EGE ACADEMIC REVIEW / *EGE AKADEMİK BAKIŞ*

Volume 26 • Number 4 • October 2026

Cilt 26 • Sayı 4 • Ekim 2026

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EGE ACADEMIC REVIEW / EGE AKADEMİK BAKIŞ

Vol.26 • Issue 4 • October 2026
pp. 629/644
Doi: 10.21121/eab.20260039
Received: 20.08.2025 • Accepted: 20.03.2026

Article Type: *Research Article*

Türkiye's 2018 Antidumping Measures and Their Impact on Targeted Countries and Products

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ABSTRACT

This article examines the impact of nine antidumping measures implemented by Türkiye in 2018 against Germany, Sweden, Finland, Russia, Poland, Brazil, China, Vietnam, and Iran. These measures were taken in response to unfair trade practices, including dumping, by these countries. This study conducted a descriptive analysis that integrated qualitative analyses of policy documents, trade data, and case studies, with a sectoral focus on the sectors most affected by dumping practices. Furthermore, the Chow structural break test was applied to assess the effectiveness of the 2018 antidumping measures. The Chow test results confirm that 2018 marked a significant structural break in Türkiye's import dynamics with several countries, for Germany, Poland, Vietnam, Iran, and Brazil. On the other hand, no significant structural break is observed in imports from Finland, Sweden, China, and Russia. This could be due to several factors, such as the absence of direct antidumping measures against these countries in 2018, strong underlying trade relationships that buffer against such interventions, or already stable trade volumes unaffected by tariff-based policies.

Keywords: Antidumping Measures, Türkiye, Chow Test.

JEL Classification Codes: F13

Referencing Style: APA 7

INTRODUCTION

The interaction between protectionist policies and global trade liberalization has long attracted the attention of both academics and policymakers. While traditional protectionism relied heavily on tariffs to shield domestic industries, contemporary global trade increasingly depends on non-tariff instruments. This shift reflects the growing need for countries to reconcile international trade obligations with domestic economic priorities (Vandenbussche and Viegelahn, 2011).

Türkiye's integration into the European Union (EU) Customs Union in 1996 marked a significant turning point in its trade policy. The agreement prohibited the use of tariffs on non-agricultural imports and required Türkiye to adopt the EU's common customs tariff for imports from third countries. As a result, Türkiye's ability to rely on conventional tariff-based protection was severely constrained. This institutional framework compelled Türkiye to seek alternative trade defence mechanisms, with antidumping measures emerging as a central policy instrument to address unfair trade practices and protect domestic industries.

Türkiye's antidumping policies have therefore functioned not only as tools of trade defence but also as instruments of industrial policy. While formally aligned with World Trade Organization (WTO) rules, these measures have been used pragmatically to mitigate the adverse effects of import competition. Over time, a substantial body of literature has examined the legal, technical, and economic effectiveness of Türkiye's antidumping practices.

In Türkiye, measures aimed at protecting domestic production against dumping are implemented under Law No. 3577 on the Prevention of Unfair Competition in Imports, enacted on June 14, 1989. According to Article 2(a) of this law, dumping is defined as the export price of a good to Türkiye being lower than the normal value of a like product. If dumping causes injury, threatens injury, or delays the establishment of an industry, the General Directorate of Imports may initiate an investigation either

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ex officio or upon complaint (Articles 3 and 4). Following an investigation conducted by the Unfair Competition Assessment Board, provisional measures, price undertakings, or antidumping duties may be imposed (Article 6). The responsibility for paying antidumping duties rests with the importing firm, and the duty is collected or secured by the Customs Administration (Articles 8 and 9).

Recent empirical studies provide important insights into Türkiye's antidumping strategies and their broader trade implications. Tan (2008) examines Türkiye's alignment with international trade norms and its shift toward the legal formalization of trade policy. While this transition strengthened compliance with global frameworks, it also introduced uncertainties regarding Türkiye's bargaining power in international negotiations. Boztaş (2012) focuses on the technical implementation of antidumping measures and identifies inconsistencies in the calculation of dumping margins and normal value. These methodological shortcomings raise concerns about both the credibility and effectiveness of the measures. Köse (2013) analyses the textile sector and finds that antidumping duties and additional customs taxes reduced import penetration and stimulated domestic production. However, the study also cautions that prolonged reliance on such instruments may weaken innovation and long-term competitiveness.

Alimu (2020) examines Türkiye's trade relations with China during the 2000–2006 period. The study shows that while less productive Chinese firms exited the Turkish market, more competitive exporters adapted by increasing prices rather than withdrawing. This adaptive behaviour suggests that antidumping measures may alleviate short-term pressures without resolving deeper structural imbalances. Akbaş (2022) provides a more recent, sector-specific analysis focusing on Türkiye's steel industry and demonstrates that antidumping decisions significantly affect firm-level import strategies. Nevertheless, the study concludes that their contribution to long-term industrial competitiveness remains limited in the absence of complementary structural reforms.

Contrasting perspectives on Türkiye's use of protectionist measures during the 2008 global financial crisis are offered by Bown (2014) and Tekbaş (2014). While Bown argues that the crisis intensified Türkiye's reliance on non-tariff measures, Tekbaş finds no substantial increase in protectionist practices. These divergent findings highlight the importance of carefully isolating policy effects from broader macroeconomic shocks. This issue is particularly relevant in Türkiye's trade with China, where sectors such as igniters and polystyrene continue to be dominated by Chinese imports despite the imposition of antidumping measures. Economies of scale and competitive pricing appear to limit the effectiveness of conventional trade defence tools in these cases.

Although the Customs Union has facilitated trade integration and economic cooperation with the EU, it has also constrained Türkiye's trade policy autonomy. Türkiye must adopt the EU's common customs tariff and implement trade agreements negotiated by the EU with third countries, despite not participating in the negotiation process. This asymmetry has generated persistent grievances, particularly in sectors where third-party agreements adversely affect Türkiye's competitiveness. As a result, antidumping measures have become one of the few policy instruments through which Türkiye can respond to import pressures.

Taken together, the literature portrays Türkiye's antidumping policies as a pragmatic yet incomplete response to global competition. While these measures provide temporary relief and ensure compliance with international trade rules, they rarely address the structural constraints that limit long-term competitiveness. The central policy challenge for Türkiye is therefore to integrate trade defence instruments into a broader strategy of sustainable economic transformation.

Against this background, 2018 represents a critical turning point in Türkiye's trade defence policy. In that year, Türkiye implemented nine primary antidumping measures targeting imports from Germany, Sweden, Finland, Russia, Poland, Brazil, China, Vietnam, and Iran. This sharp increase in policy activity distinguishes 2018 from preceding years and provides a natural reference point for empirical analysis. However, the effectiveness of these measures varied substantially across countries and products, with particularly mixed outcomes in cases involving dominant exporters such as China.

This paper contributes to the literature by offering a product- and country-level assessment of Türkiye's 2018 antidumping measures, combining descriptive trade analysis with the Chow structural break test to determine whether the 2018 antidumping practices were effective. Specifically, it investigates whether the 2018 measures led to measurable changes in import dynamics and evaluates the extent to which antidumping policies can function as effective trade defence instruments under the constraints of the EU Customs Union. In contrast to studies that rely on aggregate indicators, this paper provides a disaggregated analysis that captures the

heterogeneous effects of antidumping measures across countries and sectors.

The remainder of the paper is structured as follows. Section 2 reviews the theoretical frameworks of tariff and non-tariff barriers. Section 3 discusses Türkiye's trade policy within the context of the EU Customs Union. Section 4 provides background information on antidumping practices in Türkiye. Section 5 is on data ant the methodology. Section 6 examines the 2018 antidumping implementations and their sectoral and country-specific impacts. Section 7 presents the Chow Test results, and Section 8 concludes with policy implications.

Theoretical Framework: Tariff and Non-Tariff Barriers

Tariffs and non-tariff barriers have historically played a crucial role in shaping international trade policies (Baldwin, 2016). Tariff barriers consist of taxes or duties imposed on imports, which increase the prices of foreign goods and thereby protect domestic industries. These barriers have traditionally been the most commonly used trade restriction tools, owing to their straightforward implementation and revenue-generating capacity.

In contrast, non-tariff barriers encompass a broad range of measures, including quotas, licensing requirements, and technical standards, that indirectly restrict imports without imposing explicit fiscal costs (Neufeld, 2001). As tariff rates have declined—particularly following the implementation of multilateral trade agreements—non-tariff barriers have become increasingly important in the global trade regime. This shift from tariff-based protection to non-tariff measures reflects the evolving structure of international trade, where countries seek to safeguard domestic industries while remaining compliant with World Trade Organization (WTO) commitments (Prusa, 2001).

The theoretical framework surrounding tariffs and non-tariff barriers illustrates the significant evolution of trade protection tools, especially in Türkiye's transition from tariff-based protection to non-tariff instruments under the constraints of the Customs Union. This transition highlights the strategic adjustments Türkiye has made to counter unfair trade practices while remaining compliant with international trade obligations. While non-tariff measures—particularly antidumping duties—have provided adequate short-term protection for domestic industries, they also expose Türkiye's structural vulnerabilities within the global trading system, especially under the limitations imposed by the Customs Union.

For emerging economies such as Türkiye, non-tariff measures have become essential policy instruments. Antidumping duties, in particular, are widely used to address unfair trade practices and mitigate the adverse effects of dumping and foreign subsidies. These dynamics play a central role in shaping Türkiye's antidumping policies and its broader approach to international trade.

Türkiye's Trade Policy and the EU Customs Union

Türkiye's participation in the Customs Union with the European Union (EU) since 1996 has significantly shaped its trade policy (Akgül, 2018). The Customs Union agreement mandates the elimination of tariffs on industrial goods traded between Türkiye and the EU, while simultaneously requiring Türkiye to align its external trade policies with the EU's common customs tariff.

In recent years, discussions about modernizing the Türkiye–EU Customs Union have gained momentum. Updating the agreement could address existing structural problems and create a more balanced and equitable partnership. The modernization debate highlights potential avenues to address Türkiye's longstanding grievances and strengthen its role in global trade. Beyond correcting structural asymmetries, modernization could also incorporate mechanisms that grant Türkiye a more active role in decision-making processes.

Such reforms could alleviate the limitations that currently restrict Türkiye's trade policy flexibility, particularly regarding third-party trade agreements and the disproportionate impact of non-tariff barriers on Türkiye's exports. Key areas for reform include expanding the scope of the Customs Union to cover services and agriculture, improving consultation mechanisms, and reducing non-tariff barriers that disproportionately affect Turkish exporters. The modernization of the Customs Union would not only strengthen economic ties between Türkiye and the EU but also enhance Türkiye's ability to navigate global trade challenges (Vandenbussche & Viegelahn, 2011). However, achieving such modernization requires strong political will on both sides. Progress is also closely linked to broader political issues, including visa liberalization and human rights concerns.

Findings from Aslan and Yaman (2020) emphasize the urgent need for comprehensive reform. The study demonstrates that Türkiye's antidumping measures have produced varying levels of success, depending on the economic and geopolitical characteristics of the targeted countries. It further argues that the existing constraints

of the Customs Union limit Türkiye's capacity to respond effectively to unfair trade practices. To improve trade relations with China, the authors suggest enhancing domestic production through targeted subsidies and investment in strategic sectors such as technology and manufacturing. Bilateral trade agreements emphasizing fair competition could also contribute to a more sustainable trade relationship.

Antidumping and Türkiye

Protectionist measures have long been a cornerstone of international trade policy, evolving in response to the growing complexity of global economic relations. Initially dominated by customs tariffs and import quotas, protectionism underwent a major transformation following the 1929 financial crisis. The crisis revealed the destabilizing effects of excessive trade restrictions, prompting countries to pursue greater economic cooperation and lower trade barriers. Nevertheless, Worthington (2019) argues that even when tariffs are reduced, genuine trade liberalization often requires complementary measures to address structural imbalances.

In the post–World War II era, the United States played a leading role in establishing international trade institutions. This effort culminated in the creation of the General Agreement on Tariffs and Trade (GATT) in 1947. The GATT provided a framework for multilateral trade negotiations, established rules governing international trade, and created a forum for dispute resolution (Baldwin, 2016). Its success eventually led to the establishment of the World Trade Organization (WTO) in 1995 following the Uruguay Round negotiations. According to Mughwai (2020), the WTO has become central to regulating global trade and enforcing international trade rules.

Despite these institutional developments, the declining importance of tariffs has encouraged governments to rely increasingly on non-tariff measures. Often described as "new protectionism tools" (Aydın et al., 2010), these measures include antidumping duties, countervailing duties, and safeguard measures. They are designed to counter unfair competition and protect domestic industries from import surges, yet their widespread use has proven difficult for the WTO to discipline effectively.

Assessing the effectiveness of antidumping measures remains critical. Marcinkiewicz and Piekutowska (2020), in their Analysis of EU member states, conclude that no country follows a purely protectionist or purely liberal trade policy. This finding underscores the strategic and selective use of antidumping measures as economic policy instruments.

WTO data further show that the United States and India are the world's leading users of antidumping measures, with Türkiye ranking third. Yaman (2019) identifies mining and metal products as the sectors most frequently targeted by antidumping actions against Türkiye's exports. The United States emerges as the primary initiator of such cases, highlighting the strategic dimension of trade defence policies.

Parıltı (2015) classifies non-tariff barriers into financial and non-financial instruments. Financial instruments, such as antidumping and countervailing duties, involve monetary transfers intended to offset unfair trade practices. Non-financial instruments—including quotas and technical standards—restrict imports through regulatory or physical constraints. Together, these measures have become essential tools for countries seeking to protect domestic industries in an increasingly competitive global environment.

Table 1 compares the distribution of antidumping measures among leading economies in 2019 and 2024. The United States remains the dominant user, followed by India, Brazil, and Türkiye. The data reveal a clear global shift toward increased reliance on trade defence instruments. Between 2019 and 2024, the number of active measures rose sharply in most countries, reflecting a resurgence of protectionist tendencies in the post-pandemic period.

Türkiye ranks third globally with 169 active temporary trade barriers, demonstrating its proactive use of antidumping, countervailing, and safeguard measures. This level of engagement is notable given Türkiye's limited policy space under the EU Customs Union. Türkiye's extensive use of trade defence instruments reflects both its commitment to fair trade principles and the challenges posed by competition from countries such as China, Vietnam, and Russia.

In contrast to the global trend, Türkiye stands out as one of the few countries where the number of active measures declined, from 183 in 2019 to 169 in 2024. This reduction may reflect shifts in trade priorities, procedural constraints, or the institutional limitations imposed by the EU–Türkiye Customs Union. While many economies have adopted more protectionist trade policies in recent years, Türkiye's declining figures raise essential questions regarding the strategic direction and effectiveness of its antidumping framework.

Table 1: Antidumping Measures in Effect by Country as of 2019 and 2024 (Cumulative)

Rank	Country	Antidumping Measures 2019	Antidumping Measures 2024
1	USA	388	525
2	India	252	298
3	Türkiye	183	169
4	Brazil	161	175
5	European Union	120	114
6	Chinese	107	122
7	Argentina	102	101
8	Canada	91	119
9	Mexican	76	78
10	Australia	72	71
11	Pakistan	49	52
12	Thailand	42	44
13	Republic of Korea	39	41
14	Indonesia	35	38
15	South Africa	30	32
16	Ukraine	23	25
17	Colombia	20	22
18	Malaysia	20	21
19	Russian Federation	19	19
20	Taiwan	16	17
21	Egypt	13	14
22	Morocco	11	12
23	Vietnam	10	10

Note: Includes antidumping, countervailing, and safeguard measures combined under WTO definitions of Temporary Trade Barriers.

Source: World Bank TTB Database (2024)

DATA AND METHODOLOGY

The primary data source for the empirical analysis is Türkiye's official foreign trade statistics, which are obtained from the Turkish Statistical Institute (TurkStat) and the Republic of Türkiye Ministry of Trade. This data is supplemented by information from the World Trade Organization (WTO), including official notifications and lists of active antidumping measures. Additionally, information on global antidumping practices was sourced from the WTO and the World Bank's Temporary Trade Barriers (TTB) Database. The analysis focuses on annual import values (in U.S. dollars) for selected products and trading partners. It examines imports from Germany, Sweden, Finland, Russia, Poland, Brazil, China, Vietnam, and Iran, which were subject to antidumping measures announced in 2018.

This study employs an empirical methodology combining descriptive trade statistics with the Chow structural break test to evaluate the effectiveness of Türkiye's antidumping measures implemented in 2018. The empirical analysis consists of two complementary components. The descriptive component of the analysis first examines the import values and market shares before and after the imposition of antidumping measures for each product-country pair. Tables and figures are utilized to track the changes in import volumes and shares, enabling a visual assessment of whether imports declined, stabilized, or rebounded following these measures. This approach emphasizes the diversity of policy outcomes and avoids assuming that the effectiveness of antidumping measures is uniform across different countries or sectors.

Second, the Chow test is used to formally assess whether the relationship between imports and time differs significantly before and after 2018, the year of policy intervention. The selection of 2018 as the breakpoint is based on the notable increase in antidumping measures enacted during that year.

Model Specification:

For each country and product, the following linear regression model is estimated:

$$Import_t = \alpha + \beta Year_t + \varepsilon_t$$

where Import $_t$ denotes the annual import value, Year$_t$ represents a time trend, and ε_t is the error term. Separate regressions are estimated for Period 1 (pre-2018), Period 2 (post-2018) and the complete period. The Chow Test checks whether the regression coefficients in both periods differ significantly. It uses the following F-statistic formula:

$$F = \frac{\big(S_T - (S_1 + S_2)\big)/k}{(S_1 + S_2)/(n_1 + n_2 - 2k)}$$

where:

S_T = Sum of squared residuals for the pooled model (2000-2021).

S_1 = Sum of squared residuals for the pre-2018 model.

S_2 = Sum of squared residuals for the post-2018 model.

k = Number of estimated coefficients.

n_1 and n_2 = Number of observations in each period.

If the F-statistic is significant (i.e., the p-value is below 0.05), it indicates that a structural break exists at the chosen breakpoint (2018). There is strong evidence that Türkiye's 2018 antidumping measures caused a structural break in import trends. If not significant: the policy did not have a statistically detectable impact on imports.

Product- and Country-Level Analysis of Antidumping Measures

This section examines the effects of Türkiye's 2018 antidumping measures at the product and country levels. By structuring the analysis around specific product–country pairs, the section aims to highlight the heterogeneous effectiveness of antidumping policies and to avoid overly generalized conclusions. The study draws on official communiqués published in the Official Gazette, import statistics from TurkStat, and data from the Ministry of Trade. By analyzing trade statistics, Table 2 displays Türkiye's antidumping measure decisions from 2002 to 2024. The second column shows cumulative measures, while the third column shows decisions made and ongoing by year. The highest number of measures taken was in 2006, with 25. In 2018, nine new decisions and ten ongoing measures were on the agenda.

Table 2: Antidumping Decisions Implemented by Türkiye 2002-2024

Years	Antidumping Measures Cumulative Number	Antidumping Measures Annual Number
2002	27	11
2003	50	23
2004	65	15
2005	73	8
2006	98	25
2007	105	7
2008	120	15
2009	131	11
2010	141	10
2011	147	6
2012	149	2
2013	162	13
2014	171	9
2015	181	10
2016	196	15
2017	210	14
2018	229	19
2019	237	8
2020	241	4
2021	250	9
2022	255	5
2023	258	3
2024	260	2

Source: Republic of Türkiye, Trade General Directoriat for Imports Dumping and Subsidy Department, List of Anti-dumping and Subsidy Measures

Table 3 summarizes information from nine communiqués published in the Official Gazette. As shown in the Table, the countries involved are either members of the European Union or third parties to it. As a result of the Customs Union Agreement signed in 1996

Table 3: Measure Decisions Taken in 2018

Name of the Product	Country	Notification Date	Expiry Date
Sodium Percarbonates	Germany	02.03.2018	02.03.2023
Sodium Percarbonates	Sweden	02.03.2018	02.03.2023
Kraftliner Papers-Unbleached	Finland Russia Poland Brazil	19.04.2018	19.04.2023
Igniters	People's Republic of China	19.06.2018	19.06.2023
Wires - Core Wires	Vietnam	27.10.2018	27.10.2023
Polystyrene	Islamic Republic of Iran	31.12.2018	31.12.2023

Source: Republic of Türkiye, Ministry of Trade

between the European Union and Türkiye, Türkiye was unable to implement tariffs. The only remaining option was to make antidumping measure decisions.

Table 4: Imports of "Sodium Percarbonates" from Germany

Antidumping Measures Annual Number	Antidumping Measures Annual Number	Antidumping Measures Annual Number	Antidumping Measures Annual Number
2001	1,933,023	23,071	1
2002	7,971,794	1,238	0.0
2003	13,979,935	3,336	0.0
2004	15,452,888	13,359	0.1
2005	16,165,698	30,573	0.2
2006	16,035,925	15,732	0.1
2007	21,323,998	83,265	0.4
2008	34,126,684	814,500	2.4
2009	41,970,711	699,244	1.7
2010	33,624,608	1,082,851	3.2
2011	28,265,351	1,641,798	5.8
2012	20,091,316	1,237,190	6.2
2013	29,683,648	88,961	0.3
2014	27,588,716	74,700	0.3
2015	12,616,394	53,219	0.4
2016	9,830,724	80,173	0.8
2017	9,032,645	339,953	3.8
2018	7,313,169	188,236	2.6
2019	2,183,934	257,817	11.8
2020	1,762,499	232,040	13.2
2021	698,014	329,370	47.2

Source: Republic of Türkiye, Ministry of Trade

Measure Applied to Imports of Sodium Percarbonates from Germany and Sweden

The General Directorate of Imports of the Ministry of Economy conducted a dumping investigation into imports of "sodium percarbonates" originating in Germany and Sweden. In March 2018, a precautionary decision was taken regarding the import of these products. With the Ministry's approval, following the Board's decision, it was decided to impose measures against dumping at rates of 5% and 12% over the CIF price for imports from Germany for different companies. Antidumping measures on imports from Sweden were set at 12%. Germany's share of total imports decreased in 2018, from 3.8 percent to 2.6 percent, as imports from Germany declined more than the overall decline in imports. (see Table 4) Moreover, the decrease in imports of the same product from Sweden also contributes to the decline in Germany's share of total imports. Furthermore, imports continued to decline in the following years, from 9 million dollars in 2017 to 698 thousand dollars in 2021.

This information is also presented in Figure 1. All of these changes show that the decision is very effective.

When the data is examined, it can be observed that Sweden was much more affected by the decision compared to Germany. The share of 11.4 percent in Türkiye's total imports decreased to 0.9 percent (see Table 5). Moreover, in the following years, imports from Sweden were completely cut off, showing that the measure was effective (Özer(2023).

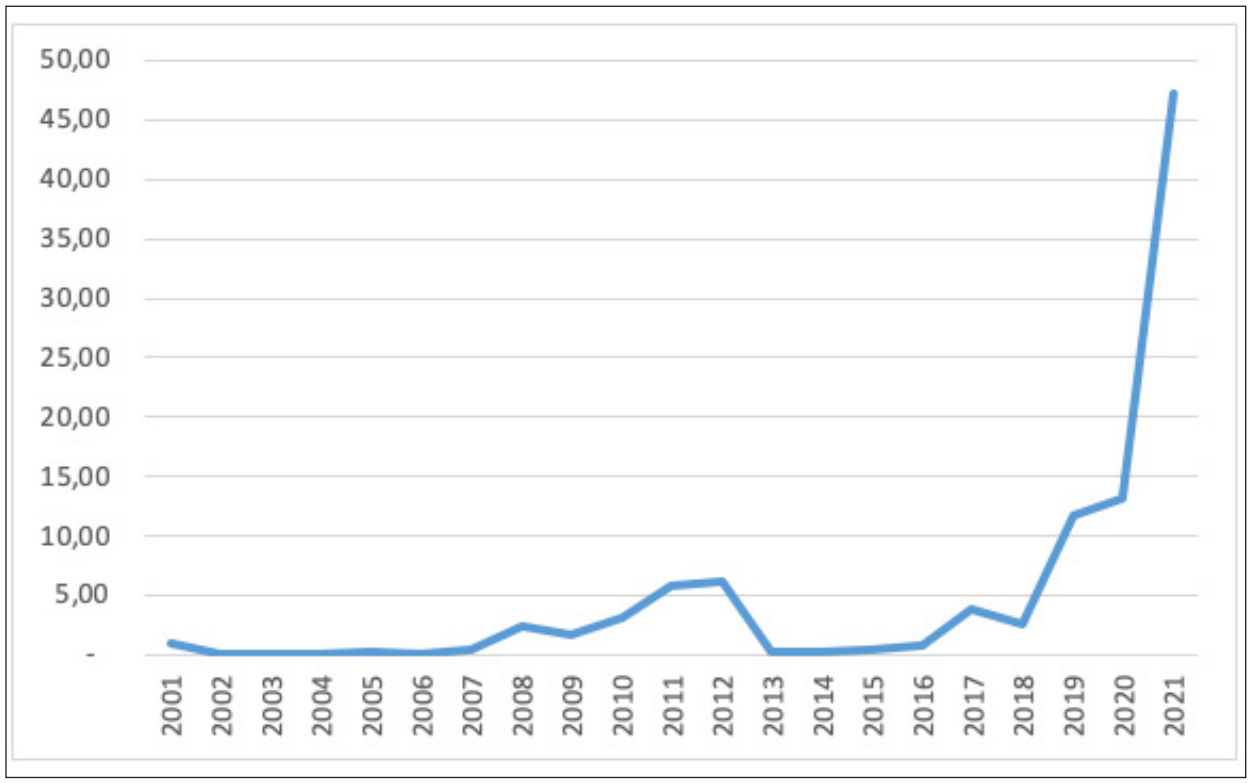

Figure 1: Import share of Germany for "Sodium Percarbonates" (%)

Source: Republic of Türkiye, Ministry of Trade

Table 5: Imports of "Sodium Percarbonates" from Sweden

Years	Total Imports of Türkiye ($)	Imports from Sweden to Türkiye ($)	Share of Sweden in Total Imports of Türkiye (%)
2002	7,971,794	7,579,995	95.1
2003	13,979,935	12,573,784	89.9
2004	15,452,888	11,821,301	76.5
2005	16,165,698	15,070,139	93.2
2006	16,035,925	14,224,523	88.7
2007	21,323,998	8,655,665	40.6
2008	34,126,684	16,072,438	47.1
2009	41,970,711	20,502,762	48.9
2010	33,624,608	17,377,779	51.7
2011	28,265,351	8,977,419	31.8
2012	20,091,316	1,944,621	9.7
2013	29,683,648	17,226,008	58.0
2014	27,588,716	14,522,286	52.6
2015	12,616,394	3,281,083	26.0
2016	9,830,724	3,706,730	37.7
2017	9,032,645	1,028,385	11.4
2018	7,313,169	66,144	0.9
2019	2,183,934		-
2020	1,762,499		-
2021	698,014		-

Source: Republic of Türkiye, Ministry of Trade

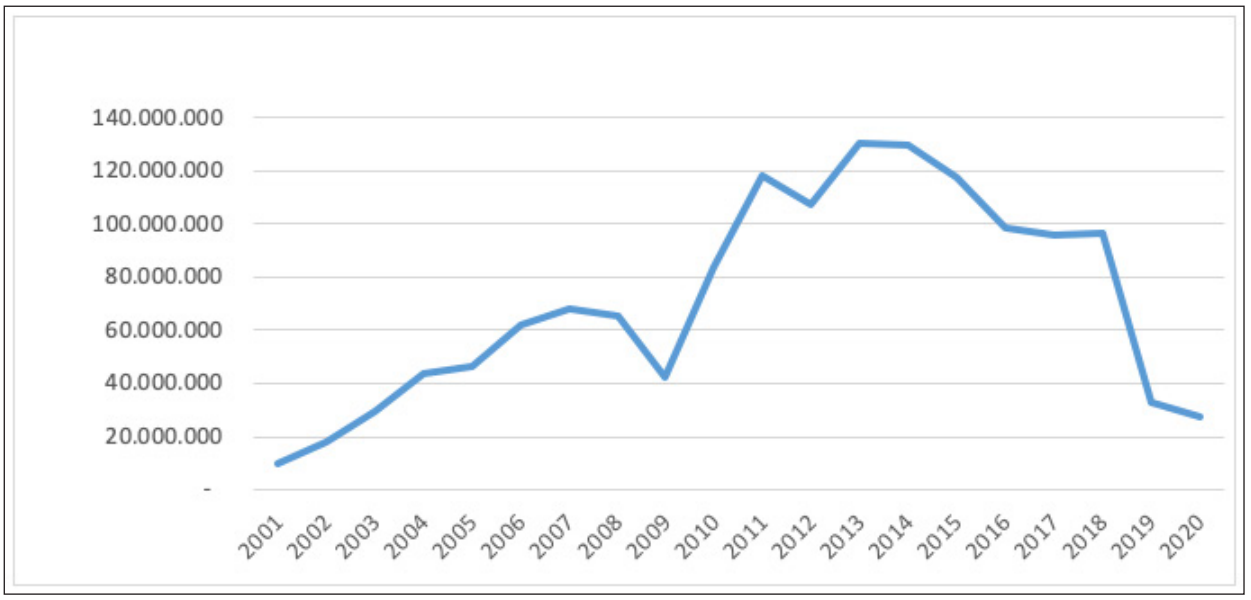

Figure 2: Total Imports of "Kraftliner Papers-Unbleached" from Finland, Russia, Poland and Brazil ($)

Source: Republic of Türkiye, Ministry of Trade

Measure Applied to Imports of Kraftliner Papers (Unbleached) from Finland, Russia, Poland, and Brazil

The company OYKA Kağıt Ambalaj Sanayi ve Ticaret Anonim Şirketi demanded an investigation pursuant to the Communiqué No. 2016/46 on the Prevention of Unfair Competition in imports of the product named "Unbleached Primary Fiber Surface (Kraftlayner) Papers Not Exceeding 175 Grams per Square Meter" originating from Finland, Russia, Poland, and Brazil. After the investigation, it has been determined that the complainant company is qualified to represent the domestic production branch. As a result, the measure was taken.

In Figure 2, the total imports of the product from the named countries are shown. As shown, imports of the product decreased sharply after the measure. Imports, which were 96.6 million dollars in 2017, declined to 32 million dollars in 2018.

In Figure 3, the import shares of each country are shown. Shares of Finland and Brazil decline continuously, whereas Russia's and Poland's decline follows an initial rise. It can be said that the measure was effective across all countries.

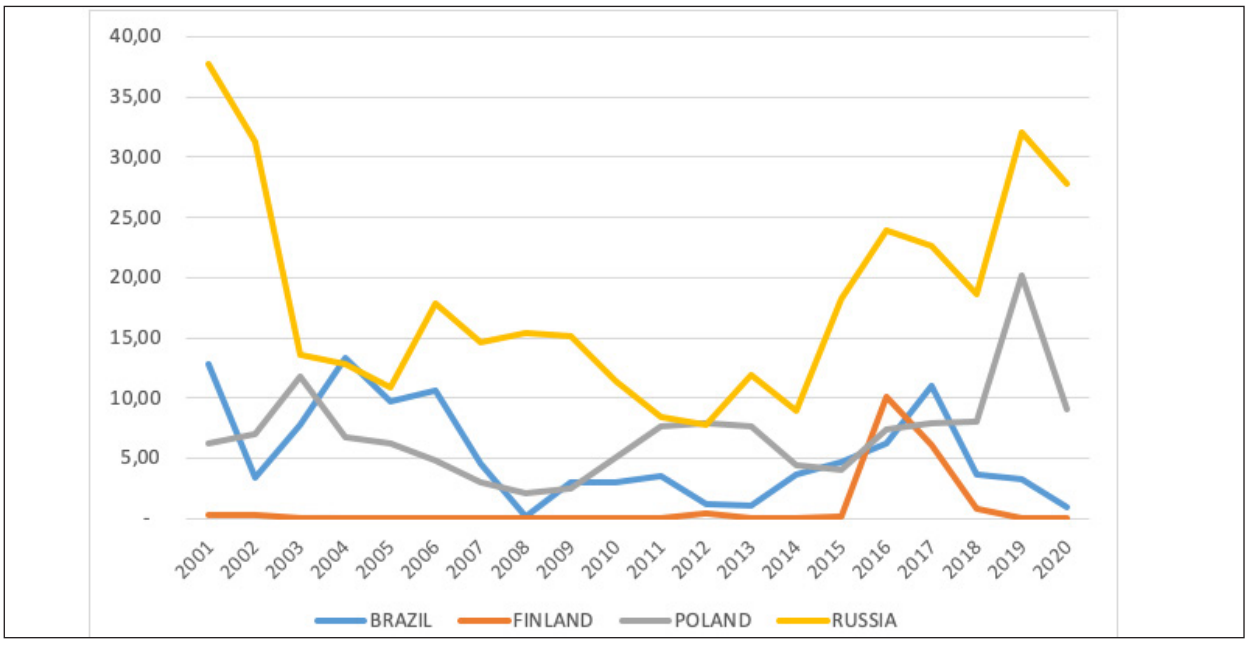

Figure 3: Imports Shares of "Kraftliner Papers-Unbleached" from Finland, Russia, Poland, and Brazil (%)

Source: Republic of Türkiye, Ministry of Trade

Measure Applied to Imports of Igniters from the People's Republic of China

Pursuant to the Communiqué No. 2018/22 on the Prevention of Unfair Competition in Imports, an investigation had been carried out by the Ministry of Economy, General Directorate of Importation, for the import of products originating from the People's Republic of China.

China's share in Türkiye's total imports in 2017 was 54.3 percent. After the measure was applied, it decreased to 44.8 percent (see Table 6). However, the effect was not permanent. Following 2019, the share returned to the previous rates. The same information is shown in Figure 4. These show that the measure was not effective for China (Özer(2023).

Table 6: Imports of "Igniters" from the People's Republic of China

Years	Total Imports of Türkiye ($)	Imports from China to Türkiye($)	China's Share in Türkiye's total Imports (%)
2001	1,728,708		
2002	1,840,688	9,950	0.5
2003	2,016,681	185,450	9.2
2004	2,510,070	146,241	5.8
2005	2,958,388	98,838	3.3
2006	3,544,374	148,701	4.2
2007	2,886,661	227,473	7.9
2008	2,500,415	388,929	15.6
2009	2,769,454	461,620	16.7
2010	3,361,894	1,275,469	37.9
2011	4,089,803	1,190,327	29.1
2012	5,310,582	1,864,410	35.1
2013	4,463,952	2,542,625	57.0
2014	5,496,316	3,368,154	61.3
2015	4,652,593	2,410,438	51.8
2016	4,551,789	2,335,152	51.3
2017	6,252,869	3,394,947	54.3
2018	6,336,694	2,838,494	44.8
2019	5,587,589	3,070,126	54.9
2020	6,042,993	3,258,213	53.9
2021	9,036,114	4,914,749	54.4

Source: Republic of Türkiye, Ministry of Trade

Measure Applied to Imports of Wires – Core Wires from Vietnam

The Ministry of Trade has made an investigation decision regarding the company "Hyundai Welding VINA Co., Ltd." and several similar companies. Following the investigation, it has been decided to impose a specific anti-dumping measure at a rate of 21.15% on the company named above and 29.65% on other companies.

In the last column of Table 7, the share of imports from Vietnam in total imports for the product "Wires – Core Wires" is listed. In 2018, this share was 36.8 percent. After the measure, it decreased by 17 percent in 2019 and by 15.4 percent in 2020. The same information is also shown in Figure 5. These observations show that the measure was effective (Özer, 2023).

Measure Applied to Imports of Polystyrene from the Islamic Republic of Iran

Table 8 summarizes information on imports of "Polystyrene". As shown, in 2017 and 2018, the share of imports from Iran in total imports was 15.0 and 13.7 percent, respectively. After the implementation of measures in October 2018, imports from Iran decreased to normal levels of 4.5 percent and 3.0 percent in 2019 and 2020, respectively. Figure 6 reveals the same thing as well. These observations show that the measure was effective (Özer, 2023).

Taken together, the product-and country-level evidence demonstrates that Türkiye's 2018 antidumping measures produced heterogeneous outcomes. The measures were highly effective in cases involving Germany, Sweden, Vietnam, and Iran, where import declines were sharp and persistent. In contrast, the impact on imports from China was temporary, highlighting the limitations of antidumping measures when applied against globally competitive exporters. These findings reinforce the importance of complementing trade defense instruments with broader industrial and trade policies.

Application of the Chow Test in Trade Analysis

In this section, in addition to the visual Analysis of import trends, a structural break test was applied using the Chow Test for the year 2018, a year in which Türkiye enacted a series of antidumping measures. The year 2018 is a potential inflection point as Türkiye implemented multiple antidumping measures in that year. In that year, Türkiye enacted a relatively high number of antidumping measures across various sectors, including chemicals, paper products, metal inputs, and industrial

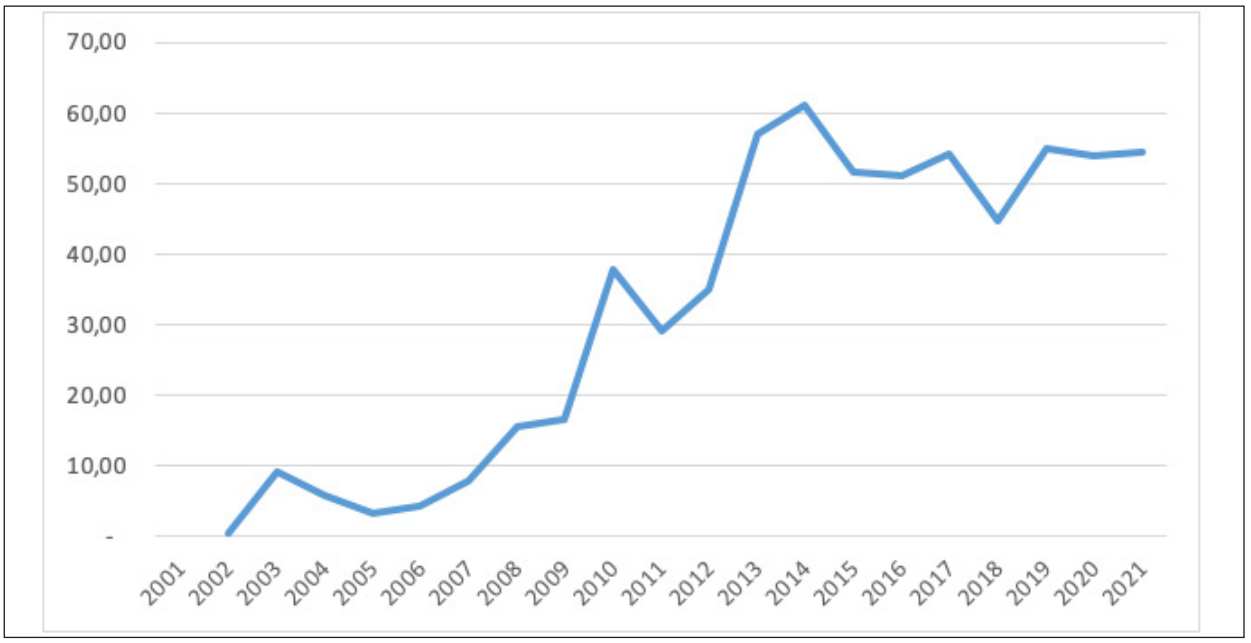

Figure 4: Import share of China for "Igniters" (%)

Source: Republic of Türkiye, Ministry of Trade

Table 7: Imports of "Wires - Core Wires" from Vietnam

Years	Total Imports of Türkiye ($)	Imports from Vietnam to Türkiye ($)	Vietnam's share in Türkiye's Total Imports (%)
2010	9,307,566	189,462	2.0
2011	11,006,990	1,474,770	13.4
2012	11,819,097	2,430,607	20.6
2013	12,509,132	2,685,941	21.5
2014	16,999,668	4,744,320	27.9
2015	16,899,791	4,054,835	24.0
2016	14,342,063	4,336,144	30.2
2017	14,243,852	4,688,678	32.9
2018	13,686,343	5,041,694	36.8
2019	12,472,209	2,118,082	17.0
2020	12,578,797	1,940,763	15.4

Source: Republic of Türkiye, Ministry of Trade

intermediates. Moreover, 2018 coincided with a period of heightened external pressure on Türkiye's trade balance, compounded by exchange rate volatility and constrained tariff policy space due to the EU–Türkiye Customs Union. These factors make 2018 a natural breakpoint for evaluating whether antidumping measures produced a statistically meaningful shift in import behavior beyond what could be attributed to gradual trends alone.

The Chow test is particularly suitable for the present study because the timing of the policy intervention is known ex ante and because the objective is to detect discrete changes associated with antidumping measures rather than gradual cyclical fluctuations. The Chow test was conducted for Germany, Iran, Vietnam, Poland, Finland, Sweden, China, Russia, and Brazil, as well as for Türkiye's total imports. For each country examined, Separate regressions are estimated for the pre-policy period (2000–2017) and the post-policy period (2018–2021), as well as a pooled regression covering the whole sample period.

The Chow Test compares the sum of squared residuals from the pooled regression with those from the period-specific regressions. The null hypothesis of the Chow test is that there is no structural break in 2018, meaning that the coefficients remain stable across periods. Rejection of the null hypothesis indicates that the antidumping measures are associated with a statistically significant change in import trends. Statistical significance is evaluated using F-statistics and corresponding p-values, with a 5 percent significance level adopted as the benchmark. If a structural break is found, it will indicate that the antidumping measures have had a measurable impact on imports. In the case of Türkiye's 2018 antidumping measures, the hypothesis is that the import values of affected products and countries have decreased significantly following the policy's enactment.

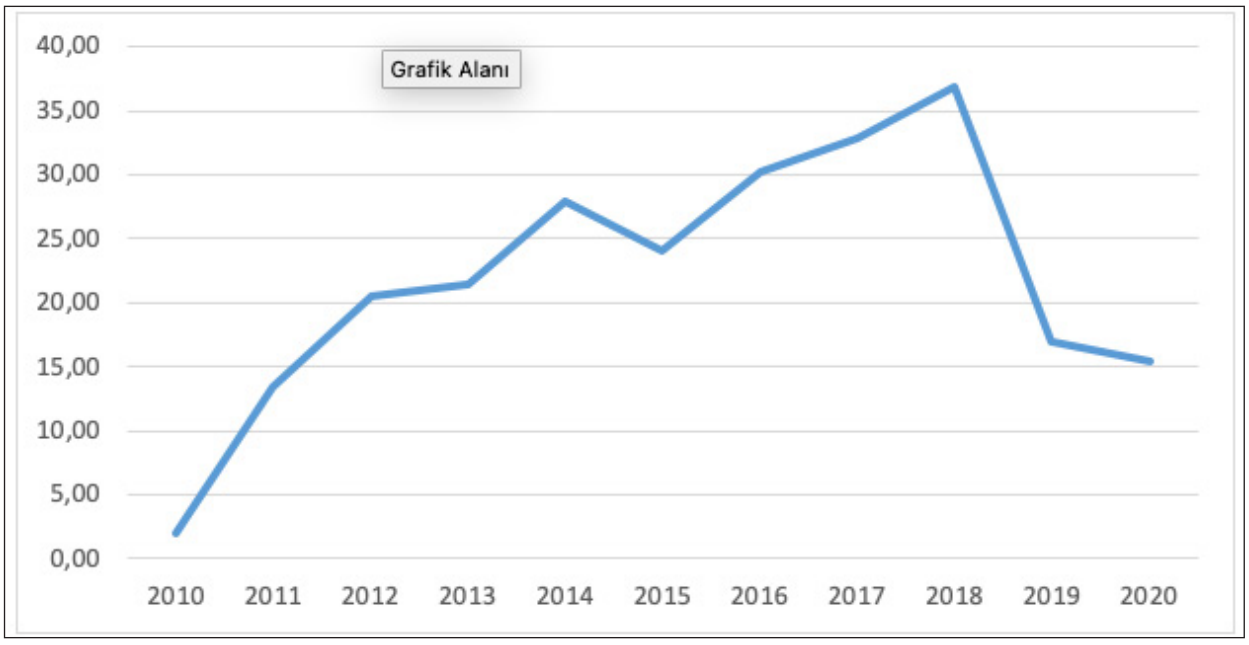

Figure 5: Import share of Vietnam for "Wires - Core Wires" (%)

Source: Republic of Türkiye, Ministry of Trade

Table 8: The Imports of Polystyrene

Years	Total Imports of Türkiye ($)	Imports from Iran to Türkiye ($)	Iran's share in Türkiye's imports %
2001	63.074.335	2.748.742	4,4
2009	260.027.096	796.786	0,3
2010	387.339.090	998.411	0,3
2011	488.724.333	4.152.921	0,8
2012	506.850.390	1.126.220	0,2
2013	536.412.662	2.772.580	0,5
2014	476.761.317	5.871.941	1,2
2015	360.226.064	11.741.716	3,3
2016	304.827.837	24.892.073	8,2
2017	371.292.375	55.663.393	15,0
2018	337.355.186	46.371.525	13,7
2019	265.403.432	11.844.242	4,5
2020	235.736.035	7.154.809	3,0

Source: Republic of Türkiye, Ministry of Trade

The Chow test results in Table 9 confirm that 2018 marked a significant structural break in Türkiye's import dynamics with several countries. For Germany, Poland, Vietnam, Iran, and Brazil, the F-statistics are high, and p-values are below the 0.05 threshold, indicating a statistically significant change in import trends after 2018. This coincides with the year Türkiye implemented primary antidumping measures targeting these very countries and products originating from them. The results indicate statistically significant structural breaks in the import patterns of Germany, Iran, Vietnam, Poland, and Brazil around 2018. This finding aligns with the visual evidence presented in the earlier graphs, where sharp declines or trend shifts became observable after 2018. For instance, Germany's sodium percarbonate imports and Iran's polystyrene imports both demonstrate pronounced drops, substantiating the effectiveness of the imposed antidumping duties.

On the other hand, no significant structural break is observed in imports from Finland, Sweden, China, or Russia, as indicated by their high p-values. This could be due to several factors, such as the absence of direct antidumping measures against these countries in 2018, strong underlying trade relationships that buffer against such interventions, or already stable trade volumes unaffected by tariff-based policies. Interestingly, when analysing Türkiye's overall import data, we also observe a structural break, albeit with a relatively lower F-statistic. This suggests that the impact of antidumping measures, although targeted, had a ripple effect on the broader trade environment.

This may also imply that while targeted antidumping measures were effective at the product or country level, their macro-level impact on Türkiye's total trade volume was limited, possibly due to substitution effects or broader economic dynamics.

Overall, these findings underscore the effect of Türkiye's 2018 antidumping actions, not only on specific bilateral trade flows but also on general import behavior. The

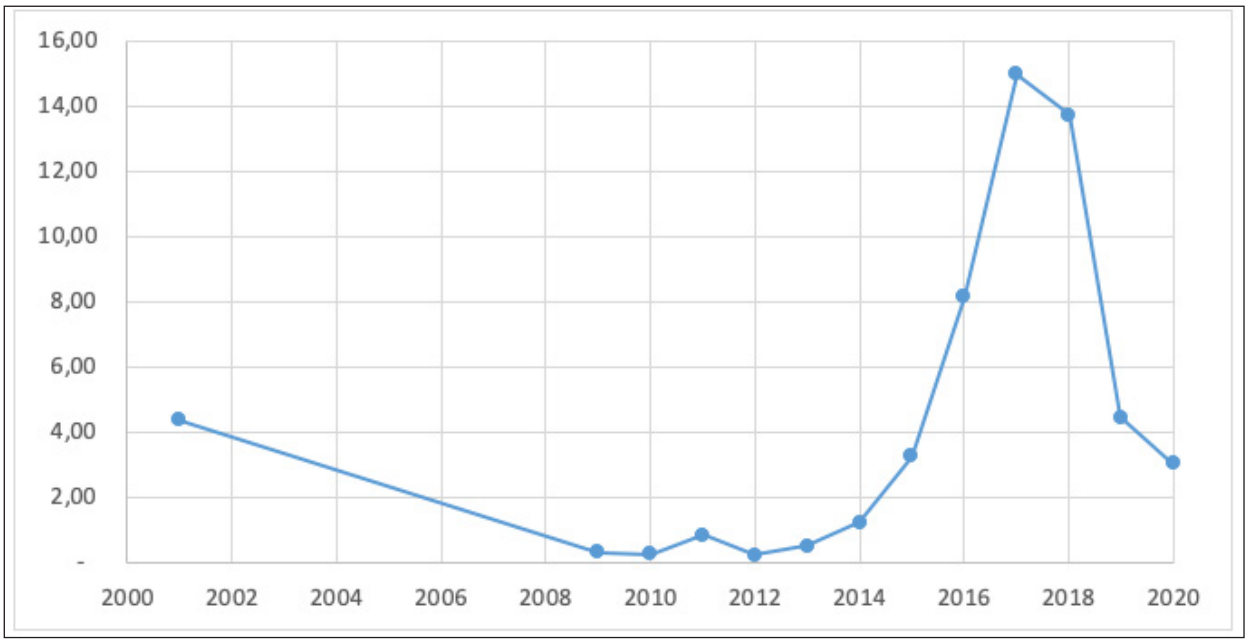

Figure 6: Import share of Iran for "Polystyrene" (%)

Source: Republic of Türkiye, Ministry of Trade

Table 9: Chow Test Results for Structural Break in 2018 (Imports of Selected Countries to Türkiye)

Country	F-statistic	p-value	Structural Break in 2018
Germany	13.07	0.002	Yes
Poland	9.45	0.006	Yes
Vietnam	6.80	0.017	Yes
Iran	9.99	0.005	Yes
Brazil	9.04	0.007	Yes
Total Imports	5.76	0.024	Yes
Finland	1.32	0.266	No
Sweden	0.72	0.409	No
China	0.15	0.704	No
Russia	0.32	0.581	No

results provide empirical support for the hypothesis that trade policy instruments, such as antidumping duties, can induce measurable structural shifts in international trade patterns. These findings support the earlier reasoning in the paper that antidumping measures were impactful in specific bilateral trade contexts but did not substantially alter Türkiye's overall trade dependency.

CONCLUSION

This study examined the effectiveness of Türkiye's anti-dumping measures implemented in 2018 by conducting a detailed product- and country-level analysis combined with a formal structural break test. Operating under the institutional constraints imposed by the EU–Türkiye Customs Union, Türkiye increasingly relies on anti-dumping instruments as an alternative to tariff-based protection. The findings of this study provide empirical evidence on whether such measures can effectively alter import dynamics when conventional trade policy tools are unavailable.

The descriptive and graphical analyses demonstrate that the impact of anti-dumping measures varies substantially across countries and products. Imports of sodium percarbonates from Germany and Sweden, kraftliner papers from Finland, Russia, Poland, and Brazil, wires from Vietnam, and polystyrene from Iran all exhibit noticeable declines following the introduction of anti-dumping duties. In several cases, these declines were not only immediate but also persistent, suggesting that the measures were effective in curbing import penetration rather than merely delaying it. By contrast, imports of igniters from China rebounded quickly after an initial decline, indicating a limited and temporary policy effect.

The econometric findings reinforce these observations. The Chow Test results confirm the presence of statistically significant structural breaks in

2018 for imports from Germany, Poland, Vietnam, Iran, and Brazil, as well as for Türkiye's total imports. These results are fully consistent with the visual evidence presented earlier in the paper, where sharp post-2018 trend shifts were observed for the same countries and products. Conversely, no statistically significant structural break is detected for China, Finland, Sweden, or Russia. This divergence highlights the heterogeneous effectiveness of anti-dumping measures and suggests that exporter characteristics—such as economies of scale, pricing power, and market diversification—play a decisive role in shaping policy outcomes.

Importantly, the absence of a structural break for China does not imply policy irrelevance but rather underscores the limits of anti-dumping measures when applied against globally dominant exporters. China's ability to absorb additional costs, adjust pricing strategies, and maintain export volumes reflects structural competitive advantages that cannot be fully neutralized through trade defense instruments alone. This finding cautions against overly generalized interpretations of anti-dumping effectiveness and emphasizes the need for complementary policy tools.

While the study attributes observed structural breaks primarily to anti-dumping measures, it is also necessary to acknowledge broader macroeconomic conditions prevailing in 2018. Türkiye experienced significant exchange rate volatility and financial stress during this period, factors that may have contributed to declining import demand. However, the country-specific and product-specific nature of the detected structural breaks suggests that macroeconomic factors alone cannot explain the observed patterns. If macroeconomic shocks were the sole driver, similar breaks would be expected across all trading partners, which is not supported by the empirical results.

From a policy perspective, anti-dumping measures can serve as an effective second-best instrument for Türkiye under the Customs Union framework, particularly when applied to exporters with limited capacity to offset cost increases.

Finally, the findings carry broader implications for the ongoing debate on the modernization of the EU–Türkiye Customs Union. Türkiye's heavy reliance on trade defense instruments reflects a structural asymmetry in the existing framework, in which tariff policy is constrained without sufficient compensatory mechanisms.

In conclusion, this study demonstrates that Türkiye's 2018 anti-dumping measures produced measurable, statistically significant changes in import behavior among several key trading partners, yet remained insufficient to address deeper structural trade imbalances. Anti-dumping instruments should therefore be viewed not only as a solution but as part of a broader industrial policy strategy aimed at enhancing Türkiye's long-term competitiveness and resilience in global markets.

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