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**TÁC ĐỘNG CHUYỂN HƯỚNG THƯƠNG MẠI CỦA CÁC BIỆN PHÁP CHỐNG
BÁN PHÁ GIÁ CỦA MỸ ĐỐI VỚI GỖM SỨ TRUNG QUỐC: CƠ HỘI VÀ THÁCH
THỨC ĐỐI VỚI TĂNG TRƯỞNG XUẤT KHẨU CỦA VIỆT NAM (2018–2024)**

Phạm Phan Thùy Trang¹, Bùi Thị Thanh An, Dương Nguyễn Hà Anh,

Lưu Phương Anh,

Sinh viên K63 CLC Kinh tế đối ngoại – Viện Kinh tế và Kinh doanh quốc tế

Trường Đại học Ngoại thương, Hà Nội, Việt Nam

Vũ Huyền Phương

Giảng viên Viện Kinh tế và Kinh doanh quốc tế

Trường Đại học Ngoại thương, Hà Nội, Việt Nam

Tóm tắt

Nghiên cứu này phân tích tác động chuyển hướng thương mại của thuế chống bán phá giá của Mỹ đối với gốm sứ Trung Quốc từ năm 2018 đến năm 2024, tập trung vào sự trỗi dậy của Việt Nam như một nhà cung cấp thay thế quan trọng. Sử dụng phương pháp so sánh trước và sau và phân tích Lợi thế So sánh Hiện thực (RCA) trên các mã HS 6907.21, 6907.22 và 6907.23, nghiên cứu đã xác định được sự dịch chuyển đáng kể của thị trường. Kết quả cho thấy sự sụp đổ gần như hoàn toàn của nhập khẩu Trung Quốc vào thị trường Mỹ, giảm 98,7% về số lượng, trong khi xuất khẩu của Việt Nam tăng trưởng theo cấp số nhân. Đáng chú ý, RCA của Việt

¹ Tác giả liên hệ, Email: k63.2413150304@ftu.edu.vn

Nam trong một số phân khúc đã vượt qua ngưỡng quan trọng 1.0, báo hiệu sự cải thiện năng lực cạnh tranh về cấu trúc. Tuy nhiên, nghiên cứu cũng nêu bật những rủi ro liên quan đến sự phụ thuộc của Việt Nam vào nguyên liệu đầu vào trung gian của Trung Quốc và khả năng bị điều tra chống bán phá giá. Kết quả cho thấy, mặc dù các biện pháp khắc phục thương mại đã tạo ra "cơ hội vàng" cho Việt Nam, nhưng tính bền vững lâu dài phụ thuộc vào việc tăng cường chuỗi cung ứng trong nước và tuân thủ quy định.

Từ khóa: chống bán phá giá, xuất khẩu của Việt Nam, gốm sứ, chiến tranh thương mại, chuyển hướng thương mại

TRADE DIVERSION EFFECTS OF U.S. ANTI-DUMPING MEASURES ON CHINESE CERAMICS: OPPORTUNITIES AND CHALLENGES FOR VIETNAM'S EXPORT GROWTH (2018–2024)

Abstract

This research examines the trade diversion impacts of U.S. anti-dumping measures on Chinese ceramics over the period of 2018-2024, thereby identifying opportunities and challenges for Vietnamese ceramic exports. The authors primarily adopted a qualitative methodology, using a before-after comparison, import unit value assessment, and a multi-country Revealed Comparative Advantage (RCA) analysis (comparing Vietnam with India and Brazil) across specific HS codes (690721, 690722, and 690723). This expanded methodology isolates structural shifts from COVID-19 disruptions and explains the profound trade dynamics. The findings show a 98.7% plummet in the quantity of Chinese imports in the U.S. market compared to an exponential growth experienced by Vietnam. Additionally, Vietnam's RCA in certain segments crossed the critical 1.0 threshold, which implies improved structural competitiveness. Apart from evident potentials, the study also highlights risks related to Vietnam's dependence on Chinese intermediate materials and anti-circumvention investigations from the U.S.; therefore, to ensure long-term sustainability, Vietnam should enhance national supply chains and adherence to regulatory standards.

Keywords: anti-dumping, Vietnamese exports, ceramic tiles, trade war, trade diversion

1. Introduction:

The global trade of ceramic products has experienced a change in structure since 2018. Previously, China's ceramic exports held complete control, with approximately 37.5% of the total global volume by 2017 (ITC, 2017). Nevertheless, this dominance nearly collapsed after the U.S. government embarked on prohibitive measures against Chinese imports.

The first pressure was initiated on September 24, 2018, as the U.S. Trade Representative (USTR) added a broad scope of ceramic products to the lists of Section 301 tariffs as a part of the larger U.S.-China trade war (USTR, 2018). By March 31, 2020, the final determination set combined duty rates often exceeding 400% (DOC, 2020a), which effectively triggered a collapse of Chinese ceramic imports in the U.S. market (DOC, 2020b, 2020c).

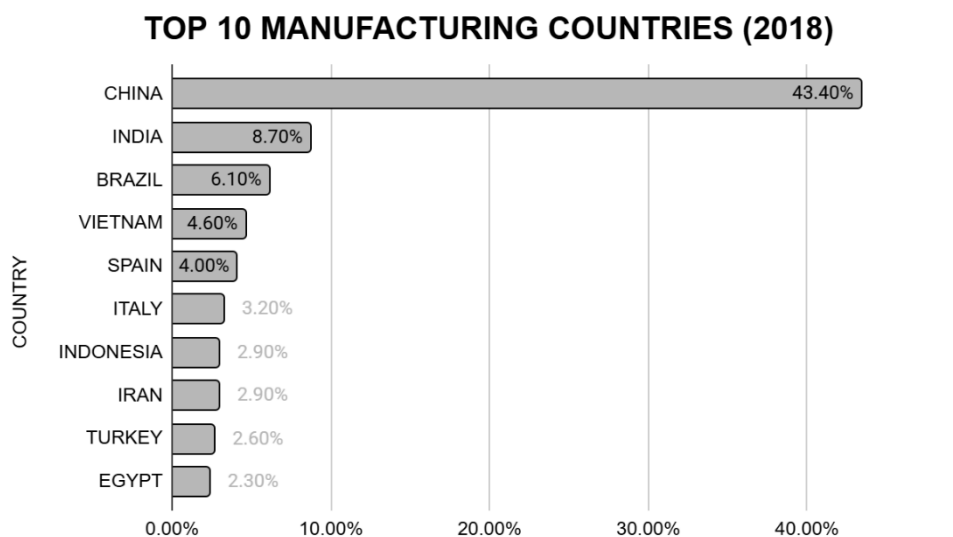


Figure 1. Top 10 ceramic manufacturing countries in 2018

Source: Ceramic World Web

With the position of the fourth-largest producer of ceramic tiles in the world (Ceramic World Web, 2018) and advantages of production relocation and FDI diversion (Nomura, 2018), Vietnam has rapidly become an ideal manufacturing location for alternate sources to eliminate the supply gap created by China. However, it has raised some fundamental challenges to Vietnamese ceramic producers.

Consequently, the research aims are as follows: (1) To measure the effects of trade diversion and the growth prospects of the Vietnamese ceramic exports; (2) To determine the challenges facing the Vietnamese exporters in the U.S. market. (3) To suggest recommendations on the sustainable development of the Vietnamese ceramic industry.

Four indicators are used: export value (USD thousand), export quantity (tons), market share, and unit price (USD/ton), supplemented by the RCA index to assess structural competitiveness. There are 6 levels of ceramic tiles; however, this study only focuses on 3 types of ceramic tiles, which are classified under the Harmonized System (HS) 6-digit level, which are: HS 690721, HS 690722 and HS 690723. By using HS 6-digit product codes, the study ensures consistency in international trade comparisons and allows exact measurement of export performance across different ceramic tile segments.

In this study, RCA is applied to assess whether Vietnam has developed a competitive advantage in ceramic tile exports to the U.S. market during 2018-2024, rather than simply benefiting from a temporary increase in demand caused by the redirection of trade flows from China. By tracking RCA values across the study period, the analysis can distinguish between structural export competitiveness and short-term trade diversion effects. The formula is as follows:

$$RCA_i = X_{ij}/X_{it}X_{wj}/X_{wt}$$

Where:

- X_{ij} = Exports of good j by country i
- X_{it} = Total exports of country i
- X_{wj} = World exports of good j
- X_{wt} = Total world exports

Throughout the 2020-2022 period, although global demand and export volumes declined due to supply chain disruptions (COVID-19 noise), the RCA index reflects actual competitiveness. Since both the numerator and the denominator are impacted by the pandemic, the continuous growth of Vietnam's RCA indicates that the market shift to Vietnam is a sustainable structural trend, not a temporary one. To address the limitations of a single-country focus and to eliminate the noise caused by global volume contractions during the COVID-19

pandemic (2020-2022), this study expands its methodology to include a comparative RCA and unit price analysis. By benchmarking Vietnam against other primary beneficiaries of the Vinerian trade diversion—specifically India and Brazil—the methodology captures the new competitive reality and structural challenges facing Vietnamese enterprises.

2. Literature review

2.1. *Trade creation and trade diversion theory*

The analysis framework for trade diversion originates from Jacob Viner's notable paper *The Customs Union Issue* (Viner, 1950). Trade diversion is when efficient imports from non-member countries are replaced by less efficient imports from preferred partners due to discriminatory tariff policies. Despite being originally developed for regional integration, this Vinerian framework has been applied widely to evaluate unilateral trade remedies. If an importing country imposes anti-dumping duties on an exporter (e.g., China), untargted competitors like Vietnam are more likely to encounter more competitiveness. This in turn may lead to a trade diversion effect according to Viner's logic.

2.2. *Anti-dumping as contingent protection*

From an economic perspective, anti-dumping measures are conditional protection tools. Empirical studies on U.S. trade policy and specific tariff impacts (Prusa, 1997; Lee et al., 2013) indicate that instead of shielding the domestic market, anti-dumping measures primarily function as a discriminatory trade restriction that redirects global supply. To explain more clearly, by analyzing bilateral trade flows, Park (2009) shows that these measures create a trade-depressing effect (reducing imports from targeted countries) and a trade-diversion effect (increasing imports from non-targeted countries).

2.3. *Third-country effects of anti-dumping measures*

Empirical studies show that the third-country effects of anti-dumping duties are often not only limited to bilateral relationships but also unintentionally change the global trade network. One consequence is anti-circumvention behavior, as evidenced by Chinese exporters rerouting goods through Southeast Asia to avoid foreign anti-dumping tariffs many times (Park, 2009). Besides redirecting exports, trade measures may also promote internal restructuring,

specifically the Vietnamese catfish case experiencing a shift in production allocation under the U.S. duties (Brambilla et al., 2009).

In the context of the U.S.-China trade war, Vietnam simultaneously increased exports to the United States while importing more Chinese intermediates. This can be inferred as a complex interaction between trade diversion and supply chain restructuring (UNCTAD, 2022).

The literature thus identifies five recurring patterns: suppression of targeted imports, expansion of non-targeted suppliers, trade diversion to alternative markets, avoidance through third countries, and FDI relocation. These patterns provide a strong analytical framework to examine whether similar mechanisms occurred in the ceramic tile industry after anti-dumping measures were imposed by the United States on China.

2.4. *Research gap*

Despite extensive literature on AD measures, three gaps remain. The first one is its failure to capture Vietnam's specific structural emergence, although the Vinerian framework broadly explains third-country trade diversion. The next gap is that empirical work rarely assesses combined U.S. AD effects in the ceramics sector during 2018-2024. Lastly, existing analyses seldom integrate trade diversion with FDI relocation dynamics and section 781 anti-circumvention risks to explain Vietnam's rise as a strategic supply-chain hub rather than a mere temporary substitute.

3. Theoretical framework

3.1. *WTO anti-dumping principles and how AD works in practice*

Under the WTO Anti-Dumping Agreement, member nations may levy AD duties when imports are priced below 'normal value' and cause 'material injury' to the domestic industry (WTO). In practice, AD investigations are started by injured domestic industries; then authorities collect extensive price and cost data from exporting companies to calculate the extent of undervaluation relative to fair value (Zhang, 2026). Empirical studies showed how AD duties can significantly reduce the import quantity of targeted products, causing shifts in trade flows (Blonigen and Park, 2004). However, AD enforcement is also criticized for its

complexity and potential to be used as a strategic trade tool rather than simply solving unfair pricing practices (Thomas, 2005).

3.2. Mechanism of trade diversion and conceptual framework toward Vietnam

In the context of anti-dumping duties, imposing additional tariffs on targeted exporters raises their relative cost disadvantage in importer markets, creating market space for alternative suppliers whose export prices remain uncontrolled by AD duties (Park, 2009). When major markets impose duties, importers often take goods from non-targeted countries to satisfy domestic demand, leading to changes in trade patterns (Lee & Park, 2013). However, trade diversion is often examined by importing authorities to distinguish it from trade deflection (or re-routing), where goods are only transshipped or undergo insignificant processing in a third country to circumvent duties (Pistikou, 2024).

Within this framework, Vietnam potentially benefits from the U.S. AD measures on Chinese ceramics, as duties redirect trade flows toward non-targeted countries with competitive cost structures and product substitutability (Pistikou, 2024; Park, 2009). However, there are also risks related to the trade diversion effects.

3.3. Rules of origin

Rules of origin are important for determining the national source of a product (WTO). In the case of ceramic products under HS Chapter 69, the United States applies the principle of substantial transformation, meaning that a product's origin is determined by where the key manufacturing process takes place. In the ceramic tile industry, the firing stage in the kiln is often considered the most important stage because it gives the tile its final physical properties. As a result, ceramic tiles that are shaped and fired in Vietnam can be considered products of Vietnamese origin. However, if semi-finished tiles (such as biscuit tiles) are imported from another country, for example, China, and undergo minor processes such as glazing or polishing in Vietnam before export, they may not satisfy the rules of origin requirements (Koslowski, 2020). This difference is important for assessing whether Vietnam's ceramic exports truly reflect domestic production or adjustments in supply chains following anti-dumping measures.

4. Industry and market context

4.1. Global ceramic market and U.S. import characteristics

With approximately 55% of global tile output in 2024, China has taken the lead in global ceramic production (IndexBox, 2024). Meanwhile, the U.S. is the dominant importer due to its high demand for construction sectors (World Bank, 2023). To protect domestic manufacturers, the U.S. has applied prohibitive anti-dumping duties on Chinese ceramics, which divert sourcing toward non-targeted suppliers (ITA, 2020).

4.2. Vietnam and competing suppliers

Vietnam has become a strategic alternative supplier in the global ceramics market thanks to competitive labor costs, growing production capacity, and a vast array of free trade agreements. However, prior to the impact of U.S. anti-dumping duties, the global and U.S. ceramic markets largely depended on established powerhouses for supply.

Table 1. U.S. Imported value of ceramic products by exporters (2018)

Exporters	Imported value in 2018
World	2,149,063
Italy	659,565
Spain	334,896
Mexico	229,983
Turkey	100,755
Brazil	94,445
India	12,872
Vietnam	327

Source: U.S. Import Data (2018)

These leading exporters maintained their market shares and high export volumes through product quality traits and other merits:

Italy and Spain: Dominating the market, these nations are held in high regard for their premium quality, aesthetic innovation, and advanced manufacturing technologies. Their products also cater strictly to high-end architectural and luxury design segments.

Mexico: Greatly benefits from its geographical proximity to the U.S. and tariff-free access under the USMCA. Besides, Mexican ceramics offer reliable, standard quality that perfectly matches the high demands of U.S. commercial and residential construction sectors.

Turkey: Utilizes its historical craftsmanship and high-end design ability to produce aesthetically appealing ceramics. It offers near-European premium quality but at a more competitive price.

Brazil: Has a robust domestic industry with access to rich natural resources. This enables Brazil to produce highly durable, thick tiles that perform well in mid-tier and heavy-duty segments.

India: While its export value was relatively modest in 2018 at 12,872 compared to European giants, India holds a large potential with its massive production scale and low-cost structure.

The application of anti-dumping duties on China fundamentally boosted these third countries' exports because of shifting trade flows. This background establishes the baseline of the intensely competitive and quality-driven global context that Vietnam must try in order to capture diverted U.S. market demand.

5. Methodology

5.1. Data sources

This study applies a mixed-method approach. Firstly, a comparative quantitative analysis is conducted using trade data (2018-2024) from Trade Map and WTO. Beyond standard export statistics, this research combines Unit Value Analysis and RCA comparisons with non-targeted peers (India and Brazil) to isolate the impacts of the COVID-19 pandemic. Secondly, a legal-

regulatory qualitative analysis is used, focusing on U.S. trade enforcement documents (Section 781 of the Tariff Act of 1930), to assess avoidance risks. This approach ensures that the study not only observes trade diversion but also provides a comprehensive view of Vietnam's new competitive reality.

5.2. *Before-after comparison approach*

This study adopts a before–after comparison approach to measure the impact of anti-dumping (AD) and countervailing duties (CVD) on Chinese ceramic exports, dividing the analysis into a pre-policy period (2018–2019), which represents the baseline market conditions before the implementation of the trade remedy, and a post-policy period (2020–2024), which captures market adjustments after the policy took effect. To strengthen the analysis, this approach is complemented by observing trends in non-targeted countries, including Spain, Italy, Mexico, Brazil, and India. By comparing these control groups with China, the study aims to separate the effects of trade policy from broader shocks such as COVID-19, which affected all countries simultaneously.

5.3. *Limitations of the method*

Although the before–after comparison method is useful, it cannot fully isolate confounding factors such as global demand fluctuations, exchange rates, and COVID-19, and it faces limitations in establishing precise causality, especially as HS 6-digit data may not capture product differentiation or quality changes. However, this study mitigates these issues by comparing the targeted country, China, with non-targeted countries such as Vietnam and India within the same pandemic context. Since COVID-19 affected all countries, differences in export performance help distinguish the impact of trade policy from broader shocks, meaning the results should be interpreted as indicative rather than strictly causal evidence of trade diversion.

6. Results and Analysis

6.1. U.S. Ceramic Import Shifts from Vietnam and China (2018-2024)

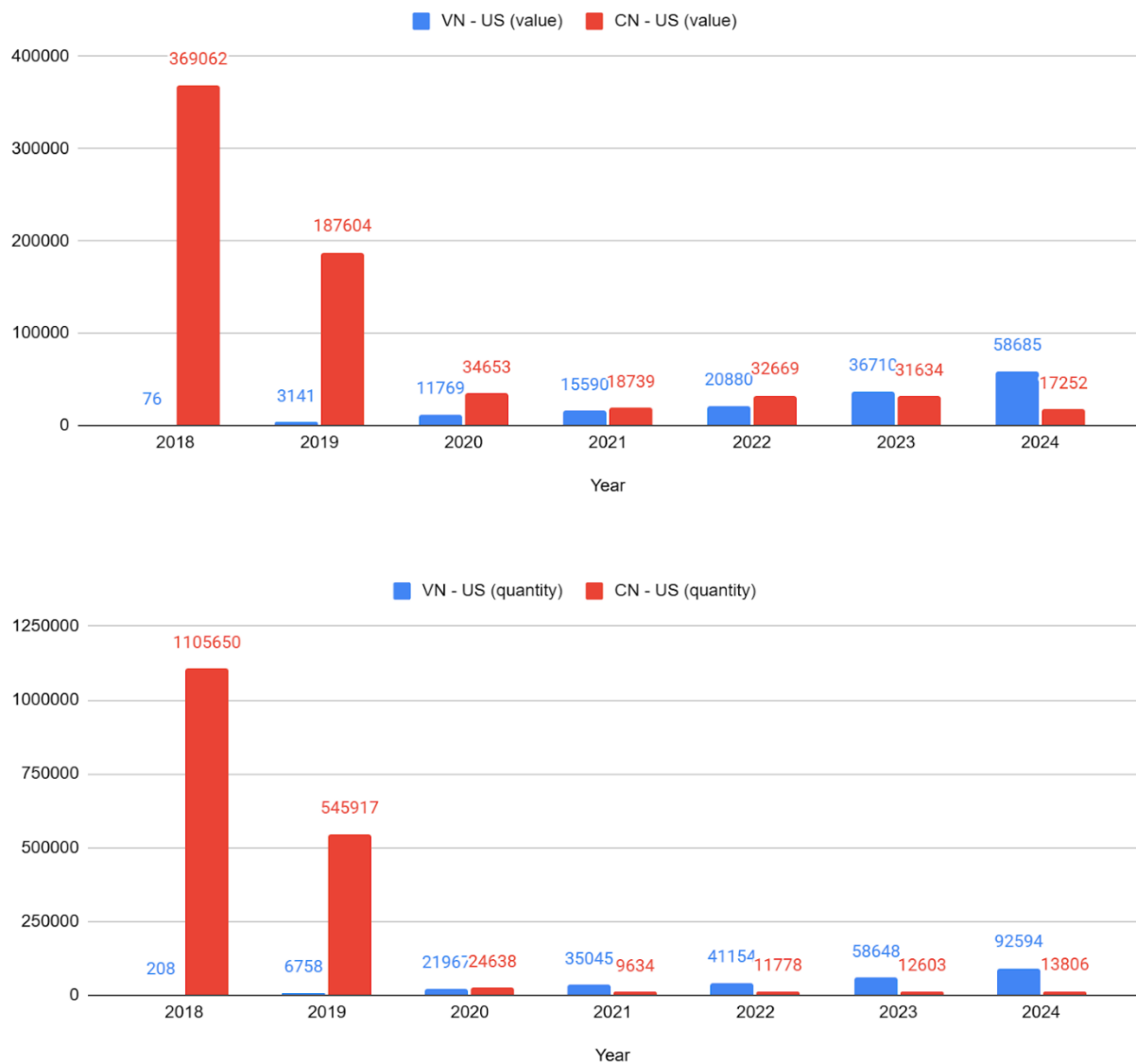


Figure 2. U.S. Ceramic Imports from Vietnam and China (2018–2024)

Source: ITC Trade Map

Note: Value is in thousand USD; quantities are in tons

6.1.1. The "Before" Phase (2018-2019): Chinese Dominance

In 2018, Chinese ceramic tiles heavily dominated the U.S. market, with the export value and quantity being 369,062 thousand USD and 1,105,650 tons, respectively, whereas the contribution of Vietnam was nearly zero.

By 2019, the figure for Chinese began to drop rapidly to 187,604 thousand USD and to 545,917 units; meanwhile, Vietnam experienced its first significant surge (to 3,141 thousand USD and 6,758 tons).

6.1.2. The "After" Phase (2020-2024): Market Substitution

After the policy application, China's export value continued to fall until reaching 17,252 in 2024. Similarly, the volume exported plunged 98.7% to 13,806 units in 2024 compared to its peak.

In contrast, Vietnam recorded a hundredfold soar in the export value and quantity, with the data increasing to 11,769 and 21,967, respectively. The figures ended at 58,685 thousand USD and 92,594 tons, indicating that Vietnam's export indicators (both value and quantity) significantly surpassed those of China in these fields for the first time.

6.1.3. Unit Price Comparison between Vietnam and China

Table 2. Unit price of exported ceramic tiles from Vietnam and China to the U.S.

Product code	Year	Unit Price (Thousand USD/Tons)	
		VN Unit Price in US	CN Unit Price in US
690721	2018	-	0.3298
	2019	0.5108	0.3547
	2020	0.5482	1.3944
	2021	0.4609	2.0149
	2022	0.5220	2.8481
	2023	0.6474	2.6700

	2024	0.6474	1.3601
690722	2018	0.3654	0.2892
	2019	0.2777	0.2756
	2020	0.3527	1.6718
	2021	0.3625	2.1020
	2022	0.4312	2.8437
	2023	0.4424	2.3534
	2024	0.4426	1.0353
690723	2018	-	0.4545
	2019	0.4464	0.4279
	2020	0.4718	1.0530
	2021	0.4196	0.8260
	2022	0.4872	1.1850
	2023	0.6126	0.9955
	2024	0.6126	0.6798

Source: ITC Trade Map

Before anti-dumping measures were implemented, China's unit price remained lower than Vietnam's (around 0.35 thousand USD per ton). However, due to a considerable tax, the figure for China for HS 690721 witnessed an eightfold rise to 2.8481 in 2022. In stark contrast, Vietnam's unit price remained relatively stable between 0.46 and 0.64 thousand USD/ton over the period.

6.2. Detailed Analysis of Vietnam's Export Performance and Competitiveness

Table 3. Vietnam's and China's market share of exported ceramic tiles (2018–2024)

Product code	Year	Market Share (%)	
		VN Market Share in US (%)	CN Market Share in US (%)
690721	2018	0.00%	19.13%
	2019	0.25%	10.04%
	2020	0.96%	2.35%
	2021	0.73%	0.83%
	2022	0.73%	1.34%
	2023	1.59%	1.64%
	2024	2.93%	0.94%
690722	2018	0.02%	26.66%
	2019	0.11%	12.30%
	2020	0.03%	2.27%
	2021	0.02%	2.00%
	2022	0.06%	2.19%
	2023	0.35%	1.85%
	2024	0.27%	1.00%
690723	2018	0.00%	25.21%
	2019	0.01%	14.52%

	2020	0.61%	1.14%
	2021	1.97%	0.23%
	2022	2.58%	0.20%
	2023	4.39%	0.25%
	2024	5.61%	0.20%

Source: ITC Trade Map, UN Comtrade

6.2.1. Market Share Dynamics in the U.S.

HS 690721 & HS 690723 experience the most significant changes. China held 19.13% and 25.21%, respectively, while Vietnam held 0.00% in 2018. Over 4 years, whereas Vietnam's share rose to 2.93% (HS 690721) and 5.61% (HS 690723), China's figure declined to under 1% in both categories. In HS 690722, Vietnam's share growth was quite insignificant (reaching only 0.27% in 2024) despite a plunge in China's market share from 26.66% in 2018 to just 1.00% in 2024.

6.2.2. Revealed Comparative Advantage (RCA) Trends

Table 4. RCA index of Vietnam, China and other competitors (2018-2024)

HS Code	Country	2018	2019	2020	2021	2022	2023	2024
690721	Vietnam	0.60	0.61	0.62	0.63	0.63	0.64	0.64
	China	1.78	1.70	1.20	0.94	1.09	1.21	1.01
	India	2.96	4.43	5.87	5.33	5.17	7.77	7.39
	Brazil	0.92	0.80	0.79	0.91	0.93	0.73	0.76
690722	Vietnam	0.75	0.73	0.61	0.95	0.72	1.17	1.55
	China	3.22	3.70	3.57	3.15	3.54	3.43	2.47
	India	1.38	1.44	1.98	1.74	1.40	3.05	2.52
	Brazil	7.25	5.27	4.45	5.73	4.72	3.68	5.01

690723	Vietnam	0.49	0.65	0.60	0.72	0.92	1.19	1.04
	China	1.72	1.52	1.13	0.82	0.93	0.89	0.84
	India	6.97	7.09	11.51	7.97	6.30	8.41	5.53
	Brazil	1.11	1.27	1.42	1.41	1.34	1.12	1.32

Source: ITC Trade Map

For HS 690722 and 690723, Vietnam officially exceeded the threshold of 1.0 in 2023, eventually reaching 1.55 and 1.04 in 2024, which shows that Vietnam has been becoming more specialized in this field. Meanwhile, despite starting at relatively high RCA scores, China has lost its comparative advantage, as evidenced by the RCA scores in HS 690721 and HS 690723, which was around and even fell below the threshold by 2024.

However, Vietnam is not the only beneficiary of this trade diversion.

Most notably, in HS 6907.21, India experienced an exponential surge, with its RCA rising from 2.96 in 2018 to an overwhelming 7.39 in 2024. This indicates that India has rapidly become a dominant global supplier, creating a high structural barrier for Vietnamese exporters. Similarly, in the mid-tier segment (HS 6907.22), Brazil's RCA scores were consistently around 5.01, far surpassing Vietnam's peak of 1.55.

6.3. Comparative analysis and Covid-19 Isolation

Table 5. Comparative analysis of Export quantity during the Covid-19 period.

Exporters	2018	2019	2020	2021	2022	2023
Spain	28,958	32,589	37,521	43,911	40,353	31,150
Italy	33,931	31,607	30,878	35,884	35,339	27,644
India	1,597	6,347	18,756	20,095	26,344	37,552
Mexico	35,133	33,435	31,147	33,405	33,728	31,110
Brazil	14,698	19,330	21,356	20,914	21,215	16,156

Source: ITC Trade Map

Note: Quantities are in 1000 square meters

According to the hypothesis of a market downturn due to the pandemic, if COVID-19 were the primary reason for imported ceramics declines, then all major supplier countries to the U.S. would have to experience a simultaneous and correlated decline due to the global supply chain and the total of domestic U.S. construction. However, despite China's collapse, non-targeted countries such as Spain, Mexico, and Italy maintained stable export volumes, even witnessing slight growth during the peak of the pandemic (2020-2021).

7. Discussion

7.1. Interpretation of trade diversion evidence

The empirical data (2018-2024) confirms a structural trade diversion in the U.S. ceramic market. Consistent with Jacob Viner's (1950) framework, restrictive AD/CVD duties act as a catalyst, redirecting sourcing from China to a broader group of non-targeted nations. Notably, by comparing China's collapse with the sustained growth of other suppliers during the 2020-2022 period, this study isolates the effect of the COVID-19 pandemic. The fact that non-targeted exporters increased their quantities while China plummeted exponentially proves that trade remedies, rather than pandemic-induced demand shocks, were the primary causes of this realignment.

The study also confirms that trade diversion did not only benefit Vietnam but also led to an intense competition among nations.

The findings reveal that the collapse of Chinese export volume was a direct consequence of a high tariff pass-through effect (Feenstra, 2015). Given that ceramic tiles exhibit high price elasticity of demand, the rise in China's unit price incentivized U.S. importers to shift toward other suppliers who maintained stable prices. However, Vietnam may face circumvention risks under Section 781 of the Tariff Act of 1930. Unlike other suppliers, Vietnam's proximity and FDI ties to China place its Vinerian gains under constant regulatory scrutiny, requiring robust domestic manufacturing evidence (e.g., kiln-firing) to sustain its market access.

7.2. Opportunities

7.2.1. Filling Supply Chain Vacuums

The Chinese exit due to high tariffs left a massive supply gap in the U.S. market, creating a chance for Vietnamese firms to indirectly contract and become primary partners for these stores, thus establishing a long-term brand presence in the U.S. (USITC, 2020).

7.2.2. Integration into "China Plus One" Strategy

Instead of chasing low prices, U.S. importers are looking for supply chain resilience. Vietnam has become the preferred choice in the "China Plus One" strategy. With political stability and active integration into trade agreements (Lam & Nguyen, 2019), Vietnam is now seen as a logical, permanent hub for manufacturers relocating their production bases away from China.

7.2.3. Tariff Arbitrage and Price Competitiveness

While Chinese tiles face prohibitive taxes, Vietnamese products still enter the U.S. under MFN status, often with little to no duty, which creates a natural price advantage (USITC, 2023). Vietnamese companies don't need to decrease their prices to compete; instead, they can maintain healthy margins and use the extra cash to upgrade their kilns and expand production capacity.

7.2.4. Moving into High-value Product Segments

Focusing on customization and aesthetics allows Vietnamese exporters to escape the "low-cost commodity trap" and earn much higher value per unit.

7.3. Challenges

7.3.1. The Threat of Anti-Circumvention Investigations

As Vietnamese exports to the U.S. surge, they inevitably draw the attention of U.S. trade authorities. Under Section 781 of the Tariff Act of 1930, the U.S. may initiate anti-circumvention investigations if it suspects that Chinese goods are being rerouted through Vietnam with minimal processing; eventually, they can apply the same tax to Vietnam.

7.3.2. Heavy Reliance on Chinese Raw Materials

A major weakness is that Vietnam's domestic production still relies on Chinese input supplies. According to the International Trade Administration, a product must undergo

"substantial transformation" to prove its origin. Transitioning to local or non-Chinese materials is becoming a mandatory requirement.

7.3.3. Intensifying Global Competition

Rivals from India and Brazil are flooding the U.S. with very aggressive pricing, particularly in the low-end segment (Giacomini, 2024). This creates barriers for Vietnam's firms to maintain profit margins while expanding their market shares.

7.3.4. Rising Energy Costs Squeezing Margins

Ceramic production is highly energy-intensive. Gas and electricity make up a huge part of the cost. With global energy markets being so volatile, production costs in Vietnam are being pushed up significantly (World Bank, 2022). For factories still using older, less efficient kilns, these costs can erode profits, making it harder to maintain the price advantage.

8. Recommendations and conclusion

8.1. Summary of key findings

The research reveals the evidence of trade diversion after the U.S. imposed AD/CVD duties on Chinese ceramics, specifically China's export quantity plummeting by 98.7% over the given period, while Vietnam's indicators (value, volume, and market share) grew considerably across all three HS categories. In addition, the multi-country RCA analysis indicates that while Vietnam achieved structural competitiveness in specific segments, it faces intense pressure from other suppliers. This confirms that the trade diversion effect has created a highly competitive "new reality" for Vietnamese exporters.

8.2. Recommendations for Vietnamese firms and policymakers

8.2.1. For firms

Firstly, it is necessary to adopt advanced digital traceability systems to provide evidence that the production lifecycle—primarily the kiln-firing phase—occurs domestically (U.S. Customs and Border Protection, 2020). This measure can serve as a defense against potential U.S. anti-circumvention investigations according to Section 781 of the Tariff Act of 1930.

Secondly, to avoid commodity price competitions with rivals like India, Vietnamese exporters should allocate capital towards high-end, LEED-certified production, improving the global value chain and ensuring long-term competitiveness.

Thirdly, firms should establish direct strategic partnerships with major U.S. retailers instead of third-party intermediaries to ensure volume stability and policy resilience.

8.2.2. For policymakers

Firstly, it is advisable for the Ministry of Industry and Trade (MoIT) to establish an early warning system that closely monitors export figures, thus providing timely measures to regulate or warn businesses to avoid falling under the scrutiny of a U.S. safeguard investigation (UNCTAD, 2022).

Secondly, the government should foster national raw material industries, such as glazes and chemicals, to reduce reliance on China's supply and increase the local value content (LVC).

8.3. Limitations and suggestions for future research

Although this study provides certain useful insights, several limitations still exist.

Firstly, the analysis relies primarily on descriptive methods such as before-after comparison and trade indicators, which cannot fully explain causal impacts of anti-dumping duties on export figures (Prusa, 2011).

Secondly, differences in product quality or firm-level competitiveness cannot be captured, while the focus on U.S.-Vietnam-China flows omits broader FDI and supply chain relocation dynamics (UNCTAD, 2022; WTO, 2023).

Future research could apply more econometric approaches to better examine the causal relationships (Bown, 2016). Firm-level data could also be utilized to provide deeper insights into how Vietnamese ceramic producers adapt their strategies under international trade regulations.

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