fasilitas seperti HCVM, X-ray, dan CSS, dan sedang mempersiapkan langkah untuk menunjuk pegawai khusus agar pengawasan serta pemanfaatan teknologi dapat lebih optimal. Penunjukan pejabat khusus untuk manajemen aset menjadi prioritas demi menjaga kelancaran fungsi peralatan secara maksimal". Facilities such as HCVM, X-ray, and CSS, and specialized personnel to enhance management and the use of technology is essential to guarantee the efficient functioning of equipment.

Head of Section for KPT Services and Administration stated that it is "kekhawatiran yang berlebihan karena Batam adalah kawasan bebas, maka karena tujuan utama kawasan bebas batam adalah untuk menarik investasi, sehingga memang diberi kebebasan dalam hal impor. Berada di jalur merah, oleh karena itu dilakukan pemeriksaan fisik dan besi dan baja berukuran besar, sehingga sulit untuk diselundupkan". Excessive concerns since Batam is a free trade zone, created mainly to draw in investments by permitting unrestricted imports. Situated in the designated red zone, thorough physical inspections are carried out, particularly on large steel and iron items, thereby complicating the process of smuggling. He also stated that "loket antrian yang terpisah membuat masyarakat kurang puas" dan "pengguna jasa tidak puas dengan sistem CEISA FTZ 4.0 dan ION BETA yang sering down". Separate queue counters have caused public dissatisfaction as well as frequent downtime of CEISA FTZ 4.0 and ION BETA, so improving these aspects of service is a priority.

Based on Staff of Enforcement and Investigation Division, "Kurangnya petugas untuk menjaga wilayah Batam dan pulau disekitarnya, beban kerja yang berat karena penyelundupan sangat marak terjadi. Pengecekan dokumen dan barang fisik menjadi terhambat karena kurangnya sarana dan prasarana di Pelabuhan". The small number of officers responsible for securing Batam and its nearby islands leads to a significant workload because of widespread smuggling activities. Insufficient facilities and infrastructure at the port impede both document and physical inspections of cargo. Staff of Enforcement and Investigation Division stated that "Sistem KPU BC Batam adalah sistem self-assesment, sehingga cukup sulit untuk mencari keseimbangan antara keinginan pengguna jasa dan proses pemeriksaan yang memang panjang. Pengguna jasa ingin proses yang cepat, namun perlu ketelitian dari petugas untuk memeriksa kelengkapan data dan barang fisik yang sesuai". Self-assessment system requires KPU BC Batam to find a balance between the expectations of service users and the detailed inspection process needed. Service users seek a quick procedure, whereas officers must be careful in checking the thoroughness of the information and confirming that the actual products correspond properly. "KPU yang khusus menangani FTZ atau Free Trade Zone dan apa core business-nya? FTZ berarti investasi. Semakin tinggi investasi di Batam itu salah satu parameter keberhasilan bea cukai Batam, penerimaan tetap ditargetkan namun bukan yang utama. Mayoritas usaha di kota Batam adalah galangan kapal, sehingga sangat membantu memajukan industri galangan kapal di Batam, bahkan Indonesia. The increase in investment in Batam serves as a vital measure of the success of Batam Customs. Although revenue targets remain, they are of lesser importance. The economy of Batam is largely driven by shipyards, which are essential for promoting both the local and national shipbuilding sector. In regards to anti-corruption management, "Menekankan pada sistem rewards dan punishment. Selalu ada sosialisasi tentang KKN, sehingga kembali lagi pada kesadaran risiko dari masing-masing petugas." Internal Compliance Unit (UKI) consistently highlights the importance of a transparent government that is devoid of corruption, collusion, nepotism (KKN), bribery, and other transgressions. Nevertheless, the success ultimately relies on the risk awareness of every officer. All departments are required to perform their responsibilities and roles effectively.

KPU BC Batam follows KMK 322/KMK.09/2021 and KMK 323/KMK.09/2021 as the legal foundation for Internal Control System (SPI) in a bureaucratic setting that maintains integrity and transparency. With the exception of HS 7208.27.11, 7208.27.91, 7208.39.10, 7208.39.20, 7208.39.30, 7208.39.40, ex7208.90.10, and ex7208.90.20, which are regulated in PMK 31/PMK.010/2022, all iron and steel under HS 72 as specified in PMK 111/PMK.010/2019, PMK 15/PMK.010/2022 and PMK

31/PMK.010/2022 enter Batam as imports and are then transferred to TLDDP.

KPU BC Batam's UKI oversees internal control. Tax revenue targets have consistently been achieved optimally, shown in table 4. KPU BC Batam has also successfully exceeded its Key Performance Indicators (IKU) targets, achieving more than 100%. Table shows that the KPI, which is expressed as a percentage of the Organizational Performance Score (NKO), increased by 2.85% between 2022 and 2023, shown in table 5.

Table 4. Batam Customs Revenue

Year	Target (Billion Rupiah)	Realization (Billion Rupiah)	Percentage
2018	142.06	168.25	118.44%
2019	200.98	226.08	112.49%
2020	265.12	301.48	113.71%
2021	284.89	1090.88	382.91%
2022	1025.38	1160.82	113.21%
2023	508.82	522.37	102.66%

Source: data that has been processed by the author, 2024

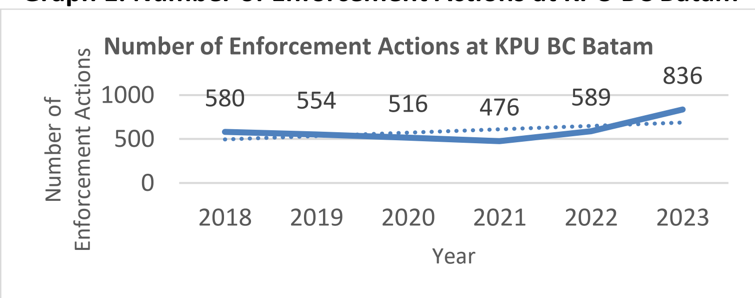
Table 5. Organizational Performance Score

Year	Organizational Performance Score
2022	110,99%
2023	113,84%

Source: data that has been processed by the author, 2024

According to Habib et al. (2022), businesses' adherence to customs laws is not significantly impacted by fiscal amenities in Batam. To put it another way, financial incentives do not immediately lead to more compliance. This finding is different from earlier studies, including that of Kumaratih & Ispriyarso (2020) and Sari & Nuswantara (2017), which found that business actors follow policies because they have favorable opinions of the government and a high degree of trust in it, because of the government providing convenient facilities and support for business operations. Consistent with Habib et al. (2022), this analysis discovers that fiscal relaxation benefits business actors while increasing the possibility for facility misuse. The increase in smuggling operations coincides with the expanding gaps that occur because of long-term fiscal policy laxity in the long term. Although KPU BC Batam's earnings considerably exceeded expectations, the likelihood of state losses due to smuggling has grown. From 2018 to 2023, revenue realization grew by 210.50%, whereas the number of smuggling enforcement actions and potential losses increased by 44.14% and 127.63% respectively as shown in graph 1 and table 6.

Graph 1. Number of Enforcement Actions at KPU BC Batam



Source: data that has been processed by the author, 2024

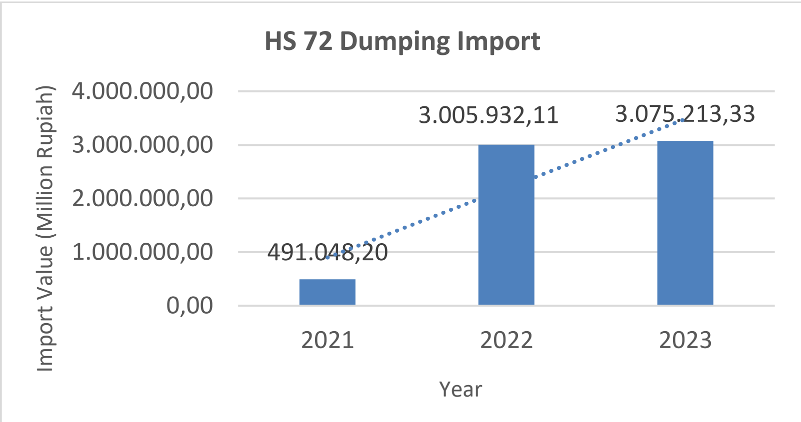
Table 6. Smuggling Enforcement at KPU BC Batam 2018–2023

Year	Value	Potential state losses (Billion Rupiah)

	(Billion Rupiah)	
2018	5.554,88	7,31
2019	96,01	13,25
2020	78,76	14,03
2021	156,92	63,89
2022	101,71	29,97
2023	268,06	16,64

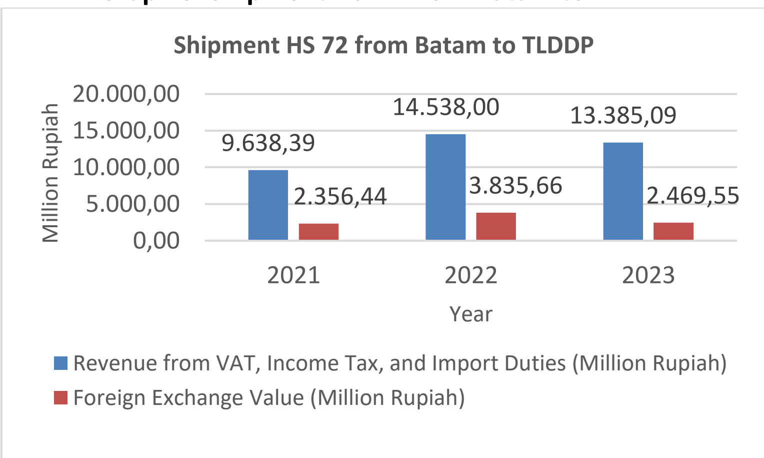
As shown in graph 2, the import of dumped iron and steel under HS code 72 has increased significantly, rising to 526.25% in only two years over 2021 to 2023.

Graph 2. HS 72 Dumping Import



Source: data that has been processed by the author, 2024

Graph 3. Shipment HS 72 from Batam to TLDDP



Source: data that has been processed by the author, 2024

Difficulties in calculating the portion of dumped iron after it has been processed have impeded the organization's ability to effectively carry out regulations. Consequently, policy regarding the implementation of BMAD on the transfer of dumped HS 72 from FTZ to TLDDP has experienced multiple changes. These modifications are illustrated in the release of PMK No. 47/PMK. 04/2012, PMK No.120/PMK.04/2017, PMK No. 84/PMK.04/2019, and PMK No. 34/PMK. 04/2021. The latest regulation PMK No. 34/PMK. 04/2021, essentially return to the rules stated in the original regulation

PMK No. 47/PMK. 04/2012, which stated that outflows to TLDDP are not subject to BMAD if the released HS 72 items have been processed. Graph 3 shows 38.87% rise in HS 72 shipment and KPU Batam received VAT, income tax, import duty and foreign exchange value without additional import duties including BMAD because HS 72 have gone through processing or being part of new products.

Table 7. Budget 2022 to 2023

Year	Budget	Realization	Percentage
2022	16,537,881,000	15,759,800,109	95.30
2023	18,031,387,000	17,527,268,977	97.20

Source: data that has been processed by the author, 2024

The expenditures of KPU BC Batam remain within the limits of the allocated budget, as presented in Table 6. The budget of KPU BC Batam is allocated for operational costs, which encompass expenses related to staff, materials, and capital investments. The allocation of staff or personnel budget is managed centrally by the DJBC headquarters. The budget allocated for materials at KPU BC Batam is primarily used for office operational requirements, equipment and machinery maintenance, and other non-operational purposes. Capital expenditures are usually designated for the construction of buildings or structures, as well as for renovation.

DISCUSSION

The problems with internal control at KPU BC Batam come from human resources and technology. Issue also occurs because of inadequate facilities and infrastructure, including the lack of sufficient temporary storage facilities (TPS), space for storing large-sized confiscated goods, heavy equipment or transport tools such as cranes and forklifts at the port, malfunctioning X-ray machines, and CCTV, as well as slow office Wi-Fi. Public understanding of customs, excise, and free trade zones is also limited. Furthermore, service segmentation across multiple counters requires service users to queue repeatedly in different areas. Limited competence and risk awareness, and the absence of dedicated personnel in administering enforcement equipment, such as High Container Vehicle Mobile (HCVM), X-ray, and Container Scanning System (CSS). System disruptions in ION Beta and CEISA FTZ 4.0 during peak hours. Increasingly sophisticated smuggling methods and unregistered ports, exacerbate these challenges.

External stakeholders include businesses such as importers, exporters, shipping agents and freight forwarders, government agencies include the Ministry of Finance, the Ministry of Commerce, and BP Batam. KPU BC Batam is certain that the outflow of HS 72 from Batam to TLDDP would not avoid scrutiny as these shipments pass through the red channel. This process requires a physical inspection and typically involves large amounts. Consequently, the likelihood of smuggling taking place from Batam to TLDDP is quite minimal, thus rendering any related concerns somewhat overstated. Nevertheless, it is evident that challenges in supervision remain. This highlights the importance for KPU BC Batam to be careful and avoid the risks associated with overconfidence bias (Gaba et al., 2023). Gaba et al. (2023) stated that this confidence is based on proven methods and past operational experience, highlighting the necessity of exercising caution to prevent cognitive bias in decision-making.

The self-assessment system asks service users to independently submit information related to customs, while the detection process is carried out automatically without direct involvement from officers. The smart engine uses artificial intelligence to provide an objective risk score by profiling users based on past information, types of goods, identities of exporters, and records of violations, and generates an objective risk score. Officers carry out inspections solely based on these evaluations. Due to the system's dependence on automation, the officers at KPU BC Batam should uphold a sense of professional skepticism and refrain from exhibiting bias. According to Alon-Barkat (2022), automation and confirmation bias are common risks in information systems within the public sector.

The Batam free trade zone is marked by a high level of complexity in creating and applying policies, necessitating a comprehensive Cost-Benefit Analysis (CBA). Nurcahyo et al. (2020) argue that to protect the public interest, domestic demands should be met before imposing import restrictions. Therefore, to assess the objectives of implementing BMAD in safeguarding local producers, it is essential to evaluate both the costs and benefits of the regulations. As stated by the OECD (2020), CBA ensures that policy decisions are founded not only based on data, but also consider the economic and social impacts comprehensively. This method necessitates robust cooperation among researchers, practitioners, and policymakers. Effective transfer of knowledge and communication enhance the use of CBA by speeding up learning across different sectors and promoting teamwork in handling important evidence to create adaptable and lasting policies. For example, the creation of Batam FTZ has created chances for significant misuse of fiscal incentives. Multinational Enterprises (MNEs) frequently employ transfer pricing and profit shifting strategies to evade their tax responsibilities (Tambunan and Sinaga, 2020). This practice is enhanced by the exemptions from VAT and import taxes, along with Batam's close location to Singapore, which is an important international logistics center. Numerous multinational enterprises set up shipbuilding facilities in Batam and supplied their products to related companies overseas. At the same time, Indonesian organizations, as part of the maritime transport industry, import identical goods from their overseas partners. To reduce possible tax losses, it is essential to enforce strict laws and establish ongoing monitoring and oversight systems. Findings from KPU BC Batam show serious gaps in technology use, risk understanding, and human resource skills, which limit enforcement and supervision. This study adds to internal control theory by presenting it as vital in areas without tariff protections and develops governance theory by stressing the need for adaptable, risk-based measures in high-risk settings to maintain regulatory standards.

Smuggling methods that continuously change and improve have developed as a reaction to enhanced oversight and advancements in technology used in customs enforcement and border security (Mansour, 2025). In technical terms, smugglers frequently modify shipping paths, alters shipping schedules, breaking down shipments into partial consignments, or use modern communication technologies to enhance their coordination. For instance, it has become progressively harder for automated systems to identify digital document forgery and smugglers utilize specific packaging techniques to hide illegal items, decreasing the chance of detection by X-ray machines at ports or checkpoints.

Illegal trade, which encompasses smuggling, usually takes place in settings characterized by significant corruption in political and governance systems (Krylova, 2023). Illegal trade networks that have been established frequently depend on bribery to sway administrative officials, customs agents, and border security staff positioned in free trade areas, ports, national borders, and checkpoints. Additionally, a lack of integrity in political and judicial systems effectively shields offenders from law enforcement actions. Criminals take advantage of corrupt behaviors throughout distribution lines in nations with inadequate government structures. This weakens legal clarity in the commercial sector and decreases the efficacy of law enforcement agencies.

Technical problems frequently result from a lack of public awareness of customs laws and procedures in free trade zones (Yuswanto, 2023). There is still little assistance from service users with import and export customs procedures. Assistance from service users in customs procedures for importing and exporting goods is still very limited. This issue is shown by the ineffective recording of cargo readiness in CEISA FTZ for physical inspections and the delays in providing hardcopy documents in the red channel. As a result, the processes involved in customs clearance do not operate efficiently. The Internal Compliance Unit (UKI) conducts a thorough internal control audit function to avoid the repetition of tasks and to address the constraints of limited personnel resulting from the negative growth system outlined in Ministry of Finance Regulation No. 87/PMK. 01/2021. UKI audits concentrate on assessing the risk level, reviewing outcomes from earlier audits, and considering any suspicions and reports of violations. According to Sitenko et al. (2021) and Coetzee et al. (2013), improving the allocation of resources by streamlining audit procedures increases the importance of audit results, the precision of risk management within organizations, and preventive actions by facilitating more focused decision-making. Erlina et al. (2020) emphasize RBIA greatly influences the quality of internal audits conducted in government institutions. However, the importance of internal audit roles and communication methods does not greatly influence the execution of RBIA; rather, the primary attention is on training personnel and structural elements like policy frameworks and the dedication of senior management. The system of negative growth has also contributed to making organizations more streamlined and efficient by highlighting the need for synergy and alignment between business strategies and information technologies, in line with the evolution of lean enterprise architecture (Ogheneyome, 2024). The effective utilization of information technology and the rapid advancement of skill development act as remedies to meet the requirements of human resources.

KPU BC Batam shows various shortcomings in its risk management practices. The small number of employees and persons in charge (PIC) of risk management in each division who have received proper training—either through in-person classes or e-learning—has restricted the organization's overall ability to manage risks effectively. According to the research conducted by Banuaji and Firmansyah (2019), rotating internal staff among departments may hinder the speed of service delivery. This is because employees typically need time to achieve the necessary skills to effectively perform their duties in new roles. The latest rules regarding internal rotation are outlined in SE-3/KPU.02/2022. Additionally, there has been no allocation of staff specifically designated to manage, maintain, and monitor essential equipment, including the High Container Vehicle Mobile (HCVM), X-ray units, Container Scanning Systems (CSS), and other related facilities. The lack of proper oversight has resulted in decreased availability of equipment, a backlog in maintenance (Blazey et al., 2020), and less effective use of detection and monitoring technologies. In the administration of public assets, it is crucial to appoint specific officials for asset management to guarantee the ongoing functionality of equipment, improve operational efficiency, and reduce downtime.

The most recent edition of CEISA is CEISA 4. 0. In the year 2023, the city of Batam continued to function under CEISA 3. 0 and only initiated the shift to CEISA 4. 0 at the end of 2023 after previous implementation by the KPU BC and KPP BC offices in key cities throughout Indonesia. The complete implementation of CEISA 4. 0 for KPU BC Batam is set to begin on January 1, 2025, in line with Decree No. KEP-269/BC/2024. The shift from CEISA FTZ to CEISA 4. 0 FTZ in a brief period has caused instability in the system. CEISA 4. 0 FTZ is still facing various technical problems, such as system errors, unresolved bugs, and inconsistent performance, especially during busy service times. These circumstances interfere with the recording of inspection reports (LHP), the redistribution processes, and the verification of documents by officials, while service users face challenges in finalizing customs paperwork.

Bockius and Gatzert (2023) highlight that the risk culture in an organization is made up of three main aspects: the beliefs, values, and behaviors of employees regarding risk. This specifically relates to the challenges in technology adoption faced by KPU BC Batam, including problems with the x-ray system and the instability of the CEISA 4. 0 platform. The three aspects are connected and together influence how the organization responds to uncertainty. Beliefs represent both personal and shared views about the importance of risk management as an essential factor in reaching organizational goals. Values represent ethical standards and guidelines that influence how we prioritize, evaluate, and respond to risks. Conversely, actions exemplify the visible expression of these beliefs and values in everyday activities, including following preventive measures or actively communicating potential risks. The combination of these three factors improves the organization's capacity to recognize, assess, and manage risks efficiently, leading to improved long-term performance. In the public sector, limited awareness of risk is frequently linked to a lack of dedication from senior management in enforcing policies related to risk (Damayanti et al., 2023). As a result, the actions of middle managers and operational staff often respond to situations happening only after risks have become apparent.

The combination of digital technologies and openness in global trade can greatly improve innovation and competitiveness in the area, as shown by the import of advanced technology products to aid local production. As stated by Jiang et al. (2021), the main benefit of policies that support free trade zones is their role in fostering technological advancement and innovation. In addition, Krylova (2023) highlights that shortcomings in the technologies used to identify illegal goods, along with their inadequate application, continue to pose a significant obstacle to enhancing the efficiency of enforcement and monitoring. This issue is particularly pressing given the increasing incidence of smuggling operations in free trade and free port areas.

This research on KPU BC Batam indicates that internal control and governance structures should transition from strict, compliance-driven approaches to flexible, risk-sensitive systems. Such systems must incorporate technology, staff training, cooperation between agencies, and strong monitoring processes to stay effective in dynamic and high-risk areas such as free trade zones. By taking this approach, this research aids in creating a more detailed and practical theory of internal control and governance within the public sector.

CONCLUSION

KPU BC Batam follows the guidelines of KMK 323/KMK. 09/2021 to promote a culture of integrity in the execution of the Government Internal Control System (SPI), as outlined in KMK 322/KMK. 09/2021. Batam has received tax benefits, which include exemptions from BMAD on imports of dumped iron and steel classified under HS 72. The success of its internal control system is shown through reaching revenue targets and achieving excellent organizational performance, as indicated by key performance indicators (KPI). Nonetheless, various challenges and limitations persist in the execution of the internal control system, especially because of the widespread occurrence of smuggling incidents. The resources and infrastructure of KPU BC Batam continue to be insufficient, dividing services among various counters necessitates that service users stand in line multiple times in different service sections that obstructs seamless operational processes. Public knowledge regarding customs, excise, and the free trade zone is inadequate, leading to interruptions in processes because of delays stemming from data discrepancies or insufficient documentation. Concerning information technology, there are frequent system interruptions, especially when using applications like ION Beta for licensing and CEISA FTZ 4. 0, particularly during busy operational times. Smuggling techniques are constantly changing and adjusting due to increased oversight and advancements in technology within law enforcement and border security. The presence of many ports that are not officially registered allows for the potential of smuggling operations. KPU BC Batam needs to enhance the inspection and monitoring of goods and collaborate more closely with agencies like BP Batam and the TNI. There should be a focus on making processes transparent, accountable, and efficient to manage risks, including better use of technology to combat illegal trade. The limitations of this research involve its lack of capacity to track the long-term results of the CEISA 4. 0, hence the results are restricted to early assessments and the study focuses only on KPU BC Batam's internal views.

SUGGESTION

Practical advice: KPU BC Batam needs to improve the inspection and monitoring of goods, work more closely with relevant agencies such as BP Batam and the TNI, and focus on making processes more transparent, accountable, and efficient in managing risks. They should also make better use of technology to stop illegal trade. Although the chance of dumped iron and steel getting past inspections is low, officers should remain careful and avoid becoming too confident. Increase the quantity of random inspections. To improve service efficiency and make it more convenient for users, KPU BC Batam is recommended to introduce a single-window service system or an integrated queuing process. Having adequate facilities and tools, like warehouses, cranes, forklifts, include X-ray machines, and CEISA FTZ 4.0 when needed. The self-assessment system and AI-based smart engine must be approached with professional caution to prevent issues like automation and confirmation bias. It is also important to keep training staff, especially those involved in risk management and operating equipment, and to engage the public to improve customs compliance.

The government should enhance the regulatory system at KPU BC Batam to ensure that policies can adjust to changes in global trade and effectively tackle new smuggling methods. Regulations should support the investments in infrastructure, handling tools, storage facilities, and well-coordinated transportation systems to make logistics more efficient. Improving information technology and using advanced detection tools such as HCVM, CSS, X-ray machines, along with big data and artificial intelligence, can help manage risks better. Government also should guarantee ongoing training for staff and promoting a culture of honesty and awareness about risks to support the internal control system and cut down violations. Additionally, better cooperation between agencies and law enforcement, along with strong enforcement efforts, is necessary to ensure effective border monitoring to prevent illegal activities.

Theoretical Suggestions: Future research could explore the methods used in incorrect invoicing and false declarations during transaction recording, as well as their possible effects on government revenue. This could involve examining practices like transfer pricing, and the under or overvaluation of imported goods. These studies would help create more accurate ways to monitor such activities. Furthermore, looking into how customs revenue loss affects the competitiveness of domestic industries and the balance of trade is important. It would help clarify the connection between poor customs management and issues like unfair market practices and long-term economic damage. Additional research might also look at how businesses support compliance with customs rules, considering both external factors, such as laws and internal factors, such as how well the organization is governed.

REFERENCE

Akmaliya, R. A., Prakasa, S. U. W., & Zulhuda, S. (2023). Anti-Dumping Committee's Strategy to Confront Dumping Practices: Indonesian law and International Law Perspective. *Journal of Private and Commercial Law, 7*(1), 147–166. https://doi.org/10.15294/jpcl.v7i1.44491

Alansary, O. S., & Al-Ansari, T. (2023). Defining 'Free Zones': A Systematic Review of Literature. *Heliyon, 9*(4), e15344. https://doi.org/10.1016/j.heliyon.2023.e15344

Alon-Barkat, S., & Busuioc, M. (2022). Human–AI Interactions in Public Sector Decision Making: "Automation Bias" and "Selective Adherence" to Algorithmic Advice. *Journal of Public Administration Research and Theory, 33*(1), 153–169. https://doi.org/10.1093/jopart/muac007

Banuaji, A. D., & Firmansyah, A. (2018). Sistem Informasi Penerimaan Bea Masuk di KPPBC Ngurah Rai. *Jurnal Perspektif Bea Dan Cukai, 2*(2). 51-64. https://doi.org/10.31092/jpbc.v2i2.289

Blazey, A., Gonguet, F. & Stokoe, P. (2020). *Maintaining and Managing Public Infrastructure Assets.* In G. Schwartz, M. Fouad, TS. Hansen & G. Verdier (Eds.). How Strong Infrastructure Governance Can End Waste in Public Investment (pp.265-281). International Monetary Fund.

Bockius, H., & Gatzert, N. (2023). Organizational Risk Culture: A Literature Review on Dimensions, Assessment, Value Relevance, and Improvement Levers. *European Management Journal, 42*(4), 539–564. https://doi.org/10.1016/j.emj.2023.02.002

Buehn, A., & Farzanegan, M. R. (2011). Smuggling around the world: evidence from a structural equation model. *Applied Economics, 44*(23), 3047–3064. https://doi.org/10.1080/00036846.2011.570715

Bunnell, T., Grundy-Warr, C., Sidaway, J. D., & Sparke, M. (2011). *Geographies of Power in the Indonesia–Malaysia–Singapore Growth Triangle*. In International Handbook of Globalization and World Cities (pp. 465–475).

Cnbcindonesia, 2021. Pembebasan Bea Masuk Batam, Industri Baja Minta Diawasi Ketat. https://www.cnbcindonesia.com/news/20210312180811-4-229786/pembebasan-bea-masuk-batam-industri-baja-minta-diawasi-ketat. Retrieved 20 March 2024.

Coetzee, P., & Lubbe, D. (2013). Improving the efficiency and effectiveness of Risk-Based internal audit engagements. *International Journal of Auditing, 18*(2), 115–125. https://doi.org/10.1111/ijau.12016

Damayanti, R. A., Syarifuddin, S., & Zalshabila, S. (2023). Risk Management: The Awareness of Public Managers on Risk as a Social Construction. *International Journal of Professional Business Review*, *8*(7). https://doi.org/10.26668/businessreview/2023.v8i7.2504

Erlina, E., Nasution, A. A., Yahya, I., & Atmanegara, A. W. (2020). *The Role of Risk Based Internal Audit in Improving Audit Quality*. International Journal of Management, 11(12), 299-310. https://doi.org/10.34218/IJM.11.12.2020.029

Fadli, M. R. (2021). Memahami desain metode penelitian kualitatif. *Humanika, 21*(1), 33–54. https://doi.org/10.21831/hum.v21i1.38075

Gaba, V. (2023). *Prior Experience of Managers and Maladaptive Responses to Negative Performance Feedback.*

Habib, N., Wati, L, N., & Wardini, A, K.(2022). Determinants Of Customs Regulations Compliance In Directorate General of Customs and Excise Audit Result. *Jurnal Reviu Akuntansi Dan Keuangan, 12*(1),88-105. https://doi.org/10.22219/jrak.v12i1.17655

Henning, C. (2015). *Free Trade Zones/Export Processing Zones*. The Wiley Blackwell Encyclopedia of Consumption and Consumer Studies, 1–3.

Hill, M., & Hupe, P. (2021). *Implementing Public Policy* (4th ed.). SAGE Publications Ltd.

Jiang, Y., Wang, H., & Liu, Z. (2020). The Impact of the Free Trade Zone on Green Total Factor Productivity —— Evidence from the Shanghai Pilot Free Trade Zone. *Energy Policy*, *148*. https://doi.org/10.1016/j.enpol.2020.112000

Kompas, 2019. BPK Soroti Masalah Piutang Pajak dan Bea Masuk di Kemenkeu. https://www.kompas.id/baca/utama/2019/06/12/bpk-soroti-masalah-piutang-pajak-dan-bea-masuk-di-kemenkeu. Retrieved 20 March 2024

Kompas, 2022. Regulasi terlalu longgar, impor baja sulit dibendung. https://www.kompas.id/artikel/regulasi-terlalu-longgar-impor-baja-sulit-dibendung. Retrieved 20 April 2024.

Krugman, P., & Wells, R. (2015). *Macroeconomics* (4th ed.). Worth Publishers.

Krylova, Y. (2023). Smugglers' paradises in the global economy: Growing threats of hubs of illicit trade to security & sustainable development (Final Report). *Terrorism, Transnational Crime and Corruption Center (TraCCC)*, George Mason University.

Kumaratih, C., & Ispriyarso, B. (2020). Pengaruh Kebijakan Perubahan Tarif PPH Final Terhadap Kepatuhan Wajib Pajak Pelaku UMKM. *Jurnal Pembangunan Hukum Indonesia, 2*(2), 158–173. https://doi.org/10.14710/jphi.v2i2.158-173

Mahmud, M. F., Soekirman, A., & Tesniwati, R. (2022). Penguatan Kinerja Melalui Transformasi Digital, Budaya Adaptif, Transfer Pengetahuan dan Pola Kerja pada Bea Cukai Indonesia. *Jurnal Perspektif Bea Dan Cukai, 6(2)*, 161–182. https://doi.org/10.31092/jpbc.v6i2.1776

Mansour, A. Karim, 2025. Detecting Customs Fraud: A Deep Dive into Common Mis-invoicing and Commodity Mis-declaration schemes. London College of Graduate Studies. https://lcgi.co.uk/detecting-customs-fraud-a-deep-dive-into-common-mis-invoicing-and-commodity-mis-declaration-schemes/. Retrieved 2 July 2025.

Matondang, K., A., Sinaga, D., L., Tinambunan, F., U., Saragi, S., L., dan Sitio, V. (2024). Pengaruh Kebijakan Proteksionisme Terhadap Hubungan Dagang Antar Negara. *Journal of Social Science Research, 4*(3), 4742–4755. https://doi.org/10.31004/innovative.v4i3.10847

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook*. Edisi ke-3. Sage.

Nurcahyo, M., A., & Purwana, A. S. (2020). Dampak Penerapan Bea Masuk Anti-Dumping atas Impor Produk Tinplat. *Jurnal Perspektif Bea Dan Cukai, 4*(1), 145–165. https://doi.org/10.31092/jpbc.v4i1.746

OECD (2017). Shining Light on the Shadow Economy: Opportunities and Threats. OECD Publishing, Paris.

OECD (2020). Building Capacity for Evidence-Informed Policy-Making: Lessons from Country Experiences. OECD Public Governance Reviews, OECD Publishing, Paris.

Ogheneyome, P. (2024). Lean Enterprise Architecture: The Application of Lean Principles in Enterprise Architecture Practices. *Journal of Global Economy Business and Finance, 6*(11), 1–4. https://doi.org/10.53469/jgebf.2024.06(11).01

Petruk, O., Vyhovska, N., & Kostyshyn, Y. (2023). Development of customs control in the system of ensuring the financial security of a country. *Accounting & Financial Control, 4(1)*, 30–40. https://doi.org/10.21511/afc.04(1).2023.03

Republik Indonesia. (2021). Keputusan Menteri Keuangan nomor KMK- 322/KMK.09/2021 tentang Kerangka Kerja Penerapan Sistem Pengendalian Intern di Lingkungan Kementerian Keuangan.

Republik Indonesia. (2021). Keputusan Menteri Keuangan nomor KMK -323/KMK.09/2021 tentang Kerangka Kerja Integritas di Lingkungan Kementerian Keuangan.

Republik Indonesia. (2021). Peraturan Menteri Keuangan Nomor 173/PMK.03/2021 Tahun 2021 tentang Tata Cara Pembayaran, Pelunasan, dan Pengadministrasian Pajak Pertambahan Nilai atau Pajak Pertambahan Nilai dan Pajak Penjualan atas Barang Mewah atas Penyerahan Barang Kena Pajak dan/ atau Jasa Kena Pajak dari dan/atau ke Kawasan Perdagangan Bebas dan Pelabuhan Bebas.

Republik Indonesia. (2021). Peraturan Menteri Keuangan Nomor 34/PMK.04/2021 Tahun 2021 tentang Pemasukan dan Pengeluaran Barang Ke dan Dari Kawasan Yang Telah Ditetapkan Sebagai Kawasan Perdagangan Bebas dan Pelabuhan Bebas.

Republik Indonesia. (2021). Peraturan Pemerintah Nomor 41 Tahun 2021 tentang Penyelenggaraan Kawasan Perdagangan Bebas dan Pelabuhan Bebas.

Republik Indonesia. (2024). KEP-269/BC/2024 tentang Penerapan Secara Penuh (Madatory) CEISA 4.0 Tahap Ketujuhbelas

Sari, R. I., & Nuswantara, D. A. (2017). The Influence of Tax Amnesty Benefit Perception to Taxpayer Compliance. *Jurnal Dinamika Akuntansi, 9*(2), 176–183. https://doi.org/10.15294/jda.v9i2.11991

Schneider, F., & Enste, D. H. (2000). Shadow Economies: Size, Causes, and Consequences. *Journal of Economic Literature, 38*(1), 77–114. https://doi.org/10.1257/jel.38.1.77

Séror, J. (2021). *Computer-Assisted Qualitative Data Analysis Software (CAQDAS)*. In The Encyclopedia of Applied Linguistics (pp. 1–7). John Wiley & Sons.

Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach* (6th ed.). John Wiley & Sons.

Siregar, N. O. (2022). Regulasi Anti-Dumping Dalam Hukum Perdagangan Internasional dan Penerapannya di Indonesia. *Justisi, 8*(1), 67–81. https://doi.org/10.33506/js.v8i1.1563

Sitenko, D., Shakirova, G., & Nurgaliyeva, G. (2021). The Role of Internal Audit Standardization in Improving the Audit Quality. *Buketov Business Review, 103*(3), 95–103. https://doi.org/10.31489/2021ec3/95-103

Sparke, M., Sidaway, J. D., Bunnell, T., & Grundy-Warr, C. (2004). *Triangulating the Borderless World: Geographies of Power in the Indonesia–Malaysia–Singapore growth tri-angle*. Transactions of the Institute of British Geographers (New Series), 29(4). 485–498. https://www.jstor.org/stable/3804370

Sugiyono. (2015). *Metode Penelitian Kombinasi (Mix Methods).* Bandung: Alfabeta.

Tambunan, M.R.U.D., Sinaga, W. (2020). Country Note: Transfer Pricing and Profit Shifting Practices in a Free Trade Zone: A Case in Batam, Indonesia, Based on a Tax Court Decision. *Intertax, 48* (11), 1030-1044. https://doi.org/10.54648/taxi2020104

Thanh, B. D., Van Diep, N., & Tram, N. H. M. (2024). Impacts of Financial Development and Green Trade on the Shadow Economy: An Insight of Eagle Countries Using Bayesian Approaches. *PLoS ONE, 19*(5). https://doi.org/10.1371/journal.pone.0303135

Walidin, W., Saifullah, & Tabrani. (2015). *Metodologi Penelitian Kualitatif & Grounded Theory*. Aceh: FTK Ar-Raniry Press.

Yuswanto, Ginting, A. P., AT, M. E. P., & Kusworo, D. L. (2023). Implementation of customs, excise and tax provisions on the import of consignment goods in Batam Free Trade Zone area. *International Journal of Social Science and Human Research,* *6*(3), 1990-1996. https://doi.org/10.47191/ijsshr/v6-i3-79