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Evaluating container transport policy support at Chan May Port, Hue city, using the OECD framework

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Abstract

This study evaluates the implementation of a pilot policy supporting shipping lines in establishing container services and cargo owners using container transport to and from Chan May Port during 2022–2025. It applies the six evaluation criteria of the Organisation for Economic Co-operation and Development (OECD): relevance, coherence, effectiveness, efficiency, impact, and sustainability. A mixed-methods design combines port-operation data, budget and tax-revenue data, a survey of 34 respondents from Enterprises and Shipping Lines AND Experts & Leader-Managers groups and qualitative analysis of open-ended responses. The findings show that the policy clearly stimulated the local container market, receiving 184 vessel calls and 24,133 twenty-foot equivalent units (TEU) during the pilot period. However, sustainability remained limited, as container activity declined after the policy ended. Fiscal analysis indicates that actual support expenditure of VND 26.054 billion was associated with approximately VND 1.140 trillion in observed tax revenue in the local customs area. This observed revenue cannot, however, be equated with the policy's causal impact because tax receipts were also influenced by production, imports, business activity, and firms' customs-clearance choices. The study recommends shifting from direct cash subsidies towards strengthening the competitiveness and shared capacity of the local logistics ecosystem.

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Keywords: Public policy; port logistics; container transport; Chan May Port; OECD evaluation framework

1. Introduction

The development of logistics and container transport is important for local competitiveness, investment attraction, and supply-chain connectivity. In Hue City, Chan May Port is a significant maritime gateway. Before 2022, however, its container market was relatively small, cargo volumes were dispersed, and links among the port, shipping lines, logistics providers, and cargo owners were not sufficiently strong to sustain regular services.

To provide an initial stimulus, the People's Council of Thua Thien Hue Province (now Hue City) adopted Resolution No. 18/2022/NQ-HDND, subsequently amended and extended through related instruments, to provide direct support to shipping lines and entities transporting containerised cargo through Chan May Port [5]–[7]. The policy was accompanied by a considerable increase in vessel calls and container throughput during the pilot period. Nevertheless, the decline in activity after the policy ended raises the question of whether budgetary support created a self-sustaining market or mainly generated a short-term activation effect.

The research gap concerns the integrated assessment of outputs, resource-use efficiency, impacts, and sustainability in a local container-support policy. Applying the six-criterion OECD framework [8] and combining quantitative and qualitative evidence, this study addresses three questions: (i) what results did the policy achieve during the pilot period; (ii) how do stakeholders assess the policy against the six OECD criteria; and (iii) how should the policy be adjusted to reduce dependence on direct subsidies and strengthen underlying competitiveness?

The study contributes an approach to evaluating local container policy by combining the OECD framework with port-operation records, stakeholder surveys, open-ended responses, and fiscal analysis. It also distinguishes observed fiscal returns from the policy's causal effects, thereby avoiding overinterpretation of the cost-benefit analysis.

2. Theoretical framework and research methodology

2.1. The OECD policy evaluation framework

According to the OECD, policy evaluation can be conducted using six criteria: relevance, coherence, effectiveness, efficiency, impact, and sustainability [8]. In this study, the criteria are operationalised for a policy supporting container transport. Relevance concerns the extent to which the policy meets market needs and local development priorities. Coherence concerns its alignment with development plans, infrastructure, and coordination mechanisms. Effectiveness refers to results in terms of shipping routes, vessel calls, throughput, and participating stakeholders. Efficiency considers the relationship between public resources and observed results or revenue. Impact covers economic and logistics-related effects. Sustainability examines whether shipping services and cargo flows can continue after support ends.

The study also draws on research on port choice, in which shipping lines' and cargo owners' decisions are shaped by multiple factors, including cost, handling productivity, infrastructure, hinterland connectivity, service quality, and cargo availability. Financial support is therefore only one intervention within the wider logistics ecosystem.

Table 1. Evaluation criteria and indicators

OECD criterion	Indicators and evidence
Relevance	Survey scores; extent to which shipping-line and cargo-owner needs are met; role in market activation.

OECD criterion	Indicators and evidence
Coherence	Survey scores; alignment with logistics development, infrastructure, and inter-agency coordination.
Effectiveness	Vessel calls, TEU, number of shipping lines, services, and survey scores.
Efficiency	Actual support expenditure and observed tax revenue; benefit cost ratio (B/C) and return on investment (ROI) used only as fiscal indicators.
Impact	Effects on logistics activity, businesses, investment, and the business environment, assessed through survey and operational evidence.
Sustainability	Throughput after support ends; ability to retain customers; reported effects of discontinuing support.

Source: Compiled by the author based on the OECD framework (2021) [8].

2.2. Data and analytical methods

The study adopts a mixed-methods approach. Secondary data include vessel calls, container throughput, operating revenue, support expenditure, and public-revenue information for 2022 - 2025, supplemented by data for the first nine months of 2026 to observe the period after the policy ended. Primary data were collected through an online questionnaire containing closed- and open-ended questions. A total of 34 valid responses were obtained: 20 from businesses and shipping-line representatives and 14 from experts and managers.

Survey responses were analysed using descriptive statistics, percentages, and mean scores on a five-point scale. Open-ended responses were coded by theme. Comparisons were made across the pre-policy, pilot, and post-policy periods. Fiscal cost–benefit analysis was conducted on an observational basis; the full amount of observed tax revenue was not treated as a causal benefit of the policy.

For the fiscal indicator, B/C is calculated as observed fiscal benefits divided by actual support expenditure, while net observed benefit is calculated as observed benefits minus support expenditure. Because the study has neither an experimental design nor a control group to identify the share of public revenue attributable to the policy, the CBA results are interpreted as observed fiscal indicators rather than causal impact estimates.

3. Results and Discussion

3.1. Policy implementation and container market development

During the pilot period, Chan May Port recorded 184 container-vessel calls and total throughput of 24,133 TEU. This comprised 121 international calls carrying 15,588 TEU and 63 domestic calls carrying 8,545 TEU. Before the policy, there had been only one trial call involving 132 TEU. The increase indicates that the container market was clearly stimulated during the pilot period.

Table 2. Container transport through Chan May Port before and during the pilot period

Service type	Before the policy	Policy pilot period (Oct. 2022–Sep. 2025)
International	1 call (132 TEU/1,980 tons)	121 calls (15,588 TEU/233,820 tons)
Domestic	0 calls	63 calls (8,545 TEU / 128,175 tons)
Total	1 call (132 TEU / 1,980 tons)	184 calls (24,133 TEU / 361,995 tons)

Source: Chan May Port and the author's compilation of policy implementation records.

These outputs should nevertheless be interpreted cautiously. The increase in vessel calls and TEU demonstrates market activation during the support period, but it does not establish that the entire increase was caused by the subsidy. Cargo composition and port-operating capacity remained structural constraints.

3.2. Assessment against the six oecd criteria

To assess stakeholder perceptions of the container-support policy, the study surveyed 34 respondents in two main groups: businesses and shipping lines directly involved in market operations (n = 20), and experts and managers (n = 14). Table 3 reports mean scores on a five-point Likert scale for the six OECD policy-evaluation criteria.

Table 3. Policy assessment against the six OECD criteria

OECD criterion	Businesses/shipping lines (n=20)	Experts/managers (n=14)	Interpretation
Relevance	4.20/5	4.33/5	Strong alignment with the needs of an emerging market.
Coherence	3.90/5	4.29/5	Aligned with development priorities, but value-chain

			linkages remain limited.
Effectiveness	3.90/5	4.05/5	Clear outputs in vessel calls and TEU throughput.
Efficiency	3.52/5	3.79/5	Positive observed fiscal indicators, requiring caution in causal interpretation.
Impact	3.92/5	4.12/5	Positive spillovers for logistics activity and the business environment.
Sustainability	3.48/5	3.88/5	The weakest criterion; dependence on support remains substantial.

Source: Author's analysis of Survey 1 (n = 20) and Survey 2 (n = 14).

Relevance received high scores: 4.20/5 among businesses and shipping lines and 4.33/5 among experts and managers. This is consistent with a market still in its formative stage, where direct support can reduce initial cost barriers and risks.

Coherence scored 3.90/5 and 4.29/5, respectively. The difference suggests that public-sector respondents viewed policy alignment more positively than stakeholders directly operating in the market. Cargo availability, hinterland infrastructure, equipment, and supporting logistics

services indicate that financial support alone was insufficient to establish integrated value-chain linkages.

Effectiveness scored 3.90/5 among businesses and shipping lines and 4.05/5 among experts and managers, consistent with the recorded vessel calls and container volumes. The policy acted as seed capital, giving businesses additional transport options and helping services to develop progressively.

Actual support expenditure from 2023 to September 2025 amounted to VND 26.054 billion. Observed import-export and value-added tax revenue in the local area was approximately VND 1.140 trillion. Using these two amounts to calculate an observed fiscal indicator produces a B/C ratio of approximately 43.75. This must not be interpreted as meaning that every VND of subsidy generated VND 43.75 in tax revenue: receipts were also affected by import volumes, production and business activity, and firms' choices of customs-clearance locations.

Impact was rated 3.92/5 by businesses and shipping lines and 4.12/5 by experts and managers. Survey evidence indicates positive effects on logistics activity and the business environment. However, views about investment, public revenue, and the development of logistics firms remain primarily perception-based; the available evidence is insufficient to establish causal relationships.

Sustainability was the most prominent weakness. Businesses and shipping lines gave it a score of only 3.48/5, while the ability of infrastructure and services to retain customers without support scored 3.05/5. Of the 20 respondents in this group, 12 (60.0%) reported that ending support had a major effect, seven (35.0%) reported a moderate effect, and one (5.0%) reported no effect. Thus, 95.0% reported at least some effect.

To examine sustainability and the market response after the fiscal instrument was withdrawn, the study compared actual container operations in the first nine months of 2026 with the 2022–2025 pilot period, as shown in Table 4.

Table 4. Container transport before and after the policy ended

Period	Vessel calls	TEU	Tons
October 2022 - September 2025	184	24,133	361,995
First nine months of 2026	20	3,870	54,180

Source: Chan May Port (2026).

Container activity in the first nine months of 2026 declined substantially compared with the pilot period. This supports the existence of a transition gap: the policy stimulated the market but did not fully convert that initial momentum into underlying competitiveness capable of sustaining services independently.

3.3. Structural bottlenecks

Analysis of open-ended responses identified four major bottlenecks: (i) a small cargo base and an imbalance between exports and imports; (ii) limited cargo-handling productivity and specialised equipment; (iii) shortages of container yards, depots, container freight stations (CFS), and ancillary logistics services; and (iv) the commercial practice of buying on CIF terms and selling on FOB terms, which reduces firms' control over carrier and port selection. These constraints are interrelated and therefore cannot be resolved by a single subsidy instrument.

4. Conclusion and recommendations

The findings show that the container transport support policy at Chan May Port played a clear role in stimulating the market. Vessel calls and container throughput increased substantially during the pilot period, and survey respondents assessed relevance, coherence, effectiveness, and impact relatively positively. Fiscal analysis also indicates that observed tax revenue in the area was many times larger than support expenditure. However, observed fiscal returns should not be equated with the policy's causal impact.

The principal limitation concerns sustainability. Vessel calls and throughput declined after support ended, while infrastructure, cargo availability, hinterland services, and coordination among stakeholders remained insufficiently developed. Direct cash subsidies may therefore be appropriate as an initial catalyst, but should not remain the central long-term instrument.

For 2026–2030, policy should shift towards four priorities.

First, establish a three-to-five-year policy horizon and prioritise indirect support and capacity building.

Second, improve handling productivity and develop container infrastructure, depots, CFS facilities, and hinterland connectivity.

Third, expand the cargo base, strengthen regional linkages, and improve businesses' ability to choose ports proactively.

Fourth, accelerate digital transformation and administrative reform, while strengthening cooperation among government, the port, shipping lines, logistics providers, cargo owners, and educational institutions. Also develop a Port Community System (PCS) ecosystem. Research and deploy port community platform integration to strengthen connectivity and ensure synchronized data sharing across logistics supply chain stakeholders.

This study is limited by its small, non-probability sample, the short post-policy observation period, and the absence of a control group for estimating causal effects. Future research should develop longer time series, compare Chan May with suitable control ports, and apply appropriate quantitative methods to test policy impacts.

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APPENDIX

Post-Course Questionnaire

Purpose: This questionnaire aims to evaluate whether English for Business 1 & 2 (COB1 and COB2) have helped students achieve their learning goals.

Instructions: Please indicate your level of agreement with each statement by choosing one option.

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Conflicts of Interest

The authors declare no conflict of interest.

Informed Consent Statement

Not applicable.

Data Availability Statement

The data supporting the findings of this study are derived from Chan May Port operational records, relevant policy implementation records, and the author's stakeholder survey. Subject to applicable confidentiality and data-access restrictions, further information may be requested from the author.

Declaration of Generative AI and AI-Assisted Technologies

A generative AI tool was used to assist with English translation and language editing of the manuscript. The author is responsible for reviewing and verifying the translation, numerical data, references, and final submitted content.

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