



## Leveraging Duty Drawback Customs Regimes for Export Competitiveness

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*Duty drawback, export competitiveness, customs incentives, Santa Catarina, firm-level adoption*

### ABSTRACT

This paper reviews the analysis of operational application and strategic implications of duty drawback regimes in the export oriented companies in Santa Catarina, Brazil, with an objective of gaining a better understanding of how the mechanisms increases the competitiveness of exports. The research design adopted was descriptive and exploratory, combining the documentary analysis of the government reports, trade policies and industry statistics with the primary data obtained using structured electronic questionnaires served in the sampled 44 exporting firms. Quantitative/qualitative data were collected covering the participation in sectors, preference of drawback modalities, the logistical practices and the perceived obstacle to adoption. The results reveal that the main beneficiaries of the duty drawback mechanisms are the medium and large enterprises; moreover, the most popular modality of the suspension is the most frequently used because of the simplicity of the procedure and its economic benefits. Smaller companies show little activity due to both regulatory complexity, shortage of qualified staff, and administrative overhead. The research concludes that capacity-building, streamlined processes, and reaching out to the policy are the only required measures to expand the participation so that duty drawback programs become effective tools of regional industrialization and global market integration.

## 1. INTRODUCTION

### BACKGROUND AND POLICY CONTEXT

The integration of national economies into global trade networks has made the efficiency of customs regimes a central determinant of export competitiveness [1]. Countries seeking to expand their participation in international markets often rely on fiscal and customs-based incentives to reduce the costs of production and logistics for exporters [2, 3]. Among such instruments, the duty drawback regime has become one of the most prominent tools for facilitating trade, particularly in emerging economies. By allowing exporters to suspend, exempt, or reclaim import-related taxes on inputs used in manufacturing goods for foreign markets, this mechanism reduces production costs and enhances the attractiveness of local industries on the global stage [4, 5]. The Brazilian drawback regime, established in 1966, has historically served as a cornerstone of trade policy. Initially introduced as a narrow customs relief scheme, it has since evolved into an integrated framework that encompasses both imported and domestically sourced inputs. This evolution aligns with broader fiscal reforms aimed at boosting exports and mitigating persistent trade imbalances. In practice, the regime enables firms to lower their tax burden by more than 70% in certain cases, positioning it as a critical instrument in Brazil's export strategy. Santa Catarina, located in southern Brazil, provides an illustrative case for evaluating the operational relevance of duty drawback regimes [5, 6]. The state consistently ranks among the nation's top importers while also maintaining significant export capacity across industries such as ceramics, textiles, chemicals, and machinery. Despite these advantages, companies in the region face recurring trade deficits, which underscores the importance of fiscal incentives in sustaining competitiveness [7]. The drawback regime, therefore, functions not merely as a tax benefit but also as a policy lever to balance regional economic disparities and promote industrial expansion.

Comparatively, similar customs incentive mechanisms are employed worldwide, though their design and impact vary considerably [6-8]. For instance, Asian economies, including India and China, have implemented structured duty relief schemes as part of export-led growth strategies, with proven success in scaling industrial capacity. Brazil's model, while effective in some sectors, still faces challenges related to regulatory complexity and limited adoption among small and medium-sized enterprises (SMEs) [8-10]. Addressing these constraints remains crucial for ensuring that the benefits of duty drawback extend across the full spectrum of firms participating in global trade



The present research is both policy and academic due to the fact that it offers a large-scale legal-economic evaluation of the duty drawback regimes as an export competitiveness tool in the changing international trade landscape. Although in the current literature, the duty drawback is mostly used as a technical means of facilitation at customs, the present research contributes to the existing knowledge because it places the regime in the context of larger trade policy goals, regional integration patterns, and export-led development policies. The study sheds empirically-based knowledge about the functioning of customs incentives, albeit subnational level, by paying attention to the Brazilian drawback system and its implementation in the state of Santa Catarina, which is an under-researched topic in the general literature of the field of trade law and economics. The results find application especially by the policy makers who may want to resolve the existing trade imbalances, improve the competitiveness of the industries, and develop the inclusive export promotion systems.

The originality of the current research is the combined method of analysis that encompasses both the doctrinal legal analysis with the economic and regional policy assessment. In contrast to previous investigations that determine the drawback of duty based on a purely administrative or fiscal point of view, this research investigates its co-existence with the disciplines of international trade, and its varying effects on the firms of different sizes and sectors. Moreover, the cross-regional focus and the introduction of comparative references to the models of the Asian export incentives allow the study to introduce the choices of the institutional design and their impacts on the effectiveness. This multidimensionalism approach paves new ground into the idea of how duty drawback regimes can be realigned to adopt SMEs, diminish regulatory tensions, and model national custom policy akin to the modern global trade requirements.

## 2. REVIEW OF LITERATURE

### **Duty Drawback Regimes as Instruments of Trade Facilitation.**

The duty drawback regime is one of the trade facilitating tools that have received wide coverage in the literature to ensure that the burden of costs is lowered on exporters [8]. Initial literature views duty drawback more as a fiscal tool to offset the impact of import duties on export production to avoid the taxation of exports (e.g., Bhagwati and Srinivasan) [11]. The later empirical studies have shown that good drawback systems also lead to reduced input costs, high firm levels productivity and export performance, especially in high manufacturing-intensive industries. By imposing a duty drawback regime as outlined by scholars, it is important to note that duty drawback encourages the integration of value chains and engagement in global markets by suspending or refunding duties on imported inputs used in export production [9-11]. Nevertheless, there are also administrative issues as noted in the literature such as high compliance costs, slow refunding and cumbersome paperwork [12]. These problems tend to compromise accessibility of drawback plans especially among small and medium-sized enterprises (SMEs). Recent research places duty drawback more in the wider context of trade facilitation agenda advocated by the World Trade Organization (WTO) where simplification, automation, and transparency are held as key to the optimal effectiveness of duty drawback [10-12]. On the whole, the literature acknowledges the duty drawback as a potentially effective but institutionally delicate policy instrument the effectiveness of which significantly depends on the administrative construction and governing capacity.

### **Legal and Institutional Dimensions of Duty Drawback under International Trade Law.**

Duty drawback regimes are studied to a considerable extent with reference to the international trade law, especially regarding the General Agreement on Tariffs and Trade (GATT) and the WTO Agreement on Subsidies and countervailing measures (SCM) [12-15]. There is a general consensus among legal experts that the scheme of duty drawback is allowable under WTO rules when it involves the refund of such duties paid on inputs which are literally incorporated in exported goods. The question, however, is when drawback mechanisms become so extended as to start to appear like export subsidies [1]. A number of works examine the cases of dispute settlements and the WTO committee debates to represent the legal thin line between legal legitimate drawback practice and outlawed subsidization [16-18]. The literature also discusses how the regional trade agreements (RTAs) introduce new disciplines on the drawback regimes, which the regimes in most cases limit their application in the prevention of trade deflection and in the protection of regional value chains. Institutional explanations focus on unexplainable legal ambiguity and the regular change in regulations as a way of disincentivizing firm involvement, especially in jurisdictions where the administrative coordination process is not strong [19]. The recent literature is demanding more harmonization between the national customs law and international commitments with the view that legal predictability and certainty are important in ensuring compliance without infringing policy space [20]. In this light, the literature highlights the significance of harmonizing the regimes of duty drawbacks with the multilateral and regional trade regimes.

### **Duty Disadvantage, Competitiveness on Export, and Regional Development.**

Duty drawback regime and its relation to export competitiveness has been discussed in the literature of development economics and regional policy at length [18-20]. Empirical evidence of developing economies indicate that firms enjoying the benefits of duty drawback will have high export intensity, resilience to external shocks, and better integration into global value chains. Specifically, the studies which concentrate on export-oriented industrial clusters also emphasize that drawback regimes can contribute to the strengthening of regional comparative advantages through the reduction of input



costs and promotion of scale economies [20-22]. Nevertheless, the literature has also established unequal distributional impacts where large firms are more prone to access and enjoy such regimes because of their high administrative capability. This has made scholars to doubt the inclusiveness of duty drawback policies and their role in enhancing the overall development goals of the region [23]. Asian and Latin American case studies highlight the importance of complementary policies, e.g. digital custom systems, capacity building and SME assistance in increasing the developmental effect of drawback schemes [24-26]. Recent additions are increasingly defining duty drawback as a strategic industrial policy tool, as opposed to being a separate tax incentive, and emphasise its ability to help facilitate sustainable regional development in the context of integrated trade and industrial policies.

### THEORETICAL FOUNDATIONS OF DUTY DRAWBACK

The duty drawback regime is rooted in economic theories that emphasize the importance of reducing trade barriers to stimulate international competitiveness. Classical trade theory, particularly Ricardo's comparative advantage, highlights how nations benefit from specializing in goods where they hold relative efficiency [27]. However, high tariffs and import taxes on intermediate inputs distort this efficiency by raising production costs. From the perspective of modern trade theory, which accounts for economies of scale and differentiated products, customs regimes such as drawback enable firms to access advanced raw materials and technologies from abroad at reduced costs [25]. This access enhances product quality, innovation potential, and competitiveness in global markets. By lowering the effective cost of imported inputs, duty drawback mechanisms encourage firms to expand production capacity, which in turn creates positive spillover effects on employment, industrial clustering, and regional development [26-28]. Fiscal policy frameworks also provide theoretical justification for duty drawback. Governments use targeted tax relief not only to promote exports but also to ensure neutrality in taxation where domestic and export-oriented firms face similar effective tax burdens [29]. In this sense, the drawback regime functions as a tool of tax equalization, preventing the cumulative effect of indirect taxation from undermining global competitiveness [26-28]. This principle aligns with the World Trade Organization's (WTO) stance that export promotion measures are permissible as long as they correct distortions rather than constitute prohibited subsidies.

Customs policy and trade facilitation theory further underscore the relevance of drawback regimes. According to the trade facilitation framework advanced by the WTO and OECD, efficient customs procedures reduce transaction costs, increase predictability, and improve logistics performance [24-26]. Duty drawback integrates into this framework by directly connecting fiscal relief with operational logistics, creating a seamless mechanism that bridges tax policy and supply chain management.

A conceptual model of the drawback system can thus be understood through three core functions: (1) *cost reduction* by removing or deferring import-related taxes; (2) *competitive-ness enhancement* by enabling firms to produce at globally comparable cost levels; and (3) *trade facilitation* by simplifying customs operations and integrating fiscal incentives with export logistics. Together, these functions establish the theoretical foundation of duty drawback as an indispensable instrument in modern export strategies.

## 3. METHODOLOGICAL FRAMEWORK

### Research Design and Approach.

This research is a descriptive and exploratory study to investigate the operational use of the duty drawback regimes among the export oriented firms in Santa Catarina, Brazil. The descriptive method is applicable especially in order to systematically report current practices, institutionalization, and firm events in regard to customs incentive practices without controlling the research environment. It allows detecting tendencies in adoption, sectoral distribution, and logistics practices of the drawback regime. To this, the complementary dimension will enable the study to cover previously uninvestigated areas of the duty drawback implementation, in particular, its impact in terms of improving the competitiveness of region exports and its uneven distribution among firms. Due to the scarcity of empirical sources dedicated to the subnational implementation of duty drawback regimes, the exploratory design will help to create new knowledge and assumptions about the obstacles to implementation and the perceived advantages. The integrated design is consistent with the aim of the study to reconcile the policy level analysis with firm level realities. Combining the two methods, the study is able not only to focus on what practices are dominant, but also why some firms participate in the regime and others do not. This methodological orientation guarantees analytical flexibility and helps to understand the dynamics of an institution and operations that shape the applicability of the use of the duty drawback schemes in a regional export environment with a nuanced approach.

### Data Collection Methods and Data Sources.

The mixed qualitative-quantitative approach was applied as the data collection method based on the documentary analysis and field-based empirical research. Documentary analysis was to entail a systematic review of official government report, trade policy document, customs regulation, and industry level statistics involving adoption of the duty drawback in Brazil. These references helped to give a macro-level information of the regulatory framework, the historical development, and the patterns of use of regimes in the countries and place the regional analysis into the overall institutional context.

The major source of firm-level data was the field research that was conducted using structured electronic questionnaires. The exporting companies that were officially registered at the Ministry of Development, Industry, and Foreign Trade were provided with the questionnaires. This made sure that the respondents were actively involved at the international trade hence making them applicable to the research objectives. The emphasis on the Association of Municipalities of the Coal Region (AMREC) was because of the industrial variety and strategic significance as an export-based region in the state of Santa Catarina. Combination of documentary and primary information added to the depth of analysis of the study and triangulation of the policy intention and practice were conducted. This dual source approach increased the reliability of data and also made sure that both institutional and operational views were well attained.

### **Sampling Strategy and Population of Study.**

The sampling frame was first used to identify 90 exporting firms that were in the AMREC region. Out of this population, 44 firms responded with full and valid questionnaire response, which was the final sample to be analyzed. The strategy used in sample selection was a non-probabilistic purposive to make sure that the firms that were most relevant to the research topic are included. The sample was purposely designed to achieve heterogeneity in the size of firms, the intensity of exports, and the belongingness to separate sectors, with specific coverage in the chemicals, ceramics, machinery, and the textile sectors.

Out of the responding firms, 13 reported that they have actively used duty drawback mechanisms, and 31 reported that they did not have any contact with the regime. The difference made possible a comparative analytical framework where the study could investigate the difference in operation practices, perceptions, and constraints of adopters and non-adopters. This comparative foresight is essential in the process of establishing the advantages of a drawback utilization besides the institutional, administrative, and capacity-related constraints constraining wider engagement. Though the sample size describes the geographical region of the study, its structure offers adequate analysis in making a conclusion value in regard to the adoption and non-adoption pattern of the export-based industrial cluster.

### **Data Analysis and Analytical Framework.**

The process of data analysis incorporated descriptive and comparative analysis methods in order to respond to the research objectives of the study. In quantification of the variables of interest, such as adoption rates, sectoral distribution, frequency of imports and exports, modes of transportation and preferred modalities of drawback, descriptive statistics were used. These actions helped to map the trend of operations properly and use empirical grounds to comprehend the scope and character of the regime use in the sample.

They were then compared to the other firms that did not adopt a duty drawback regime to determine systematic differences that occurred between the two. This method allowed evaluating the impact of such factors as regulatory complexity, access to qualified staff, and strategic orientation on the decision to adopt. Semi-structured questionnaire items were analyzed qualitatively using themes to identify perceptions, motivations and constraints that were not quantifiable. Priority was given to the visual tools, such as frequency distributions and sectoral breakdowns, to show the dynamics of adoption and make them more understandable. Appropriate findings were cross-validated with secondary data on national and international trade sources to give strength to the findings. This combined analytical system promotes neither policy-relevant interpretation of the findings nor empirical rigor.

## **EMPIRICAL ANALYSIS OF DUTY DRAWBACK ADOPTION**

### **Patterns of Duty Drawback Adoption at the Sectoral and Firm Level.**

The empirical results based on the survey of export oriented firms in the southern part of Santa cataina will show that there is a great degree of heterogeneity in the adoption of duty drawback regimes by the sector and the firms. Among the 44 valid responses that were gathered, 13 companies, which comprises about 30 percent of the sample size, indicated that they actively used drawback mechanisms (**Table 1**). The adoption was mostly concentrated in the medium and large sizes, as they had more administrative resources and financial strength as well as knowledge on how the customs worked. At the sector level, companies within the chemicals, ceramics and machinery sector had the highest rates of involvement as they have more intensive demands of imported inputs and increased export rates. Small enterprises on the other hand showed low involvement in the drawback regime, even though they were involved in international trade [27]. Smaller firms often mentioned regulatory complexity, absence of specialized staff, and not knowing where to start in terms of compliance as major obstacles to creating and using the new regulations. Such results are consistent with the current body of literature where it is stressed that access to custom incentive regime is more likely to be given to firms with better institutional and managerial capacity [28, 29]. These asymmetries in diffusion indicate structural asymmetries in export-oriented industrial clusters, and point to the asymmetries in the benefits offered by duty drawback regimes not being evenly distributed. The regime therefore enhances the competitiveness of some of the firms in terms of exports, but the general developmental potential of the given regime is limited by the differences in capabilities at firm levels.

**Table 1. Sectoral and Firm-Level Adoption of Duty Drawback Regimes**

Category	Number of Firms (n = 44)	Percentage (%)	Key Observations
Firms adopting drawback	13	29.5	Adoption concentrated among medium and large firms
Firms not adopting drawback	31	70.5	Predominantly small firms
Chemical sector	High adoption	—	Strong reliance on imported inputs
Ceramic sector	High adoption	—	Export-oriented production
Machinery sector	Moderate-high adoption	—	Complex supply chains
Textile sector	Low adoption	—	Administrative and capacity constraints
Small enterprises	Limited adoption	—	Regulatory complexity and lack of expertise

#### Patterns of Adoption by Modality of drawback.

The specific modalities used by adopting firms can be analyzed which shows the preference to use the Integrated Drawback Suspension mechanism. The perceived operational benefits of this modality were highlighted by the fact that approximately 84 percent of the firms using the regime said they relied on the regime (**Table 2**). The suspension mechanism enables companies to postpone the payment of import related taxes when entry occurs and thus, better management of cash flow is achieved and production cost is lowered at the beginning of production [24-27]. This adaptability is especially useful when companies have to cope with a continuous production process and work on a small financial basis. Conversely, exemption and refund modalities were used much less by respondents. As the main discouraging factors to their adoption, firms singled out administrative complexity, a lengthy documentation requirement, and a long reimbursement schedule. In particular, the refund modality was considered to be ineffective as there is a delay between a tax payment and reimbursement, which may strain working capital [19-21]. Such results imply that the decisions making firms in favor of this or that drawback modality depend not so much on theoretical benefits in the fiscal calculus, but on more pragmatic reasons connected to the efficiency of administration and financial predictability [11, 12]. This predominance of the suspension modality thus indicates the significance of simplicity in procedures and real-time cost relief in determining firm-level interaction with customs incentive regimes.

**Table 2. Distribution of Duty Drawback Adoption by Modality**

Drawback Modality	Firms Using Modality	Percentage of Adopters (%)	Main Reasons for Adoption / Non-Adoption
Integrated Drawback Suspension	11	84	Cash flow flexibility, tax deferral
Drawback Exemption	4	31	Complex documentation
Drawback Refund	2	15	Delayed reimbursement cycles
Multiple modalities used	3	23	Strategic flexibility
Non-use of exemption/refund	—	—	High administrative burden

#### Geographical and Logistical Aspects of the Trading Process.

The empirical findings also bring out clear logistical and geographical trends on the trade activities of surveyed companies

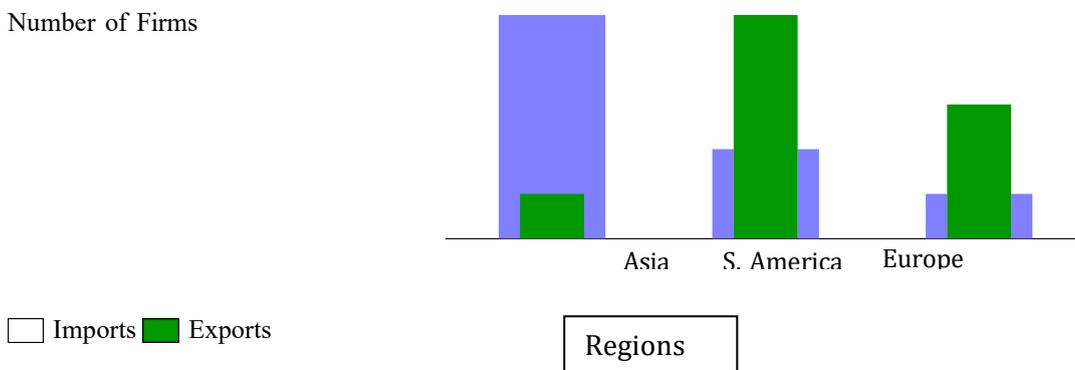


that directly affect the use of duty drawback. The maritime transport was largely used in imports of the production inputs as this cost technique was effective in bulk transport and long distance trading [14]. The strategic significance of maritime logistics, within the regional production system, was strengthened when Asia became the key source area of imported inputs, especially to companies in the chemical and machinery sectors [5-7]. Export operations, in their turn, had a significantly different profile. Most of the exports were sent to South American markets and MERCOSUR member countries occupied a significant position on the list of destinations. In this regard, road transport prevailed because it was close by geographically, transit time was shorter, and logistical costs were low. Air transport was used in a peripheral manner and normally when a high value or time-sensitive shipment was involved [6-9]. These logistical configurations emphasize the regional character of the export activity in the southern Santa Catarina area and indicate that the success of the regimes of duty drawbacks is strongly associated with the incorporation of firms into the global supplier chains both on the input and the regional export market. Table 3 shows logistical and geographical characteristics of import and export operations

**Table 3. Logistical and Geographical Characteristics of Import and Export Operations**

Trade Dimension	Imports	Exports
Primary transport mode	Maritime	Road
Secondary transport mode	—	Air (limited use)
Main geographic origin/destination	Asia	South America (MERCOSUR)
Cost considerations	Bulk shipment efficiency	Proximity and transit time
Role of air transport	Marginal	Emergency and high-value shipments
Implications for drawback use	Long supply chains favor suspension modality	Regional trade supports frequent exports

Number of Firms



**Fig. 1: Geographical distribution of imports and exports under drawback regimes**

*Sectoral Insights*

Sector-specific analysis highlighted that chemicals and ce-ramics were the primary beneficiaries of drawback. Imported dyes, pigments, and additives formed critical inputs for chem-ical industries, while minerals such as nepheline-syenite were indispensable for ceramic production. These industries reported consistent reliance on drawback to offset high domestic input costs, reinforcing its importance as a fiscal and competitive tool. In contrast, textile and food-processing firms showed only sporadic engagement with drawback mechanisms. For textiles, the reliance on local raw materials limited the incentive to import under drawback, while smaller food-processing firms cited limited expertise and administrative challenges as deterrents [11]. Such findings emphasize the uneven diffusion of drawback benefits across industries and the need for policy interventions to promote broader access.

**Key Challenges and Opportunities in Duty Draw-back Adoption**

Despite the benefits observed in reducing costs and expanding exports, the adoption of duty drawback regimes in Brazil. Overall, while the drawbacks of the system are non-negligible, the opportunities for reform and innovation present a

promising path forward. By embracing digitalization, harmonizing regulations, and aligning with sustainability goals,

TABLE II: Key Challenges and Opportunities in Duty Draw-back Adoption

Challenges	Opportunities
Regulatory complexity	Digitalization of customs procedures
Lack of skilled personnel	Regional integration (e.g., MERCOSUR)
Low SME participation due to limited awareness and administrative burden	Sustainability-linked trade incentives
Frequent regulatory changes creating uncertainty for exporters	Policy harmonization and targeted outreach programs
Concentrated adoption of duty drawback benefits among large firms	Simplification of procedures and capacity-building support for smaller enterprises

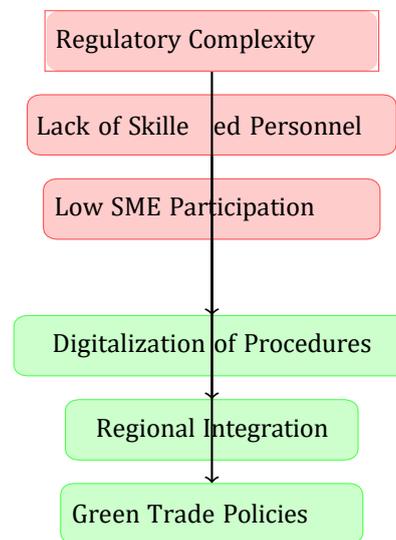


Fig. 2: Mapping of Key Challenges to Strategic Opportunities

Brazil can expand the reach of duty drawback regimes and enhance its position in global markets.

#### 4. DISCUSSION

The empirical evidence demonstrates that whilefacing several persistent challenges. The most pressing issue is the complexity of regulatory procedures, which often require firms to navigate multiple government agencies and comply with extensive documentation requirements. For small and medium-sized enterprises (SMEs), these bureaucratic hurdles serve as a substantial deterrent, limiting participation in the regime [7]. Furthermore, the scarcity of skilled personnel capable of handling specialized customs procedures exacerbates these difficulties, as many firms lack in-house expertise to manage compliance effectively [10, 11]. Another recurring challenge is inconsistent awareness and dissemination of information. While larger firms often have dedicated trade compliance departments, smaller companies rely on fragmented information sources, leading to under-utilization of available incentives. In addition, frequent regulatory changes demand constant monitoring, which creates uncertainty for firms planning long-term export strategies[3-5]. These challenges underscore the uneven distribution of benefits across firm sizes and sectors, concentrating advantages among larger players.

On the other hand, significant strategic opportunities are emerging that could enhance the scope and impact of duty drawback regimes. Digitalization of customs procedures is a primary enabler, as the transition to electronic filing and automated verification systems can drastically reduce administrative burdens. Brazil’s gradual move toward e-government platforms for trade facilitation aligns with global best practices recommended by the OECD and WTO [1, 14, 15]. Such reforms have the potential to democratize access by lowering entry barriers for SMEs.

Regional integration initiatives, such as MERCOSUR, further strengthen the relevance of drawback by expanding market



access and harmonizing customs procedures [17]. Duty drawback thus serves as a critical link between national fiscal policy and regional trade agreements, amplifying the competitiveness of Brazilian exports in neighboring markets. Additionally, there is growing potential to align drawback mechanisms with sustainability objectives, such as green trade policies and circular economy initiatives, which could further improve Brazil's international standing.

#### **POLICY IMPLICATIONS AND FUTURE DIRECTIONS**

The findings of this study underscore the importance of duty drawback regimes as a cornerstone of Brazil's export promotion strategy. However, the uneven adoption across industries and firm sizes highlights the need for targeted policy interventions. Policymakers must prioritize simplification of administrative processes, since excessive regulatory complexity continues to discourage participation by small and medium-sized enterprises (SMEs). Streamlined procedures, combined with digital platforms for submission and monitoring, can drastically reduce compliance costs while improving transparency. Another policy implication relates to the necessity of building institutional capacity. The scarcity of skilled personnel with expertise in customs regimes remains a bottle-neck. Expanding training programs and promoting collaboration between universities, trade associations, and government agencies could create a pool of professionals equipped to manage drawback procedures effectively. This would enable SMEs, in particular, to overcome current barriers and participate more fully in global markets.

Moreover, the integration of drawback regimes with broader trade facilitation reforms presents opportunities for systemic improvements. International best practices, as recommended by the WTO and OECD, emphasize the harmonization of customs rules and the elimination of redundant procedures. Brazil's ongoing tax reform efforts provide a window to embed such principles into domestic legislation, ensuring that drawback mechanisms remain compatible with evolving global trade standards.

In addition, policymakers should consider aligning draw-back regimes with sustainable trade objectives. As global markets increasingly demand environmentally responsible practices, linking fiscal incentives with the use of eco-friendly inputs or green supply chain strategies could position Brazil as a leader in sustainable export promotion. Such integration would not only reinforce competitiveness but also enhance compliance with emerging global sustainability standards.

#### **5. CONCLUSION**

This study has examined the role of duty drawback regimes as a strategic instrument for enhancing Brazil's export competitiveness, with a particular focus on enterprises in Santa Catarina. The analysis demonstrates that the regime provides substantial fiscal relief by lowering the effective cost of imported inputs, thereby improving the competitiveness of export-oriented industries such as chemicals and ceramics. Empirical evidence also shows that the Integrated Drawback Suspension modality is the most widely utilized, reflecting its flexibility and immediate financial benefits. At the same time, findings reveal that adoption remains uneven. Large and medium-sized firms dominate the use of drawback, while smaller enterprises continue to face barriers linked to regulatory complexity, limited access to skilled personnel, and information gaps. This uneven distribution underscores the importance of targeted policy interventions to ensure broader participation. Without such measures, the regime's benefits will remain concentrated, limiting its overall contribution to industrial diversification and inclusive growth. The theoretical framework developed in this research highlights duty drawback as more than a fiscal instrument; it is also a trade facilitation mechanism that integrates customs policy, logistics efficiency, and fiscal neutrality. Its future relevance will depend on how well policymakers can embed it within broader reforms, particularly ongoing digitalization initiatives, customs harmonization efforts, and sustainability-linked trade policies. Looking forward, duty drawback regimes must evolve alongside global trade dynamics. Opportunities exist for integrating them into green trade strategies, regional cooperation agreements, and digital platforms that lower compliance costs. If effectively modernized and democratized, the drawback system could serve not only as a tool for short-term cost relief but also as a long-term enabler of Brazil's industrial transformation and sustained participation in global value chains.

#### **REFERENCES**

1. Akinsola, O.K., *The Impact of International Trade Laws on Corporate Strategy: Navigating Cross-Border Legal Challenges for Multinational Corporations*. 2025.
2. Steinbach, S. and C. Zurita, *Assessing the Impact of the Trade Facilitation Agreement on Agri-Food Global Value Chain Integration*. *The World Economy*, 2025. 48(9): p. 2128-2154.
3. Rippa, A., *Borderland infrastructures: Trade, development, and control in western China*. 2025: Taylor & Francis.
4. Al Mehairbi, K., et al., *Bridging Borders: Trade Promotion and Foreign Direct Investment*. 2025, Washington, DC, USA:: International Trade Council.
5. Fabio, M., *Customs law of the European Union*. 2025: Kluwer Law International BV.
6. Lei, W.C., K. Toshevsk-Trpchevska, and V. Stojkoski. *Digital and Sustainable Trade Facilitation*. in *Economics and Finance Readings: Selected Papers from Asia-Pacific Conference on Economics & Finance*, 2024. 2025. Springer

Nature.

7. Sarker, E., Digitalization in Customs Clearance. 2025.
8. Li, C. and H. Shen, Does trade facilitation contribute to export product quality upgrading in China? *The World Economy*, 2025. 48(3): p. 460-499.
9. Robusto, B.T., The Drawback Loophole: How a 1789 Duty Refund Law Can Nullify the Effects of Modern Tariff Policy. *Fed. Cir. BJ*, 2025. 34: p. 205.
10. López-Valenzuela, D.C., Duty Drawbacks, Imported Inputs Duties and Exports: Evidence from Firm-Level Data from Colombia. *Revista de economía del Rosario*, 2022. 25(2): p. 1-59.
11. SMOLSKI, F.M.d.S., J. RUFFONI, and S. MASCARINI, The effect of economic complexity and relatedness on the economic growth of brazilian microregions. *Estudos Econômicos (São Paulo)*, 2025. 54: p. e53575442.
12. Al-Zaqeba, M.A., et al. The Effect of Implementing AI-Driven Customs Processes on Trade Facilitation Efficiency in Jordan. in *Conference on Sustainability and Cutting-Edge Business Technologies*. 2025. Springer.
13. Brannon, I., Ending The Double Drawback Loophole. Available at SSRN, 2025.
14. Ranasinghe, U.C., et al., Global value chains, trade facilitation and the use of environmental management practices in SMEs. *International Journal of Operations & Production Management*, 2025. 45(5): p. 1119-1147.
15. Guo, P., H.Z. Hamzah, and L. Chin, Has trade facilitation of the 'Belt and Road' countries promoted China's cross-border E-commerce exports? *The World Economy*, 2025. 48(2): p. 238-266.
16. Singh, R.R., A. Verma, and V. Dhaka, Impact of US Tariffs on International Trade: Legal Perspectives and Global Implications. *International Journal of Environmental Sciences*, 2025. 11(5s): p. 614-620.
17. Dalvi, S., Leveraging Duty Drawback Customs Regimes for Export Competitiveness. Available at SSRN 5886502, 2025.
18. Galella, P., The No Drawback Rule in EU Preferential Agreements. *Global Trade and Customs Journal*, 2023. 18(1).
19. Corrêa, R.S.F. and D.L. Cavalcante, Progress in environmental tax reform in Brazil, in *Environmental Tax Reforms for a Just Energy Transition*. 2025, Edward Elgar Publishing. p. 210-221.
20. de Melo, J., Z. Sorgho, and L. Wagner, Reducing Wait Times at Customs to Boost Trade: How Implementing the Trade Facilitation Agreement Can Expand Trade among AfCFTA Countries? *Journal of African Economies*, 2025. 34(2): p. 265-294.
21. Marques, B.R.B. and N.L. de Souza Correa, Regime aduaneiro especial de drawback: Oportunidade de melhorar a competitividade. *Advances in Global Innovation & Technology*, 2025. 3(2): p. e32231-e32231.
22. Park, S., Regime-Wide Rules of Origin and Global Value Chains Trade. Available at SSRN 5255514.
23. Berryman, A.K., et al., Skill and spatial mismatches for sustainable development in Brazil. *arXiv preprint arXiv:2503.05310*, 2025.
24. Garcia, A., L. Thompson, and C. Brito, South-south investments: driver for alternative globalization? Examining China-Led special economic zones in Brazil and South Africa. *Critical Sociology*, 2025. 51(4-5): p. 887-905.
25. Kizi, K.K.M., et al., Tax Regime in Free Economic Zones and Its Impact on Regional Competitiveness. *Web of Scientist International Scientific Research Journal*, 2025. 5(4): p. 8-8.
26. Hayakawa, K., N. Laksanapanyakul, and H. Mukunoki, The trade effect of regional trade agreements in the presence of duty drawbacks. *The World Economy*, 2024. 47(9): p. 3681-3708.
27. Sibupiwa, M. and A. Qutieshat, Trade Facilitation and Firms: A Literature Review. *Studies in Business and Economics*, 2025. 20(1): p. 247-262.
28. Reddy, K. and S. Sasidharan, Trade facilitation and global value chain participation: Cross-country analysis. *Foreign Trade Review*, 2025. 60(3): p. 291-313.
29. Raga, S., P. Agarwal, and V. Fur, Vulnerability of low-and middle-income countries to the impacts of aid cuts and US tariff increases. ODI Global Emerging analysis. London: ODI Global <https://odi.org/en/publications/vulnerability-of-low-and-middle-income-countries-to-the-impacts-of-aid-cuts-and-us-tariff-increases>, 2025.

