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**SIGNIFICANCE OF MOST-FAVOURED-NATION TERMS IN GLOBAL TRADE:
A COMPREHENSIVE ANALYSIS**

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ABSTRACT: The Most-Favoured-Nation (MFN) principle has historically been instrumental in promoting stability and equitable trade conditions. In recent decades there has been a rise in bilateral and regional trade agreements, which deviate from the MFN principle in providing more favourable tariff treatment to specific partners. At the same time, WTO Members can, under certain circumstances, raise trade barriers against imports for different reasons, including to counter unfair trade practices. Using a novel and comprehensive dataset based on customs data submitted by WTO Members to the WTO's Integrated Database and complemented by other sources, this paper provides an in-depth analysis of global merchandise trade flows under both MFN and preferential tariffs. The methodology takes into account trade remedies, including anti-dumping and countervailing duties, additional duties in the US and China, and the utilization of trade preferences by incorporating preferential tariffs and bilateral trade flows for 184 economies. The research highlights the nuanced effects of MFN trade across different economies, regions, product and income groups, and compares MFN treatment on imports and exports. The paper concludes that more than 80% of global trade in goods is conducted on MFN terms and underscores the continued importance of the multilateral framework for the global trading system.

KEYWORDS: World Trade Organization; International Trade; Most-Favoured-Nation; Regional Trade Agreements; Preferential Trade Arrangements; Preference Utilization; Trade remedies; Antidumping and Countervailing Duties.

JEL CLASSIFICATIONS: F13, F14, F15, F53

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1 INTRODUCTION

The "Most-Favoured-Nation" (MFN) principle is a cornerstone of the World Trade Organization (WTO), enshrining one key aspect of non-discrimination in global trade. This principle, embedded mainly in Article I of the General Agreement on Tariffs and Trade 1994 (GATT 1994), mandates in general terms that any trade advantage granted by a WTO Member to any trading partner must be extended immediately and unconditionally to all other Members. Applied universally by 166 countries and separate customs territories, the MFN principle has fostered a more stable and predictable global trading environment, preventing discriminatory trade practices and promoting fairness in global trade relations.

Over recent decades the global trade landscape has witnessed a surge of preferential trade agreements deviating from the MFN principle since the post-"Cold War" period of the 1990s. By the end of 2024, hundreds of preferential trade agreements are in force, which means that essentially all economies in the world have at least one agreement allowing to trade on preferential terms. In the context of the WTO, these are referred to as regional trade agreements (RTAs). In addition, there are also many unilateral schemes that provide preferential access to certain groups of Members, such as the least-developed Members under the Generalized System of Preferences and other schemes, which in the WTO are referred to as preferential trade arrangements (PTAs). These agreements and unilateral arrangements are allowed under the WTO as exceptions to the MFN principle. While often seen as complementary to the multilateral trading system, they create additional complexity for traders as they offer more preferential market access which may differ across specific partners. To eliminate any potential confusion between the terms "Regional Trade Agreements" and "Preferential Trade Arrangements", this paper will use the hybrid term "Preferential Trade Agreements" abbreviated as PTA for consistency.

The scope of this research analysis is to highlight the share of global merchandise trade conducted under MFN tariffs, dissecting it across regions, countries⁴, product categories, and income groups. It also examines tariffs and preferential trade flows, including trade remedy measures such as anti-dumping (AD) and countervailing (CV) duties, as well as specific tariff actions arising from the US-China trade conflict. A deeper understanding is needed in a world increasingly perceived to be characterized by PTAs: *How significant remains the MFN principle in global merchandise trade?*

This research contributes to the literature in several ways by leveraging a novel dataset from the WTO's Integrated Database (IDB), which includes detailed tariff-line data from national customs authorities. This dataset is enriched with information from additional sources, combined in the WTO's Analytical Database, on trade and preferential tariff regimes from public and private data suppliers, enabling an analysis of global bilateral trade flows under specific duty regimes. Crucially, the dataset incorporates "preference utilization rates", which go beyond theoretical MFN and preferential tariff levels to estimate the actual use of these regimes. This advancement provides a more accurate representation of global trade flows, recognizing that the simple existence of preferential trade agreements does not ensure their full utilization. Our analysis also shows that the proportion of trade covered by anti-dumping and countervailing duties, modestly impacts global trade by 1.3% and 0.6%, respectively, while the bilateral US-China trade conflict

⁴ In the context of this paper, the terms "countries," "governments," and "economies" are used to also include separate customs territories; their usage does not imply any political or legal definition of sovereignty or statehood.

affects approximately 1.9% of global goods trade. By offering a descriptive and nuanced analysis of the MFN principle, this research highlights that over 80% of global trade in goods operates under MFN terms.

The remainder of this paper is structured as follows: Section 2 provides a review of the relevant literature. Section 3 reviews key concepts, including the MFN principle and other provisions, exceptions and derogations. Section 4 introduces the novel dataset. Section 5 outlines the methodology, with a focus on incorporating data on preference utilization to enhance the analysis. Section 6 presents results and Section 7 concludes with recommendations for future research directions.

2 LITERATURE REVIEW

This study builds on existing research examining the interplay between the Most-Favoured-Nation (MFN) tariffs and those levied under RTAs and PTAs. A substantial body of research has focused on quantifying the extent of MFN and preferential trade, although data limitations have presented significant challenges. Grether and Olarreaga (1998), analyzing data of 53 countries, estimated that 58-60% of trade was taking place under MFN terms, while Fugazza and Nicita (2013) build on the assumption that PTAs provide lower tariffs for about 30% of world trade. Limão (2016) estimates that approximately 55% of global trade falls under preferential trade agreements by employing the simplified assumption of "counting all trade among the parties to the agreement, regardless of whether it is explicitly covered by the agreement." In a subsequent study, Dadush and Dominguez Prost (2023) refine this methodology and utilize the NSF-Kellogg Institute Database on Economic Integration Agreements, concluding that 66.5% of world trade can be categorized as taking place under preferential terms. Carpenter and Lendle (2010) estimated that 16% of world trade was eligible for preferential treatment among the 20 largest importers. These studies highlight both the importance of preferential regimes and the persistent difficulties in accurately measuring their impact.

We provide a more accurate representation of global trade flows under tariff regimes by integrating preference utilization rates. Building on this extensive literature and observing a continued momentum for trade agreements including '*Rumours of the trade deal's death are greatly exaggerated*' as noted by The Economist (2024), our study offers an updated and comprehensive perspective on MFN and preferential trade by employing a highly detailed dataset covering 184 economies. Unlike prior studies, our approach is descriptive rather than econometric, offering a granular understanding of preferential trade shares while setting the stage for future empirical research on the implications of trade preferences for global trade policy.

The WTO's *World Trade Report 2011* emphasizes the need for coherence between multilateral and preferential trade arrangements to minimize potential negative impacts of preferential trade agreements on the MFN principle. Slow progress in multilateral trade negotiations has driven countries to pursue bilateral or regional trade integration, raising concerns about the cumulative effects of PTAs. Baldwin and Jaimovich (2012) describe this phenomenon as a *domino effect* where the formation of a PTA incentivizes other countries

to join or create new agreements. The *Handbook of Deep Trade Agreements* (2020) by the World Bank offers additional insights into the relationship between PTAs and MFN, particularly their impact on tariff margins. Espitia et al. (2018) highlight the evolution of PTAs into complex, multi-dimensional agreements, which play an increasingly significant role in shaping modern trade landscapes. Similarly, Acharya's edited volume (2016) on *Regional Trade Agreements and the Multilateral Trading System* explores the growing breadth of RTAs, which now include commitments beyond market access for goods and services, encompassing rules of origin, trade remedies, investment, intellectual property, labour, and environmental standards. Crawford (2012) further highlights that RTAs often achieve substantial liberalization, with developing countries frequently matching or exceeding the commitments of developed economies. However, liberalization remains uneven, with sensitive sectors such as agriculture often excluded or minimally affected. Hofmann et al. (2019) analyze the increased scope of preferential trade agreements covering areas within and beyond WTO mandates.

More recent research has sought to better understand preference utilization, aided by the availability of increasingly detailed import datasets. Keck and Lendle (2012) constructed a *pseudo transaction-level* dataset to analyze preference utilization, while Cariola and Lanz (2022) examined its determinants, finding higher utilization rates for reciprocal preferences. Acharya and Parajuli (2025) found that while the share of imports amongst RTA partners has increased between 2010 and 2022, actual trade that could be conducted using RTAs has remained stable.

This paper also situates itself within broader discussions tariff and trade policies. Low et al. (2009) examine the risks of preference erosion from MFN trade liberalization in manufactured goods, focusing on developing countries benefiting from non-reciprocal preferences in major markets, refining prior methods to avoid overstated risks of preference erosion. More generally, Larch and Yotov (2024) review half a century of methods for estimating trade agreement effects over time, and Saggi and Kamal (2018) investigate the MFN principle's role in promoting multilateral cooperation in economies of unequal size. Elbehri and Wainio (2006) argue that while preferential access offers immediate benefits, multilateral market access often yields more sustainable advantages, particularly for developing countries.

Finally, Mattoo et al. (2024) examine the impact of geopolitical rivalry on trade cooperation and the implications on the design of the rules-based multilateral trading system, and Bown (2021) explores the role of geopolitical tensions in shaping MFN by examining the US-China trade conflict, the escalation of tariffs and deviations from the MFN principle. The study offers interesting insights into the challenges to the multilateral trading system.

3 MFN PRINCIPLE AND OTHER DUTY ARRANGEMENTS

Article I of the GATT 1994

Under paragraph 1 of this provision, entitled "General Most-Favoured-Nation Treatment", a Member of the WTO agrees to accord "*any advantage, favour, privilege or immunity*

granted by any contracting party to any product [...] immediately and unconditionally to the like product [...] of all other contracting parties". Hence, any advantage given by any Member to any other country, must be extended to all other WTO Members. Its purpose is to prevent discriminatory practices and ensure equitable treatment among trading partners. This principle, considered one of the most important ones in the multilateral trading system, is prominently inscribed in Article I of the GATT.

Article I - General Most-Favoured-Nation Treatment

"[...] With respect to customs duties and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, and with respect to all matters referred to in paragraphs 2 and 4 of Article III, any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.

The application of GATT Article I:1 and the following Article II:1 provide a framework for commitments, as *"each contracting party must afford commerce from other contracting parties treatment no less favourable than what is outlined in the relevant schedule"* appended to the GATT. These commitments, referred to as bound duties, indicate the maximum tariff level a Member can impose when importing goods from all other WTO Members. In practice, however, WTO Members frequently apply lower duties. Importantly, whenever a Member reduces tariffs or removes trade barriers for a particular trading partner, it must extend the same concession to all other WTO Members, on the same principle, on an MFN basis.

The origin of the MFN concept traces back centuries (Wang 2022), with references found in treaties in medieval Europe by city-states such as Venice and Genoa. In the 18th century nations like Britain and France concluded MFN clauses in their bilateral commercial agreements, such as for example the Treaty of Utrecht in 1713. In 1860, the Coden- Chevalier Treaty signed between Britain and France led eventually to a larger scale adoption of MFN principles in international treaties. Most prominently the league of nations endorsing the MFN principle as a way to promote international economic cooperation; the GATT institutionalized the MFN principle as a cornerstone of the global trading system. The 1930s protectionist measures highlighted the need for an unconditional multilateral MFN clause, leading to its inclusion in the GATT of 1947 and the Marrakesh agreement of 1994, establishing the WTO.

Regional Trade Agreements and Preferential Trade Arrangements

While the MFN clause remains a fundamental principle, WTO Agreements also allow exceptions. WTO Members may sign agreements on a bilateral or regional level to reduce or eliminate trade barriers among themselves or unilaterally grant preferential treatment for developing and Least-Developed Countries (LDCs), which may include provisions on tariffs, quotas, customs procedures, and many other trade-related matters. There are generally two types of trade deals: Regional Trade Agreements (RTA) and Preferential Trade Arrangements (PTAs). These agreements have become increasingly "deeper" over

time, incorporating provisions beyond trade and aiming to complement, rather than replace, the multilateral trading system, with a focus on inclusivity, particularly for the smallest and most vulnerable economies. Despite their benefits, RTAs and PTAs may lead to trade distortions and regulatory complexities due to overlapping beneficiary schemes, potentially causing implementation challenges and regulatory inconsistencies.

RTAs are reciprocal trade agreements between two or more partners which are not necessarily in the same region or geographically close. Parties to the agreement, commit to eliminate tariffs and other restrictions on substantially all trade among signatories as referred to in GATT article XXIV and not to raise any barrier to trade with economies outside their agreement. Additionally, RTAs can be signed between developing countries only under less strict conditions under the Enabling Clause.

RTAs must be notified to the WTO and are reviewed to ensure transparency and adherence to WTO rules. A dedicated WTO database for RTAs (<http://rtais.wto.org>) provides detailed information and shows that close to 400 RTAs covering "Goods" or "Goods & Services" are currently in force and notified.⁵ Furthermore, our analysis incorporates regional trade agreements (RTAs) that are currently in force without having been officially notified to the WTO, as these have been identified by incorporating data by the ITC.

WTO Members may also unilaterally grant preferential trade conditions to developing and least developed countries. These include various types of preferential duty arrangements falling under paragraph 2 of the Decision of 28 November 1979 on Differential and More Favourable Treatment Reciprocity and Fuller Participation of Developing Countries ("Enabling Clause"), except for RTAs under paragraph 2(c). The most known is the Generalized System of Preferences (GSP) scheme under which developed countries may grant a preferential tariff treatment to imports from developing countries and LDCs. This study also includes other schemes such as the US African Growth and Opportunity Act (AGOA), which have been authorized by the WTO General Council through waivers.

PTAs are reviewed by the WTO in the Committee on Trade and Development (CTD). An overview and list of beneficiary and granting Members can be found on the WTO's Preferential Trade Arrangements Database (<http://ptadb.wto.org>). Overall, 24 Members are listed to provide 31 PTAs. Notification and reviews are guided by the PTA Transparency Mechanism⁶. The mechanism adopted in 2010 mandates preference granting Members to notify "imports by duty scheme", i.e. import data on a national tariff line level detailing which import scheme was used at the time of import. These new datasets allow to calculate "preference utilization", a key aspect to better understand the effectiveness of PTAs. Furthermore, as discussed in the next section, several Members provide detailed datasets allowing for the analysis of RTAs, providing valuable information for the calculation of preference utilization in a comprehensive manner which is a key element in our analysis on trade conducted under MFN terms.

The proliferation of RTAs and PTAs has raised concerns about undermining the MFN principle by bypassing the non-discriminatory framework of the WTO. Some economies appear to be focusing on more targeted agreements aligned with strategic priorities, such as securing access to certain inputs, critical minerals or strengthening specific supply chains. While traditional PTAs remain relevant, this emerging trend reflects a recalibration

⁵ WTO RTA database, available at: <https://rtais.wto.org> (accessed December 2024).

⁶ Transparency Mechanism for Preferential Trade Arrangements, WTO, 14 December 2010 (WT/L/806)

toward agreements that are narrower in scope but potentially more impactful in addressing pressing economic and geopolitical challenges.

As outlined above, to avoid any potential confusion between the terms "Regional Trade Agreements" and "Preferential Trade Arrangements," we will use the hybrid term "Preferential Trade Agreements" (PTA) in this paper.

Other MFN provisions, exceptions, and derogations

In contrast to MFN derogations that provide more favourable trade terms, additional unilateral duties may also be imposed on specific trading partners. These include trade remedies, such as anti-dumping and countervailing duties, which may be imposed under strict conditions in accordance with WTO agreements.

Anti-dumping duties (AD) are additional tariffs a government may impose on imported goods that are considered to be entering an importing market at a price below the price of the imported product in the "ordinary course of trade" in the country of origin or export (Article 2 of the Agreement on Antidumping). These duties are put in place with the intention to protect domestic industries from unfair competition caused by "dumping" from foreign companies. The WTO Agreement on Antidumping (ADA) provides for regulations for the imposition of AD duties. In general terms, the process foresees the initiation of an investigation and notification to the WTO and if dumping is confirmed and shown to have caused injury to the domestic industry, a WTO Member may impose AD duties on imported product on a bilateral basis proportional to the dumping margin.

Countervailing (CV) duties are additional tariffs levied on imported goods a WTO Member may impose once the presence of subsidized imports has demonstrated to injure a domestic industry. These practices may give the exporting companies an unfair advantage in international trade by lowering their production costs or allowing them to sell goods at below-market prices. In order to impose CV duties in line with the WTO's Agreement on Subsidies and Countervailing Measures (SCM)⁷, a WTO Member starts an investigation to determine whether imported goods are being subsidized and causing injury to domestic industries. If such injury is found, the country can impose CV duties on those imports. Furthermore, safeguard measures can be invoked to protect domestic industries from serious injury due to a sudden surge in imports. However, these are not part of our analysis.

In addition to trade remedy measures, this paper also takes into the account trade tensions between the United States of America and China, where escalating tariffs on imports on both sides have been put in place. The trade dispute began in 2018 under US president's Trump administration, where at first additional duties were levied on steel and aluminium products among others, an often-cited reason being "national security". In the following months and years, the number of products subject to additional duties increased substantially, based on grounds of alleged theft of intellectual property or subsidies of state-owned enterprises.⁸ These measures imposed by the United States invoked retaliatory measures by China on goods imported from the United States, targeting specific industries such as agriculture, automobiles and chemicals. These rounds of retaliation

⁷ See more information on https://www.wto.org/english/tratop_e/scm_e/subs_e.htm

⁸ These tariffs have been imposed on various grounds including "national security" and "intellectual property violations", among other, including Section 232 and 301 of the US Trade Act.

increased over time and resulted in a significant amount of bilateral trade being subject to additional tariff duties.

This research paper also takes into account some of the so-called "plurilateral" tariff initiatives at the WTO, such as the "Information Technology Agreement" (ITA), the "Pharmaceutical Agreement", and the "Agreement on Trade in Civil Aircraft" which have been established among a subset of WTO members. Unlike traditional multilateral agreements, which require consensus from all members, plurilateral agreements are negotiated and signed by only a portion of the WTO membership. However, they are often "multilateralized" under the MFN principle, meaning that any concessions made by the participating members are extended to all WTO members. In short, these are agreements by some Members that result in lower MFN tariffs.

4 DATA

The analysis presented relies primarily on data reported to the WTO's Integrated Database (IDB), initially established by the GATT Council in 1987⁹, which was modified in 1997 (WT/L/225) and 2019 (G/MA/367). WTO members submit annual datasets to the Secretariat, which include MFN and often preferential duties, as well as bilateral import statistics, at the national tariff line level. These datasets may also contain details on seasonal duties, tariff rate quotas, and country-specific or product-specific exemptions from preferential treatment, if applicable. The WTO Secretariat is responsible for the transformation and standardization of these data submissions.

A majority of WTO Members comply with the obligation to notify annually to the IDB tariff and import data on the national tariff line level, with current coverage for tariffs and imports stands at 84% and 76% respectively.¹⁰

To ensure that our analysis is based on the most comprehensive global coverage, this paper uses a dataset from the WTO's Analytical Database, which is essentially the IDB complemented with additional sources: For tariff data, information reported to the IDB is supplemented by preferential duty details submitted to the WTO Committee on Regional Trade Agreements. Additionally, the study incorporates data from the International Trade Centre (ITC) of preferential agreements that are not reported to the WTO. For bilateral import flows, the IDB information is supplemented with bilateral import data from UN Comtrade, while additional missing data points are complemented with data from the "Trade Data Monitor" (TDM). At last, when data for a given reporter and year is still unavailable, the nearest year's data is used as a substitute.

Datasets at the national tariff line level are aggregated at the Harmonized System (HS) subheading level (HS 6 digit), creating a comprehensive global dataset that covers 184 economies. This dataset incorporates the following dimensions: year, reporter, partner, HS subheadings, bilateral import value, MFN duty, and the "best preferential duty". The best eligible preferential duty is defined as the lowest applicable duty rate for a

⁹ For more information, please consult: https://www.wto.org/english/tratop_e/tariffs_e/idb_e.htm, and the Modalities and Operation of the Integrated Database (IDB), WTO reference G/MA/367

¹⁰ WTO IDB, December 2024

reporter-partner pair per HS subheading, which may be derived from multiple rates due to overlapping preferential duty schemes before aggregation. Because our analysis focuses on major trade relations covered by the MFN principle and WTO rules, the dataset explicitly excludes intra-EU trade (i.e. trade within the European common market).¹¹ For this analysis, this constructed dataset is used to identify bilateral trade flows that may be eligible for preferential treatment. To overcome the assumption that any import theoretically eligible for preferential treatment would be "utilizing" the preferential tariff treatment, which would largely overestimate the share of preferential trade, we correct by using the methodology presented in the next section.

The analysis also takes up detailed information on current trade remedy measures. Data extracted from the WTO Trade Remedies Data Portal provide information on bilateral imports and products at the HS 6-digit level which are subject to additional duties with regard to trade remedies. The dataset for the year 2022 includes a total of 6'271 bilateral country pairs for additional AD duties, and 2'520 observations subject to CV duties.

Finally, we quantify the US-China trade conflict in this analysis. Detailed customs data from the US and China allow us to specify products which are subject to additional duties. The US has imposed multiple rounds of additional duties on imports from China, targeting a wide range of products across various industries. The additional duties imposed by the US can range from 7.5% to 25%, depending on the specific products, and are captured in HS chapter 99 for which specific tariff rates are available. At the same time, China has retaliated by imposing additional duties on imports from the US on a wide range of products, with tariff rates ranging from 2.5% to 30%. All these data points are taken up in our analysis.

5 METHODOLOGY

For the purposes of this analysis, import data from the most recent six-year period, spanning from 2017 to 2022, have been examined. One reason being the availability of data on detailed imports by duty scheme, which is essential for our methodology. We begin our analysis with HS 2017, then also include the most recent year available, 2022. Our research paper does not aim to offer insights into MFN utilization over time; rather, the six-year analysis presented (see Annex Table 3) helps to demonstrate that our findings and assumptions remain consistent across the years.

Despite the availability of multiple preferential tariff treatments under various PTAs, not all products that are eligible for preferential duties are imported utilizing these preferential tariff treatments. While the preference eligibility would allow us to quantify the maximum share of trade under these preferential conditions, the preference utilization allows to quantify the actual share of trade that does benefit from them.

This underutilization can be attributed to several factors, including the fact that the exporters do not meet the requirements of the applicable preferential rule of origin.

¹¹ The EU consisting of 28 member states until end 2020, thereafter as EU 27. The EU is treated as one entity in this analysis, as it notifies data as one customs union and WTO Member.

Another often-cited reason is the complexity of rules of origin and associated administrative burdens, as exporters must prove that their goods qualify for preferential treatment, which can be both costly, time-consuming and may expose them legal liabilities. Additionally, the administrative costs associated with claiming these preferences, including the need for extensive documentation, may outweigh the benefits, especially when the margin between preferential and MFN tariffs is minimal. A lack of awareness or understanding of available preferential schemes also hinders their use. These complexities, among others, may explain the gap between trade flows that are eligible for preferential tariff treatment and the actual use of trade preferences. The reasons for the use preferential duty scheme is outside the scope of this paper.

To enhance our analysis on the MFN trade further, we incorporate a novel dataset resulting from a decision by the WTO's "Transparency Mechanism for Preferential Trade Arrangements" as overseen by the WTO Committee on Trade and Development (CTD). The dataset allows to investigate the "utilization of preferences" as preference granting Members are required to submit detailed information at the national tariff line level concerning "imports by duty scheme," specifying the particular duty scheme applied to bilateral imports that benefit from preferential treatment. This transparency mechanism mandates the provision of such information for non-reciprocal preferential trade arrangements and relevant waivers¹². However, several WTO Members voluntarily provide detailed imports on the national tariff line for all preferential duty schemes, including RTAs, and other duty exemptions such as plurilateral agreements. As referred to earlier, this paper uses the hybrid term "Preferential Trade Agreements" (PTA) in the analysis.

These comprehensive datasets are matched with tariff and preferential duties at the national tariff line level and hence enable us to first identify products that are "eligible for preferential tariff treatment" and then assess whether these products are "actually utilizing" the benefits of a bilateral agreement. Notably, these Members, who provide detailed import statistics on preference utilization, represent 40-50% of global trade (see Annex Table 1). These economies tend to be quite similar, which raises questions about their representativeness as a sample. While we do not see this as a significant bias, we assume that more developed economies are likely to utilize trade preferences more extensively. As a result, this may lead to a slight overestimation of preference utilization rates, potentially introducing a downward bias in the final result and share of MFN trade.

In our analysis of preferential tariff treatment, we adopt an assumption regarding the eligibility of products for such treatment. Specifically, we assert that a preferential tariff must be lower than the MFN tariff. As an alternative to the assumption that preference eligibility is determined by a tariff preference margin, we further tested the impact of a different methodology and reclassified these trade flows as preferential whenever a trade agreement was in place and when the MFN rate was zero.¹³

Additionally, while 160 of the 184 economies analyzed are WTO Members, we chose not to exclude non-WTO Members entirely, recognizing the value of a more comprehensive dataset. Importantly, limiting the analysis to WTO Members alone would not have significantly altered the overall results.¹⁴ For non-Members, we treated their imports as

¹² See WTO document WT/L/806

¹³ The results lead to an overestimation of eligible preferential trade, with MFN trade decreasing to 64% instead of 78%, assuming full preference utilization.

¹⁴ Limiting the analysis exclusively to WTO Members, the global MFN share drops from 78.1% to 77.9% with full preference utilization and from 83.3% to 83.2% with "observed" preference utilization.

quasi-MFN, reflecting customs schedules which are applied uniformly to all partners, unless specific preferences are shown. Although these tariff schedules do not fall under WTO rules, they are applied similarly to MFN tariffs in practice.

Using the novel dataset, we can calculate the Preference Utilization Rate (PUR), which is defined as the ratio of the trade value that benefits from preferential treatment to the total trade value eligible for such treatment.¹⁵ We note that PURs differ across economies, years, and product categories. To obtain a more consistent measure of the PUR, we compute the average across reporters for each year and product category. To facilitate this analysis, we use a classification system by the WTO called the "Multilateral Trade Negotiation (MTN)" categories. The latest version contains 22 categories and 72 subcategories¹⁶ for both agricultural and non-agricultural products. This allows us to calculate "preference utilization rates" (PUR) by year and MTN product category as presented in Formula (1).

Preference Utilization Rate $pur_{p,t}^{value}$ based on import value by MTN category and year

$$pur_{p,t}^{value} = \frac{\sum_{TL \subseteq \{1, \dots, p\}} \sum_{ij} PTA_{i,j,TL,t}^{observed}}{\sum_{TL \subseteq \{1, \dots, p\}} \sum_{ij} PTA_{i,j,TL,t}^{eligible}} \quad (1)$$

i : reporter with detailed import data by duty scheme (see list Annex Table 1)

j : partner

p = MTN product category

TL = tariff line

t : year i.e. $t \in [2017, 2022]$

$PTA^{observed}$: import value reported to have taken place under the PTA preferential duty scheme

$PTA^{eligible}$: import value under any eligible tariff line, i.e. preferential duty < MFN duty rate

In a second step we apply those findings to the bilateral trade flows of economies for which detailed imports by duty scheme are not available, i.e. all other economies not listed in Annex Table 1. We apply the PUR coefficients by year and product category as shown in Annex Table 2 to all bilateral trade which is eligible to preferential tariff treatment, and hence adjust the maximum utilized preferential trade for those remaining economies at the reporter, partner, and HS6-digit level, as shown in Formula (2). This adjustment reduces the *observed* preferential trade share, reflecting that not all preferential imports fully utilize the available preferences and are therefore traded under the MFN duty scheme. These adjusted shares of preferential trade are denoted as *observed**.

¹⁵ In the WTO's Committee on Rules of Origin Members have agreed on a methodology to calculate preference utilization. A discussion and alternative modalities are presented in the WTO document G/RO/W/161/Rev.2, dated 23 October 2024.

¹⁶ Multilateral Trade Negotiation categories stem from negotiations rounds in the 1970s and are occasionally updated. For further information and access to correlation tables of MTN and HS codes, please consult the WTO data blog of 14 July 2023 (https://www.wto.org/english/blogs_e/data_blog_e/blog_dta_14jul23_e.htm)

Preferential import adjustment using coefficient obtained from $pur_{p,t}^{value}$

$$PTA_{i,j,t,p,HS6}^{observed*} = PTA_{i,j,t,p,HS6}^{eligible} * pur_{p,t}^{value} \quad (2)$$

i : reporter (economies without detailed import data by duty schemes, i.e. not in Annex Table 1)

j : partner

p : MTN product category

t : year i.e. $t \in [2017, 2022]$

HS6 : product codes according to the Harmonized System

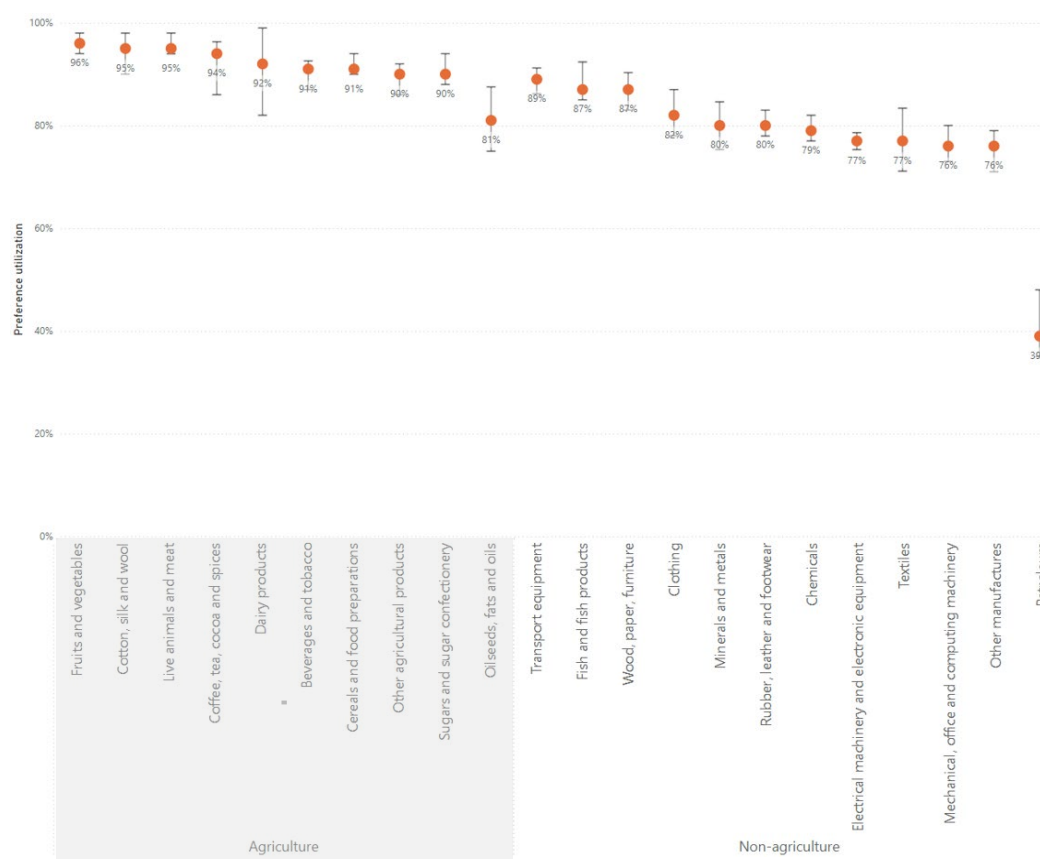
$PTA_{i,j,t,p,HS6}^{eligible}$: import value under any eligible tariff line, i.e. preferential duty < MFN duty rate

$PTA_{i,j,t,p,HS6}^{observed*}$: import value estimated based on the preference utilization rate, rather than directly reported

The result of the adjustment is presented in Figure 1, which provides a graphical overview of preference utilization across global trade, categorized by MTN category and further subcategorized into agricultural and non-agricultural sectors. The figure illustrates the range of preference utilization observed during the period 2017–2022, with the average utilization for this period highlighted. Additional details on preference utilization by MTN category¹⁷ can be found in Annex Table 2.

Figure 1: Range of preference utilization¹ across MTN categories

Per cent, 2017–2022. Averages highlighted with dots.



Source: WTO Integrated Database and WTO Analytical Database, 2024

¹ Includes data on preference utilization by WTO Members as listed in Annex Table 1 and Annex Table 2.

¹⁷ The low preference utilization value for "petroleum" of 34% for the year 2022 is largely due to a significant share of US imports that did not use the preferential trade arrangements in place.

There are number of further data limitations and assumptions for our analysis on merchandise trade statistics, excluding information on duty drawback schemes, temporary concessions, processing zones or free trade zones. We exclude European Union intra-trade as the European Union with its 27 member states¹⁸ notifies data as one WTO Member. European Union intra-trade ranges between 19-22% of total world trade reaching USD 4.2 trillion in 2022, hence an alternative including European Union intra-trade would increase the share of preferential world trade.

Regarding the dataset on trade remedy measures, it is important to note that anti-dumping (AD) and countervailing (CV) duties are not necessarily imposed on the entire bilateral trade flow of a given product between two economies. Rather, they may be imposed on some, but not all, exporting companies. However, in the absence of more granular data, the result shown in the next section assumes that all bilateral imports on a given subheading are subject to additional duties which means that our results overstate the coverage of trade subject to AD and CV duties.

For about half of world trade pertinent to reporters not listed in Annex Table 1, the analysis relies on bilateral HS6-digit data. A majority of national tariff lines within a national HS subheading show uniform tariff duties. For the remaining we assume in this analysis that the best preferential duty within a HS6-digit category applies to all national tariff lines, which may lead to an overestimation of the preferential coverage.

6 RESULTS

Global overview

The data and methodology as presented in the previous section allows us to derive several key insights, beginning with a comprehensive global overview in Table 1 that summarizes data for 184 economies for the year 2022. This table presents total import values in USD trillion, followed by "eligible" trade shares, i.e. the share of global merchandise trade which may theoretically be subject to preferential tariff treatment under the assumption of full preference utilization. It then provides "observed" values derived from WTO notifications of economies as listed in Annex Table 1 and estimates based on our methodology as outlined in the previous section. Additionally, the table presents the proportions of trade impacted by anti-dumping (AD) and countervailing (CV) duties, as well as the US-China trade conflict. However, these figures are likely overstated due to data limitations.

¹⁸ European Union (EU27) for the year 2022.

Table 1: Global trade shares

USD trillion and percentage shares, 2022

Total USD trillion ²	Eligible		Observed ¹				Anti-dumping ³	Counter-vailing ³	US ↔ China trade tensions ³
	Preferential	MFN	Preferential	MFN duty free	MFN dutiable	MFN			
20.096	22%	78%	17%	51%	32%	83%	< 1.3%	< 0.6%	< 1.9%

Source: WTO Integrated Database and WTO Analytical Database, 2024

¹ Includes both WTO Members that submit detailed datasets (see Annex Table 1) and estimates for other economies according to our methodology.² Total annual import values, excluding EU intra trade.³ These figures are likely to be overstated due to data limitations.

The columns presenting values for "eligible preferential and MFN " import shares suggest that even assuming that all bilateral preferential tariffs are fully utilized, the global share of MFN would still stand at 78%. However, as previously explained, the granted preferences are not always fully utilized. As presented in the columns referred to as "observed", we estimate that only 17% of global imports do benefit from preferential tariff treatment, which is significantly lower than the 22% share of imports that are eligible. In other words, about 1/5 of trade which is eligible for preferential treatment does not use those preferences and is traded under MFN terms instead. Hence, the share of trade in goods traded under MFN terms reaches 83%. This value is consistent with figures from previous years, as illustrated in Annex Table 3, which displays total import values and corresponding trade shares beginning with HS2017 in 2017 and includes the most recent year (2022) with comprehensive and available data.

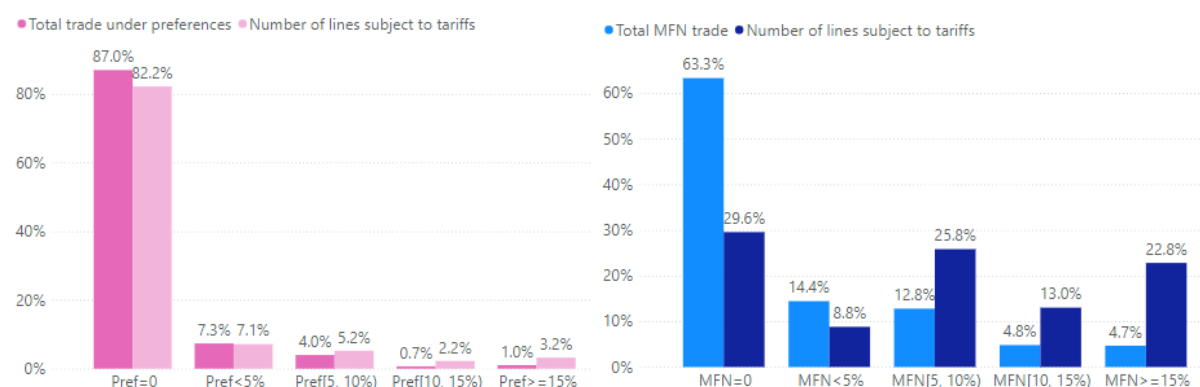
The share of global imports subject to AD and CV measures, presented right after "observed" shares of Preferential and MFN trade, overstate the impact on global trade due to limitations in the underlying dataset. As discussed in the previous sections, while the impact can be significant for specific companies, sector, exporting country or importing market, the overall effect on global trade of these trade remedies remains modest. Even with the assumption that all bilateral trade at the HS 6-digit product level is potentially subject to trade remedy measures, in 2022 AD actions would account for only 1.3% of global trade on average, while goods subject to CV duties would comprise just 0.6% of global trade.

In recent years, the US-China trade conflict gained considerable attention. Our dataset allows to quantify the impact for the year 2022: We estimate that United States imports from China subject to these additional tariffs amounted to USD266 billion. Whilst this figure is large on a bilateral level, representing 52% of total United States imports from China, on a global scale it only accounted for 1.3% of the total world's imports. Products from the United States entering China that are subject to additional duties, totaled USD128 billion, accounting for 73% of all Chinese imports from the United States, which amounts to only 0.6% of total global imports. Despite these high percentages of bilateral trade being affected, it should be noted that not all imports subject to extra charges were actually charged the additional duties as United States government allows to grant exemptions to importers¹⁹. No information about the application or utilization is known for China's imports.

¹⁹ Customs data as transmitted to the WTO IDB on preference utilization seems to indicate that about 95% of bilateral trade flows in 2022 which could be subject to additional duties are charged the extra levy.

MFN trade share can be further disaggregated, revealing that 51% of global trade is MFN duty-free, while 32% is subject to positive MFN duties.²⁰ A closer analysis of both preferential and MFN trade is presented in Figure 2. Using our dataset for the year 2022, the figure splits import values and the number of tariff lines into tariff bands defined by 5% increments. Preferential imports are presented on the left chart and MFN imports on the right one. In cases of observed preferential trade, most occurs at duty-free levels, indicating that preferences are predominantly granted on a duty-free basis, encompassing a large majority of trade of 87.0% and tariff lines of 82.2%. As preferential tariff rates rise, both the share of trade and the proportion of affected tariff lines decline. However, MFN trade flows suggest a more diverse distribution. Two-thirds of imports are conducted under MFN duty free terms, whereas this trade only represents one-third of tariff lines. We observe a decreasing share of MFN trade as tariffs increase, whereas the distinct number of tariff lines where trade occurs does not significantly decrease.

Figure 2: Preferential and MFN trade by tariff bands
Percentage shares, 2022



Source: WTO Integrated Database and WTO Analytical Database, 2024

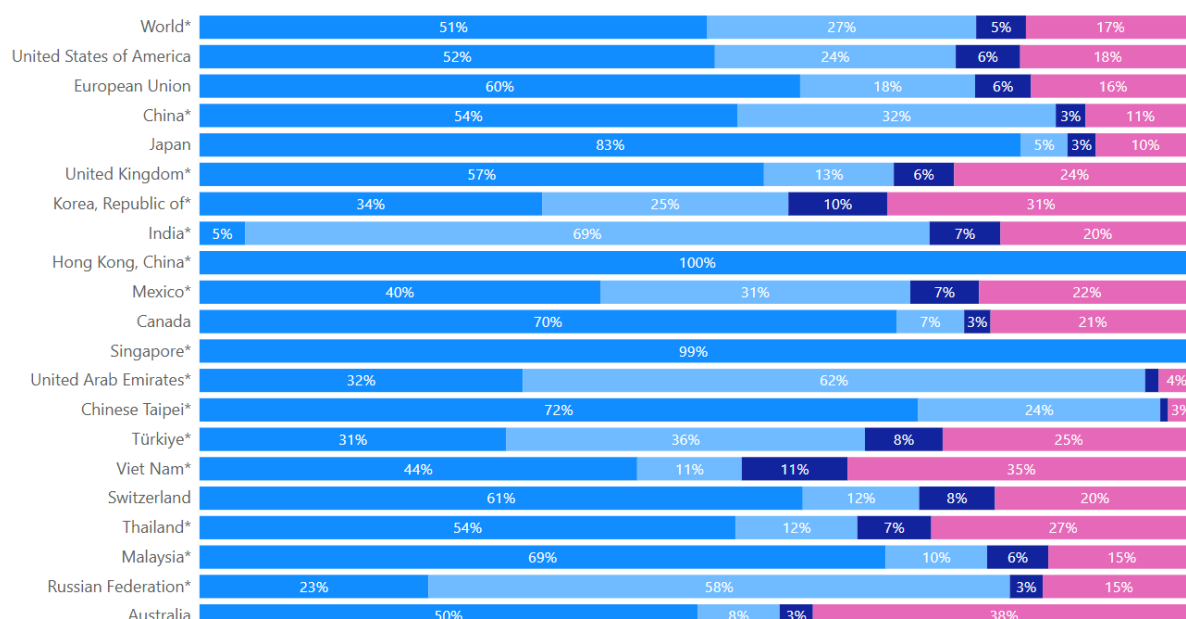
By economy

Our dataset also facilitates a more detailed disaggregation by reporting economies. Figure 3 illustrates the leading top 20 importing nations, ranked in descending order by total import value. The total imports are divided into four segments and are presented as shares: MFN duty-free trade, MFN dutiable trade, MFN dutiable trade that is eligible for preferential tariffs, and trade under preferential duty regimes. For example, an analysis of the United States' import data in 2022 reveals the following distribution: 52% of imports entered duty-free, 24% were subject to MFN duties, and 18% utilized preferential trade arrangements. The dark blue segment, representing 6% of US imports, highlights the portion of MFN dutiable trade that could have benefited from preferential tariffs but did not, thus increasing the overall MFN trade share.

²⁰ Minor revisions were made in the current version to the MFN duty-free and dutiable trade classifications, without affecting the overall MFN trade shares.

Figure 3: Imports by MFN and preferential tariff regimes, top 20 importers
Percentage shares, 2022

● MFN Duty-Free ● MFN Dutiable ● MFN Dutiable (Pref. eligible) ● Preferential (observed)



Source: WTO Integrated Database and WTO Analytical Database, 2024

* MFN and preferential shares estimated based on methodology in section 4.

Data on trade shares covered by AD, CVD or the US-China trade conflict are not included due to their lack of robustness.

As Figure 3 shows, all top 20 trading nations conduct imports mostly under the MFN principle, with many conducting a significant portion of their trade on MFN duty-free terms—Hong Kong, China, for example, entirely, and Singapore nearly so. The analysis also shows that nearly all WTO members have preferential duty arrangements in place, which are utilized to a considerable extent, the preferential trade ranging from 3-38%. Economies for which detailed import statistics have been notified include the United States, the European Union, Japan, Canada, Switzerland, and Australia; Economies marked with an asterisk (*) are based on observations which include estimates on preference utilization as presented in Section 4.

A comprehensive list of economies, including trade shares and additional information, is provided in Annex Table 4.

By region

Table 2 presents total trade by geographical regions for 2022, highlighting differences in the share of imports under MFN terms. The regions with the highest MFN trade shares are the Middle East (94%), Africa (89%), and East Asia (87%). Europe, West Asia, and North America also display relatively high shares, ranging from 81% to 82%. In contrast, Oceania and South and Central America and the Caribbean and Central Asia exhibit lower MFN shares, 64%, 77% and 78% respectively, indicating more diverse or preferential trade arrangements in these regions.

Table 2: Shares by geographical regions

USD trillion and per cent, 2022

Reporter region	Total USD trillion ²	Eligible		Observed ¹		Anti-dumping ³	Counter-vailing ³
		Preferential	MFN	Preferential	MFN		
Africa	0.694	15%	85%	11%	89%	< 0.1%	0.0%
Central Asia	0.094	28%	72%	22%	78%	0.0%	0.0%
East Asia	7.140	19%	81%	13%	87%	< 0.3%	0.0%
Europe	4.940	24%	76%	19%	82%	< 1.2%	< 0.3%
Middle East	0.940	8%	92%	6%	94%	0.0%	0.0%
North America	4.225	25%	75%	19%	81%	< 3.2%	< 2.4%
Oceania	0.353	41%	59%	36%	64%	< 1.4%	< 1.1%
South and Central America and the Caribbean	0.839	31%	69%	23%	77%	< 0.6%	< 0.1%
West Asia	0.870	24%	76%	18%	82%	< 2.1%	< 0.3%
Total	20.096	22%	78%	17%	83%	< 1.3%	< 0.6%

Source: WTO Integrated Database and WTO Analytical Database, 2024

¹ Includes both WTO Members that submit detailed datasets (see Annex Table 1) and estimates for other economies according to our methodology.² Total annual import values, excluding EU intra trade.³ These figures are likely to be overstated due to data limitations.

The data shows that the MFN trade share for South and Central America and the Caribbean could be much lower and reach 69% rather than the currently observed 77%. This would be achieved if all existing preferential duty schemes would be fully utilized. In other words, this type of analysis also allows for a deeper examination of "lost opportunities of PTAs" where economies import under MFN terms despite being eligible for preferential market access. The WTO Committee on Rules of Origin has reviewed several studies²¹ focusing on the non-utilization or underutilization of trade preferences by Least Developed Countries (LDCs).

By MTN category

In Figure 4, global import values for the year 2022 are categorized according to MTN categories and ranked by total import value. The leading product category is "Minerals and metals," with a corresponding value of USD 3.8 trillion. Of this total, USD 2.3 trillion is MFN duty-free, USD 0.8 trillion is MFN dutiable, and USD 0.15 trillion is eligible for preferential treatment but traded under MFN terms. These segments, highlighted in blue, represent USD 3.2 trillion, or 85% of trade within this category, conducted under MFN terms.

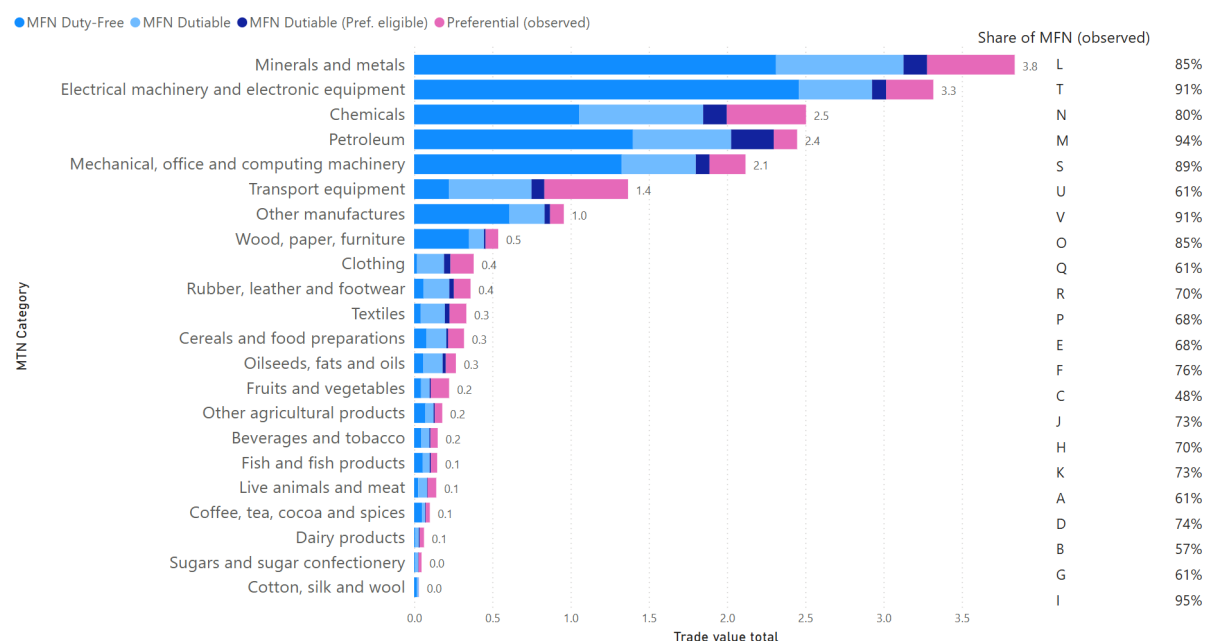
The bar chart also highlights the relative importance of certain sectors in global trade. The top five product categories—"Minerals and metals", "Electrical machinery and electronic equipment", "Chemicals", "Petroleum" and "Mechanical, office, and computing machinery"—collectively account for more than 70% of global trade. The corresponding MFN trade shares for these categories range from 80% to 94%.

In contrast, total trade values for other categories, particularly those related to the agricultural sector, are smaller. With the exception of "Cotton, silk, and wool" which has

²¹ Such as, for example, WTO documents G/RO/W/185, G/RO/W/187, G/RO/W/187/Rev.1, G/RO/W/203, G/RO/W/204, G/RO/W/212.

an MFN share of 95%, many other agricultural sectors have relatively lower shares of global MFN trade, such as the "Fruits and vegetables" category, which has an MFN share of 48%.

Figure 4: Import by MFN and preferential trade regimes¹ by MTN category
USD trillion² and percentage shares, 2022



Source: WTO Integrated Database and WTO Analytical Database, 2024

¹ Includes both WTO Members that submit detailed datasets (see Annex Table 1) and estimates for other economies according to our methodology.

² Total annual import values, excluding EU intra trade.

Data on trade shares covered by AD, CVD or the US-China trade conflict are not included due to their lack of robustness.

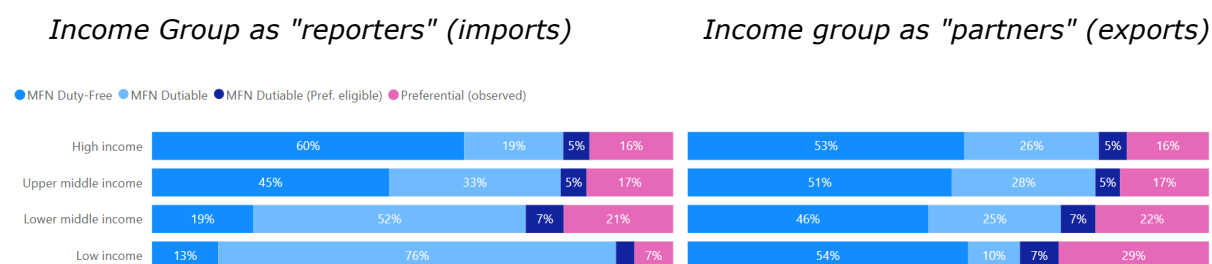
By income groups

The analysis by income groups as defined by the World Bank is presented in two distinct ways: First, on an import dimension as the previous analysis conducted by economies, regions and MTN categories. Additionally, with regard to income groups, we introduce a second dimension focused on exports. Figure 5 displays trade shares by income category; economies are grouped according to their income levels. The figure depicts imports on the left: High-income economies grant MFN tariff treatment to 84% of their imports, and preferential tariff treatment to the remaining 16%. For upper-middle-income economies, the share of trade under MFN terms is slightly lower at 83%. In lower-middle-income economies, the MFN trade share decreases further to 79%, while low-income economies exhibit the highest proportion of trade on MFN terms, at 93%.

As the underlying dataset contains detailed data for 184 economies, we can reverse the perspective to analyze export flows accordingly and aggregate by income level. Figure 5 shows exports on the right and reveals that more developed countries are more likely to encounter MFN terms in export markets, with high-income countries exporting 84% of

their goods under MFN terms, compared to 71% for low-income countries. This may indicate that exporters from less developed economies are more likely to encounter preferential market conditions through non-reciprocal duty arrangements, such as the Generalized System of Preferences (GSP) and Least Developed Country (LDC) duty schemes.

Figure 5: Trade by duty schemes¹ and "income group"
Percentage shares, 2017-2022



Source: WTO Integrated Database and WTO Analytical Database, 2024

Income Groups as defined by the World Bank²²

¹ Includes both WTO Members that submit detailed datasets (see Annex Table 1) and estimates for other economies according to our methodology.

MFN shares on imports vs. MFN shares on exports

Governments worldwide maintain national customs schedules and implement Most-Favoured-Nation (MFN) treatment in different ways. As a result, the tariff treatment an economy applies to its imports can differ significantly from the treatment it receives when exporting goods. This incongruence is illustrated in Figure 6, which analyzes the top 20 world traders in 2022. The graph displays the percentage difference by comparing the share of MFN imports to the share of MFN treatment faced by the same economy's exports. This visual representation clearly emphasizes the disparities in tariff treatment that economies experience between their imports and exports, highlighting differing MFN trade policies.

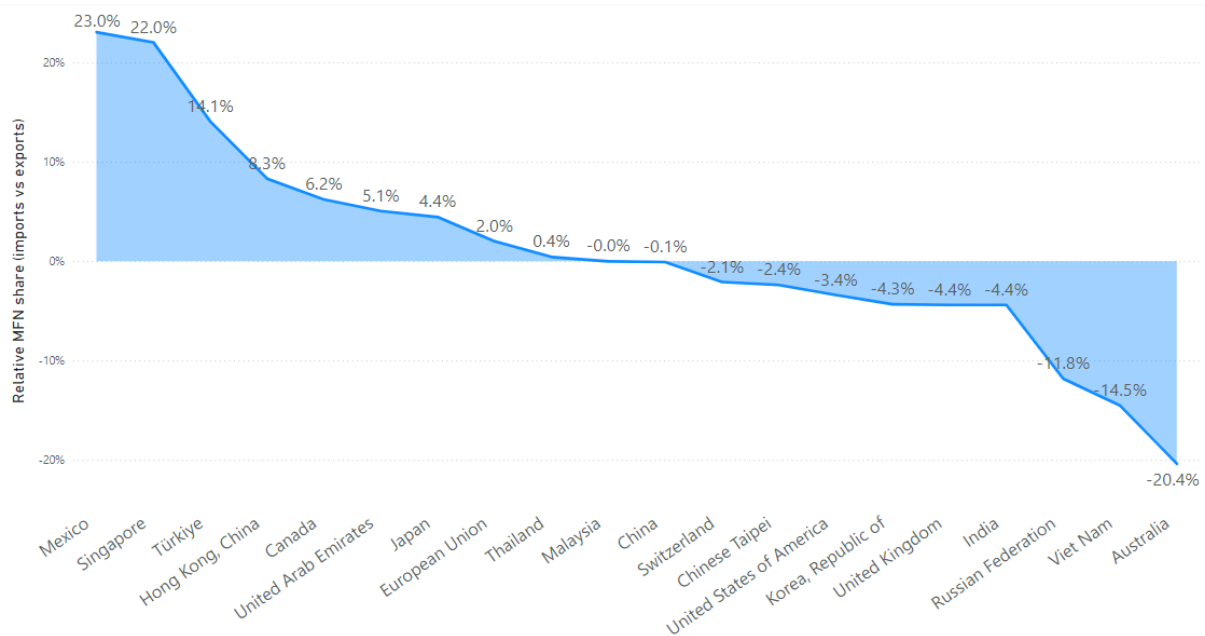
For instance, Mexico's MFN share for imports stands at 78%, aligning closely with the global average. However, only 55% of Mexico's exports are subject to MFN treatment, as a significant portion benefits from preferential market conditions when entering the United States. Singapore (22.0%) and Türkiye (14.1%), also exhibit significantly higher MFN shares on imports than exports. Japan (4.4%), the EU (2.0%), and others point to more balanced but still import-weighted MFN usage. Contrarily, negative results, particularly for Australia (-20.4%), Viet Nam (-14.5%), and the Russian Federation (-11.8%), highlight economies where imports are more conducted under preferential terms, whereas exports tend to be more subject to MFN treatment.

²² Income groups as defined by World Bank Group

<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>

Figure 6: Difference in MFN trade shares¹ between Imports and Exports, top 20 importers

Percentage shares, 2022



Source: WTO Integrated Database and WTO Analytical Database, 2024

¹ Includes both WTO Members that submit detailed datasets (see Annex Table 1) and estimates for other economies according to our methodology.

Annex Table 4 provides an overview of both MFN shares for imports and MFN shares for exports. These figures are derived from our methodology and represent estimates for many economies where data is not available. Nevertheless, the overall MFN trade shares—exceeding 80% on a global scale—underscore the significance of the MFN principle in guiding international merchandise trade.

7 CONCLUDING REMARKS

The proliferation of Regional Trade Agreements (RTAs) and Preferential Trade Arrangements (PTAs) has raised concerns regarding the continued relevance of the Most-Favoured-Nation (MFN) principle. Our analysis indicates that MFN remains a critical pillar of the global trading system, covering over 80% of international trade in goods.

A novel and detailed dataset based on customs data contained in the WTO's Integrated Database with detailed tariff provisions and bilateral trade flows - complemented by various other sources - allows for a detailed analysis of trade flows for 184 economies. These findings allow to map trade flows with MFN and preferential tariffs, including for the calculation of preference utilization to discount for the assumption that all preferential duty schemes are fully used.

The analysis reveals that 83% of global trade in goods is governed by MFN tariff treatment, underscoring its central role in the global trading system. Although 22% of global trade is theoretically eligible for preferential tariff rates, only 17% effectively benefits from such terms in practice. Trade remedy measures, including anti-dumping (AD) and countervailing (CV) duties, are also quantified. Although data limitations result in figures that overstate their actual impact, the effects of AD and CV duties on global trade are modest, averaging 1.3% and 0.6%, respectively. Similarly, while the US-China trade conflict has had significant bilateral implications, its effect on global trade has been relatively limited, influencing approximately 1.9% of total world imports.

Trade flows grouped by income groups reveal that developing countries are more likely to utilize preferential tariffs, while developed countries predominantly operate under MFN terms. Regional disparities in reliance on MFN trade are also evident, and the study identifies significant variations in the application of MFN to imports and exports across economies.

This paper contributes to ongoing discussions about the evolving dynamics of tariff policies and their implications for global trade. The relevance of the MFN principle underscores the need for a robust and inclusive multilateral trading system. Building on the findings presented in this work, future research could examine the complex interplay and interdependencies between MFN and preferential trade arrangements, considering the impact on trade flows, customs revenues, and development dimensions. These areas are increasingly shaping international trade dynamics, and understanding their interaction with MFN rules would contribute to a more comprehensive framework for addressing contemporary trade challenges.

8 REFERENCES

- Acharya, R. (ed.) (2016) *Regional Trade Agreements and the Multilateral Trading System*, Cambridge University Press.
- Acharya, R. and Parajuli, T. (2025) 'The evolution of preferential trade under regional trade agreements: has anything changed?', WTO Staff Working Paper (forthcoming), World Trade Organization (WTO)
- Baldwin, R. and Jaimovich, D. (2012) 'Are Free Trade Agreements contagious?', *Journal of International Economics*, 88(1):1-16.
- Bown, C. (2021) 'The US-China Trade War and Phase One Agreement', CEPR Discussion Papers, No 15850.
- Cariola, G. and Lanz, R. (2022) 'Preference utilization in the global economy: An empirical analysis', WTO Staff Working Paper, No. ERSD-2022-4, World Trade Organization (WTO), Economic Research and Statistics Division.
- Carpenter, T. and Lendle, A. (2010) 'How Preferential is World Trade?' CTEI Working Paper No. 2010-32, Geneva: The Graduate Institute Centre for Trade and Economic Integration.
- Crawford, J. (2012) 'Market Access Provisions on Trade in Goods in Regional Trade Agreements', Geneva: WTO Staff Working Paper ERSD-2012-20, World Trade Organization (WTO), Economic Research and Statistics Division.
- Dadush, U. and Dominguez Prost, E. (2023) 'Preferential Trade Agreements, Geopolitics, and the Fragmentation of World Trade', *World Trade Review*, 22(2).
- Elbehri, A., Wainio, J. (2006) 'Preferential Tariffs, WTO and Developing Countries: Do the Gains from Multilateral Market Access Outweigh Preferential Access?', 2006 Annual Meeting, August 12-18, Queensland, Australia: International Association of Agricultural Economists.
- Espitia Rueda, A. R., Mattoo, A., Mimouni, M., Pichot, X. and Rocha, N. (2018) 'How preferential is preferential trade?', No. 8446, Policy Research Working Paper Series, World Bank.
- Fugazza, M. and Nicita, A. (2013) 'The direct and relative effects of preferential market access', *Journal of International Economics*, 89(2): 357-368.
- Hofmann, C., Osnago, A. and Ruta, M. (2019) 'The Content of Preferential Trade Agreements', *World Trade Review*, 18(3): 365–398.
- ITC/UNCTAD/WTO (2018) *World Tariff Profiles Special topic: Utilization of preferential tariff treatment for products exported by least developed countries*.
- Keck, A. and Lendle, A. (2012) 'New evidence on preference utilization', Geneva: WTO Staff Working Papers ERSD-2012-12, World Trade Organization (WTO), Economic Research and Statistics Division.

- Larch, M., and Yotov, Y. V. (2024). 'Estimating the effects of trade agreements: Lessons from 60 years of methods and data', *The World Economy*, 47(5): 1771-1799.
- Limão, N. (2016) Preferential Trade Agreements, No 22138, NBER Working Papers, National Bureau of Economic Research, Inc.
- Low, P., Piermartini, R., Richter, J. (2009). 'Multilateral solutions to the erosion of nonreciprocal preferences in nonagricultural market access', in *Trade preference erosion: Measurement and policy response* (Hoekman, B., Martin, W. and Primo Braga, C. eds.), Washington, DC: World Bank and Basingstoke, UK: Palgrave Macmillan.
- Mattoo, A., Rocha, N., Ruta, M. (2020) *Handbook of Deep Trade Agreements*, The World Bank Group
- Ngozi Okonjo-Iweala (2021). 'On the need to rejuvenate multilateral trade deals', *The Economist*.
- Mattoo, A., Ruta, M., Staiger, R. (2024) *Geopolitics and the World Trading System*, Working Paper, Dartmouth College.
- Saggi, K. (2018) 'The MFN clause, welfare, and multilateral cooperation between countries of unequal size', in *Economic Analysis of the Rules and Regulations of the WTO*, World Scientific Publishing Co. Pte. Ltd.
- Suwanprasert, W. (2016) 'The Role of the Most Favored Nation Principle of the GATT/WTO in the New Trade Model', *Review of International Economics*.
- The Economist (2024) 'Rumours of the trade deal's death are greatly exaggerated', *The Economist*, 13 June 2024.
- Wang, A. (2022). *History of the MFN Clause in International Law*. In *The Interpretation and Application of the Most-Favored-Nation Clause in Investment Arbitration*, pp. 4-33.
- WTO (2011) *World Trade Report. The WTO and preferential trade agreements: From co-existence to coherence*.

9 ANNEX

Annex Table 1: Data availability of detailed imports by duty schemes

Reporter	2017	2018	2019	2020	2021	2022
Australia	x	x	x	x	x	x
Canada	x	x	x	x	x	x
Chile			x			
Chinese Taipei	x	x	x	x		
European Union	x	x	x	x	x	x
Iceland	x	x	x	x	x	x
Japan	x	x	x	x	x	x
Korea, Republic of	x	x	x	x	x	
Montenegro	x	x	x	x		
Norway	x	x	x	x	x	x
Switzerland		x	x	x	x	x
Türkiye			x			
United States of America	x	x	x	x	x	x
Share of world merchandise trade	47%	48%	50%	46%	43%	40%

Source: WTO Integrated Database, 2024

Annex Table 2: Preference utilization by MTN category, 2017-2022

In per cent. Reference economies/years listed in Annex Table 1

MTN Category	2017	2018	2019	2020	2021	2022	Average
A Live animals and meat	98%	94%	97%	98%	94%	94%	95%
B Dairy products	99%	98%	97%	99%	86%	82%	92%
C Fruits and vegetables	98%	97%	96%	96%	94%	94%	96%
D Coffee, tea, cocoa and spices	96%	96%	95%	96%	95%	86%	94%
E Cereals and food preparations	94%	90%	90%	93%	90%	90%	91%
F Oilseeds, fats and oils	79%	81%	88%	84%	81%	75%	81%
G Sugars and sugar confectionery	94%	93%	89%	89%	91%	88%	90%
H Beverages and tobacco	91%	92%	92%	93%	90%	87%	91%
I Cotton, silk and wool	97%	95%	96%	96%	98%	90%	95%
J Other agricultural products	92%	91%	91%	89%	91%	86%	90%
K Fish and fish products	86%	86%	88%	88%	92%	85%	87%
L Minerals and metals	84%	78%	75%	79%	85%	79%	80%
M Petroleum	48%	44%	40%	37%	38%	35%	39%
N Chemicals	82%	81%	77%	79%	81%	77%	79%
O Wood, paper, furniture	83%	86%	86%	90%	90%	89%	87%
P Textiles	75%	74%	71%	80%	83%	78%	77%
Q Clothing	87%	85%	84%	83%	80%	78%	82%
R Rubber, leather and footwear	83%	82%	81%	78%	80%	79%	80%
S Mechanical, office and computing machinery	80%	78%	76%	77%	77%	73%	76%
T Electrical machinery and electronic equipment	78%	77%	75%	77%	79%	77%	77%
U Transport equipment	90%	90%	91%	90%	86%	87%	89%
V Other manufactures	79%	76%	76%	76%	78%	71%	76%
Trade weighted average	82%	79%	78%	80%	80%	76%	79%

Source: WTO Integrated Database and WTO Analytical Database, 2024

Annex Table 3: Global Trade Shares

USD trillion and percentage shares, 2017-2022

Year	Total USD trillion ²	Eligible		Observed ¹				Anti-dumping	Counter-vailing
		Preferential	MFN	Preferential	MFN duty free	MFN dutiable	MFN		
2017	13.251	19%	81%	16%	49%	35%	84%	1.2%	0.6%
2018	14.581	21%	79%	17%	49%	34%	83%	1.2%	0.5%
2019	14.056	22%	78%	17%	49%	34%	83%	1.2%	0.5%
2020	13.794	23%	77%	19%	49%	32%	81%	1.1%	0.6%
2021	17.157	22%	78%	17%	50%	33%	83%	1.0%	0.5%
2022	20.096	22%	78%	17%	51%	32%	83%	1.3%	0.6%
Average		22%	78%	17%	50%	33%	83%	1.2%	0.5%

Source: WTO Integrated Database and WTO Analytical Database, 2024

¹Includes both WTO Members that submit detailed datasets (see Annex Table 1) and estimates for other economies according to our methodology.

²Total annual import values, excluding EU intra trade.

³These figures are likely to be overstated due to data limitations.

Annex Table 4: Regions and economies, 2022

Total imports in USD million and shares by duty regimes in per cent

Region/Economy	Income group ^a	Total imports (USD million)	MFN import share	MFN duty-free share	MFN dutiable share	Preferential share	MFN export share
Africa		694,031	89%	18%	71%	11%	81%
Algeria*	LM	46,053	100%	2%	98%	0%	87%
Angola*	LM	17,843	99%	42%	57%	1%	98%
Benin*	LM	3,847	93%	6%	87%	7%	61%
Botswana*	UM	8,115	69%	48%	21%	31%	96%
Burkina Faso*	L	5,647	87%	10%	77%	13%	92%
Burundi*	L	1,260	73%	35%	38%	27%	92%
Cabo Verde*	LM	1,772	100%	5%	95%	0%	32%
Cameroon*	LM	6,969	84%	0%	84%	16%	93%
Central African Republic*	L	623	91%	7%	84%	9%	97%
Comoros*	LM	326	100%	36%	64%	0%	73%
Congo*	LM	2,352	100%	1%	99%	0%	98%
Côte d'Ivoire*	LM	8,576	79%	10%	70%	21%	90%
Democratic Republic of the Congo*	L	11,407	100%	0%	100%	0%	51%
Egypt*	LM	96,188	100%	0%	100%	0%	69%
Eswatini*	LM	2,116	63%	41%	22%	37%	62%
Ethiopia*	L	16,538	99%	15%	84%	1%	75%
Gabon*	UM	3,646	100%	1%	99%	0%	98%
Ghana*	LM	17,963	84%	5%	79%	16%	88%
Guinea*	LM	5,000	95%	1%	94%	5%	83%
Guinea-Bissau*	L	166	84%	3%	81%	16%	9%
Kenya*	LM	21,101	92%	43%	49%	8%	60%

Region/Economy	Income group ^a	Total imports (USD million)	MFN import share	MFN duty-free share	MFN dutiable share	Preferential share	MFN export share
Lesotho*	LM	1,869	56%	28%	28%	44%	57%
Liberia*	L	1,917	65%	3%	62%	35%	93%
Libya*	UM	15,664	100%	0%	100%	0%	100%
Madagascar*	L	5,541	85%	19%	66%	15%	47%
Malawi*	L	1,586	88%	40%	48%	12%	54%
Mali*	L	4,975	81%	10%	71%	19%	99%
Mauritania*	LM	5,118	100%	11%	89%	0%	86%
Mauritius*	UM	6,611	97%	93%	4%	3%	60%
Morocco*	LM	72,576	49%	3%	46%	51%	51%
Mozambique*	L	14,671	100%	5%	95%	0%	60%
Namibia*	UM	7,434	71%	39%	32%	29%	85%
Niger*	L	3,779	90%	6%	85%	10%	85%
Nigeria*	LM	60,671	99%	3%	96%	1%	93%
Rwanda*	L	5,125	74%	32%	42%	26%	89%
Sao Tomé and Príncipe*	LM	196	100%	0%	100%	0%	74%
Senegal*	LM	12,065	98%	9%	89%	2%	56%
Seychelles*	H	2,112	93%	89%	4%	7%	48%
Sierra Leone*	L	987	96%	4%	92%	4%	91%
South Africa*	UM	111,306	89%	44%	45%	11%	86%
Sudan*	L	10,484	97%	11%	86%	3%	86%
Tanzania*	LM	15,653	95%	46%	48%	5%	56%
The Gambia*	L	708	83%	2%	81%	17%	67%
Togo*	L	2,791	91%	7%	84%	9%	73%
Tunisia*	LM	25,990	95%	37%	58%	5%	53%
Uganda*	L	9,086	80%	39%	41%	20%	74%

Region/Economy	Income group ^a	Total imports (USD million)	MFN import share	MFN duty-free share	MFN dutiable share	Preferential share	MFN export share
Zambia*	LM	9,004	100%	40%	60%	0%	55%
Zimbabwe*	LM	8,604	68%	19%	49%	32%	88%
Central Asia		94,166	78%	30%	48%	22%	92%
Kazakhstan*	UM	50,934	59%	22%	37%	41%	95%
Kyrgyz Republic*	LM	9,803	100%	23%	76%	0%	88%
Tajikistan*	LM	5,165	100%	8%	92%	0%	82%
Uzbekistan*	LM	28,264	100%	52%	48%	0%	76%
East Asia		7,140,443	86%	63%	23%	14%	85%
Brunei Darussalam*	H	9,184	99%	99%	0%	1%	83%
Cambodia*	LM	29,938	60%	30%	30%	40%	45%
China*	UM	2,585,784	89%	54%	35%	11%	89%
Chinese Taipei*	H	403,932	97%	72%	25%	3%	100%
Hong Kong, China*	H	667,081	100%	100%	0%	0%	92%
Indonesia*	UM	237,384	61%	32%	30%	39%	62%
Japan	H	853,446	90%	83%	8%	10%	86%
Korea, Republic of*	H	731,370	69%	34%	35%	31%	73%
Lao People's Democratic Republic*	LM	6,808	37%	2%	35%	63%	81%
Macao, China*	H	16,942	100%	100%	0%	0%	91%
Malaysia*	UM	293,935	85%	69%	16%	15%	85%
Mongolia*	LM	8,704	83%	2%	81%	17%	97%
Myanmar*	LM	17,403	53%	6%	47%	47%	66%
Philippines*	LM	145,890	64%	42%	22%	36%	85%
Singapore*	H	475,413	100%	99%	1%	0%	78%
Thailand*	UM	297,520	73%	54%	20%	27%	73%
Timor-Leste*	LM	921	100%	0%	100%	0%	100%

Region/Economy	Income group ^a	Total imports (USD million)	MFN import share	MFN duty-free share	MFN dutiable share	Preferential share	MFN export share
Viet Nam*	LM	358,788	65%	44%	21%	35%	80%
Europe		4,939,819	81%	54%	27%	19%	82%
Albania*	UM	8,424	77%	55%	22%	23%	66%
Andorra*	H	1,864	100%	0%	100%	0%	75%
Armenia*	UM	8,662	69%	23%	46%	31%	82%
Azerbaijan*	UM	14,527	89%	28%	61%	11%	89%
Belarus*	UM	41,811	98%	13%	86%	2%	49%
Bosnia and Herzegovina*	UM	15,380	62%	12%	50%	38%	55%
European Union	H	2,806,322	84%	60%	23%	16%	81%
Georgia*	UM	13,548	86%	72%	14%	14%	63%
Greenland*	H	829	100%	0%	100%	0%	Not available
Iceland	H	9,288	98%	95%	2%	2%	90%
Moldova, Republic of*	UM	9,219	74%	56%	19%	26%	55%
Montenegro*	UM	3,721	60%	36%	24%	40%	89%
North Macedonia*	UM	12,757	74%	44%	30%	26%	44%
Norway	H	105,735	97%	92%	5%	3%	88%
Russian Federation*	UM	293,485	85%	23%	62%	15%	96%
Serbia*	UM	41,144	54%	1%	53%	46%	58%
Switzerland	H	357,012	80%	61%	19%	20%	82%
Türkiye*	UM	363,753	75%	31%	44%	25%	60%
Ukraine*	LM	55,296	75%	33%	42%	25%	76%
United Kingdom*	H	771,120	76%	57%	19%	24%	80%
UNMIK/Kosovo*	UM	5,924	100%	0%	100%	0%	Not available
Middle East		940,053	94%	30%	64%	6%	94%
Bahrain, Kingdom of*	H	15,484	84%	16%	68%	16%	93%

Region/Economy	Income group ^a	Total imports (USD million)	MFN import share	MFN duty-free share	MFN dutiable share	Preferential share	MFN export share
Iran*	LM	52,865	100%	0%	100%	0%	76%
Israel*	H	92,911	82%	59%	24%	18%	86%
Jordan*	LM	27,149	86%	46%	40%	14%	66%
Kuwait, the State of*	H	35,926	85%	23%	62%	15%	100%
Lebanese Republic*	LM	19,491	100%	24%	76%	0%	81%
Oman*	H	38,573	71%	14%	57%	29%	98%
Palestine*	UM	9,089	100%	0%	100%	0%	Not available
Qatar*	H	33,479	100%	16%	84%	0%	99%
Saudi Arabia, Kingdom of*	H	189,877	100%	26%	74%	0%	98%
United Arab Emirates*	H	420,493	96%	32%	64%	4%	91%
Yemen*	L	4,716	100%	15%	85%	0%	88%
North America		4,225,353	81%	52%	29%	19%	78%
Bermuda*	H	1,192	100%	0%	100%	0%	Not available
Canada	H	514,287	79%	70%	9%	21%	73%
Mexico*	UM	604,615	78%	40%	38%	22%	55%
United States of America	H	3,105,259	82%	52%	31%	18%	86%
Oceania		353,295	64%	48%	16%	36%	82%
Australia	H	287,232	62%	50%	12%	38%	83%
Fiji*	UM	2,997	99%	23%	77%	1%	84%
French Polynesia*	H	2,220	100%	0%	100%	0%	Not available
Kiribati*	LM	174	100%	0%	100%	0%	Not available
New Zealand*	H	54,800	66%	38%	28%	34%	65%
Palau*	UM	154	100%	0%	100%	0%	Not available
Papua New Guinea*	LM	4,500	100%	72%	28%	0%	95%
Samoa*	LM	368	94%	15%	79%	6%	88%

Region/Economy	Income group ^a	Total imports (USD million)	MFN import share	MFN duty-free share	MFN dutiable share	Preferential share	MFN export share
Solomon Islands*	LM	601	100%	14%	86%	0%	75%
Tonga*	UM	247	94%	53%	41%	6%	87%
South and Central America and the Caribbean		838,650	77%	30%	46%	23%	79%
Antigua and Barbuda*	H	628	86%	3%	84%	14%	74%
Argentina*	UM	81,475	79%	15%	64%	21%	79%
Aruba, Netherlands with respect to*	Not classified	1,473	100%	0%	100%	0%	Not available
Bahamas*	H	3,758	100%	0%	100%	0%	90%
Barbados*	H	2,072	89%	5%	84%	11%	75%
Belize*	UM	1,381	97%	15%	82%	3%	54%
Bolivia, Plurinational State of*	LM	13,049	69%	8%	62%	31%	94%
Brazil*	UM	272,439	89%	30%	59%	11%	91%
Cayman Islands*	H	1,538	100%	0%	100%	0%	Not available
Chile*	H	97,646	32%	0%	32%	68%	61%
Colombia*	UM	75,877	79%	47%	31%	21%	71%
Costa Rica*	UM	21,395	68%	41%	27%	32%	69%
Cuba*	UM	9,817	91%	18%	74%	9%	98%
Dominica*	UM	190	98%	15%	83%	2%	82%
Dominican Republic*	UM	30,820	74%	39%	35%	26%	61%
Ecuador*	UM	32,530	91%	44%	47%	9%	79%
El Salvador*	UM	17,064	62%	32%	30%	38%	40%
Grenada*	UM	589	98%	4%	94%	2%	74%
Guatemala*	UM	32,107	73%	39%	34%	27%	58%
Guyana*	H	3,610	79%	10%	69%	21%	94%
Honduras*	LM	13,845	57%	26%	31%	43%	45%
Jamaica*	UM	7,731	97%	38%	59%	3%	67%

Region/Economy	Income group ^a	Total imports (USD million)	MFN import share	MFN duty-free share	MFN dutiable share	Preferential share	MFN export share
Montserrat*	Not classified	39	100%	0%	100%	0%	Not available
Nicaragua*	LM	8,137	63%	31%	32%	37%	52%
Panama*	H	11,176	68%	42%	26%	32%	89%
Paraguay*	UM	15,880	99%	20%	79%	1%	53%
Peru*	UM	60,153	85%	74%	11%	15%	75%
Saint Kitts and Nevis*	H	309	97%	8%	90%	3%	74%
Saint Lucia*	UM	533	82%	23%	58%	18%	57%
Saint Vincent and the Grenadines*	UM	372	97%	10%	86%	3%	90%
Suriname*	UM	1,912	76%	6%	70%	24%	95%
Trinidad and Tobago*	H	6,211	93%	54%	39%	7%	85%
Uruguay*	H	12,891	72%	25%	47%	28%	80%
West Asia		870,413	82%	8%	74%	18%	78%
Afghanistan*	L	8,568	99%	0%	99%	1%	64%
Bangladesh*	LM	47,247	93%	20%	73%	7%	41%
India*	LM	714,042	80%	5%	76%	20%	85%
Maldives*	UM	3,488	94%	37%	57%	6%	98%
Nepal*	LM	13,744	77%	6%	71%	23%	33%
Pakistan*	LM	65,764	86%	23%	63%	14%	62%
Sri Lanka*	LM	17,559	97%	56%	41%	3%	77%

Source: WTO Integrated Database, WTO Analytical Database and World Bank, 2024

* MFN and preferential shares estimated based on methodology in section 4. For non-WTO Members, we treated imports as quasi-MFN, reflecting customs schedules which are applied uniformly to all partners, unless specific preferences are shown.

^a Income groups as defined by the World Bank, <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>

L-low income, LM-lower-middle income, UM-upper-middle income, H-high income.

Note: Import shares may not always add up to 100% due to rounding.

Whenever trade data for 2022 was not available, the most recent previous data was used instead.