

World Trade Report 2026

A critical juncture for the world trading system

What is the World Trade Report?

The World Trade Report is an annual publication that aims to deepen understanding about trends in trade, trade policy issues and the multilateral trading system.

What is the 2026 Report about?

The 2026 World Trade Report examines how the more open and integrated world economy that the WTO helped to create has brought about challenges for the multilateral trading system.

As economic power has become more widely distributed, rules-based cooperation needs to adapt to this more integrated, multipolar and diverse global economy.

Find out more

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ABBREVIATIONS

AD	anti-dumping
AI	artificial intelligence
AMS	Agricultural Market Support
AoA	Agreement on Agriculture
AVE	<i>ad valorem</i> equivalents
BSTRI	Bound Services Trade Restrictions Index
CoA	Committee on Agriculture
CRN	Central Registry of Notifications
CTE	Committee on Trade and Environment
CTG	Council for Trade in Goods
CTS	Council for Trade in Services
DDA	Doha Development Agenda
DPP	Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade
DSTRI	Digital Services Trade Restrictiveness Index
DSB	Dispute Settlement Body
DSU	Dispute Settlement Understanding
EAC	East African Community
ECA	Agreement on Electronic Commerce
EEC	European Economic Community
EFTA	European Free Trade Association
EGA	Environmental Goods Agreement
FDI	foreign direct investment
FFSR	Fossil Fuel Subsidy Reform
FTA	free trade agreement
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNI	gross national income
GPA	Agreement on Government Procurement
GSP	Generalized System of Preferences
GVC	global value chain
HS	Harmonized System
ICC	International Chamber of Commerce
ICT	information and communications technology
IFDA	Investment Facilitation for Development Agreement
IMF	International Monetary Fund
INDIGO	Index of Digital Trade Integration and Openness
IP	intellectual property
IPPC	International Plant Protection Convention
IPR	intellectual property rights

ISO	International Organization for Standardization
ITA	Information Technology Agreement
ITC	International Trade Centre
ITO	International Trade Organization
JSI	joint statement initiatives
LDC	least-developed country
MFN	most-favoured nation
MPIA	Multi-Party Interim Appeal Arbitration Arrangement
MSME	micro, small and medium-sized enterprises
NFIDC	net food-importing developing country
NTM	non-tariff measures
OECD	Organisation for Economic Co-operation and Development
PSTRI	Preferential Services Trade Restrictions Index
R&D	research and development
RTA	regional trade agreement
S&DT	Special and differential treatment
SCM	Subsidies and Countervailing Measures
SPS	sanitary and phytosanitary
STRI	Services Trade Restrictions Index
TBT	technical barriers to trade
TESSD	Trade and Environmental Sustainability Structured Discussions
TFA	Trade Facilitation Agreement
TPRB	Trade Policy Review Body
TPRM	Trade Policy Review Mechanism
TPU	trade policy uncertainty
TRIMs	Trade-Related Investment Measures
TRIPS	Trade-Related Aspects of Intellectual Property
UN	United Nations
UNCTAD	UN Trade and Development
WFP	World Food Programme
WTO	World Trade Organization

FOREWORD BY THE WTO DIRECTOR-GENERAL



The world trading system is in the midst of the most severe period of disruption in 80 years. We have seen trade rules challenged on a scale unseen since multilateral institutions were created to underpin open, stable and predictable global trade in the wake of the Great Depression and the Second World War.

Some of these disruptions reflect relatively recent pressures arising from macroeconomic dynamics within major economies. Some reflect gaps in domestic social protection. But an important part of them stems from a widespread sense that WTO rules have not kept pace with a rapidly changing global economy. This year's World Trade Report takes that sense of unease seriously, and examines what lies behind it.

While the WTO's World Trade Reports typically focus on a single theme, such as artificial intelligence (AI) or inclusiveness, this edition, "A critical juncture for the world trading system", is different. It steps back to ask a more foundational set of questions: how and why has the General Agreement on Tariffs and Trade (GATT) and WTO multilateral trading system worked? What has it delivered? Where has its operation faltered? What is still working well? And what does all of this mean for the reform of the system that members are now pursuing?

The findings remind us of what is at stake. Despite the various trade measures we have seen over the past year, nearly three-quarters of global merchandise trade, around 72 per cent, still operate under the most-favoured-nation (MFN) tariff terms that the

WTO's 166 members negotiated and are legally committed to uphold.

The multilateral trading system was created to promote peace and prosperity through trade, and it has been shown that it has acted as a check on the kind of unrestrained, beggar-thy-neighbour protectionism that deepened the Great Depression. Evidence presented in this report links WTO-facilitated trade to a measurable peace dividend among members.

Since 1995, WTO membership has helped to expand trade between members by roughly 140 per cent. Economies that undertook deeper reform commitments as part of their accession grew faster as a result. From the mid-1990s, integration into the multilateral trading system has helped to drive faster growth in low-income and middle-income economies, contributing to a narrowing of the income gap with wealthier economies for the first time since the Industrial Revolution two centuries ago.

Not everyone has shared equally in these gains, and this report is candid about that. Least-developed countries (LDCs) still account for less than 1 per cent of world trade; Africa's share remains below 3 per cent. Within some developed economies, workers exposed to import competition and rapid technological change have faced job losses and have not always received the domestic support needed to adjust and benefit. These gaps in participation and adjustment help to explain some of the weakening of public confidence in open trade, and illustrate

why reform of the system must go hand-in-hand with better domestic complementary policies.

The central argument of this report is both sobering and clarifying. Many of the pressures the WTO faces today are, in an important sense, a consequence of the system's own successes. GATT and WTO rules have helped to build a more open, more integrated and more rules-based global economy – but also one that is more multipolar, in which trade policy carries higher stakes, trade frictions are more complex and economic power is far more widely distributed than it was in 1947, or even in 1995. The founding logic of the system, that governments can do better for themselves – and for others – by exchanging enforceable, non-discriminatory market access commitments rather than acting unilaterally, remains as sound today as ever. What has changed is the world in which that logic operates.

This report traces four developments that are testing the system most directly. Economic power has become more dispersed, which is fuelling friction over bargains that date back to the 1990s, but is also creating opportunities to strike new bargains, including through negotiations among developing economies. The growing diversity in how governments intervene in their economies has raised “interface” and level-playing-field concerns with other economies, which existing disciplines and remedies do not always resolve. The changing nature of trade itself, shaped by global value chains (GVCs), digitalization, AI and the environmental transition, is generating new kinds of cross-border spillovers that the WTO framework was not originally designed to address. And rising geopolitical tensions are straining the balance between the benefits of interdependence and concerns about security and resilience.

None of this diminishes the value of the multilateral trading system; if anything, it raises the cost of allowing it to erode. Scenario analysis by WTO economists, included in this report, finds that fragmentation of the trading system along geopolitical lines could reduce global GDP by

around 5 per cent, and that a world without the WTO altogether could cost closer to 7 per cent of GDP, with smaller and poorer economies losing far more than high-income economies. A strengthened multilateral system, by contrast, could add roughly 3 per cent to global GDP. The message could not be clearer: the choice before members is not between reform and the status quo. It is between adapting rules-based cooperation to today's economic realities and drifting toward a more unpredictable, power-based way of managing trade that would ultimately leave most economies worse off.

What I find heartening here is that members are now engaging actively on WTO reform in full recognition that the status quo is not an option. Reform is not an end in itself. It is how we ensure that the WTO can more effectively continue to deliver the broad predictability, transparency and fairness that this report shows the system has provided for 80 years, for a membership and a global economy that look very different from those of 1995. Reform and the delivery of concrete negotiating outcomes, whether on fisheries subsidies, agriculture, services or development, are not competing priorities to be traded off against one another; they must advance together.

I want this report to be read as an invitation rather than a verdict. It does not seek to prescribe a blueprint for reform. It simply aims to explain, with factual rigour and historical depth, how the system has worked, what it has delivered, and where its mechanisms are now under strain. I am grateful to the WTO economists and researchers who produced this analysis, and to the many members, academics and partners who engaged with them along the way.

The multilateral trading system was built by governments that chose cooperation over confrontation in the aftermath of the most destructive conflict in human history. It has been repaired and renewed before, and I believe it can be again. I hope that this report will equip all of us, members above all, with the understanding and the resolve needed to do so.



Dr Ngozi Okonjo-Iweala
Director-General

EXECUTIVE SUMMARY

Global trade policy and the WTO are experiencing the most serious and sustained disruptions since the multilateral trading system was created 80 years ago. While some of these disruptions reflect long-standing tensions, and some reflect more recent developments related to macroeconomic policies and gaps in domestic social systems, an important part comes from perceptions that WTO rules have not kept pace with rapidly changing global economic realities, and that they need to adapt. This has placed the world trading system at a critical juncture.

The central argument of this report is that the WTO's present challenges are, in many important respects, a consequence of the system's own achievements: it helped to create a more open, integrated and rules-based world economy, but also one in which trade policy plays a more important role, trade frictions are more complex, WTO membership is more diverse and economic power is more widely distributed. The WTO's founding logic continues to deliver important economic benefits, and the system continues to offer value. But its future effectiveness will now depend on its ability to adapt to the more integrated, multipolar and diverse global economy that it helped to bring into being.

Members concur that the WTO needs reform, yet they have struggled to reach agreement on how to update WTO rules on issues ranging from agriculture, services and development to concerns around transparency, subsidies and national security. Opportunities in digital and green trade have not yet been matched by new multilateral rules. The last comprehensive reform of the multilateral trading system, the Uruguay Round (1986-94), led to the creation of the WTO but preceded the widespread use of the internet, the subsequent spread of global value chains (GVCs) and major shifts in the distribution of economic power across members which have reshaped world trade.

The challenges in responding to current global circumstances are striking because the multilateral trading system has been one of the most successful frameworks of international economic cooperation in modern history. What began in 1947 as a modest tariff agreement among fewer than two dozen economies evolved into a near-universal World Trade Organization, which now counts 166 members, providing comprehensive trade rules for goods,

services and intellectual property (IP), a widely used dispute settlement system and a forum where large and small economies can address shared trade concerns. Over time, the system has helped to support a sustained decline in trade barriers, an almost 50-fold expansion in global trade, and an unprecedented period of growth, development and income convergence across economies.

Moreover, despite the challenges faced by the WTO, its rules remain the essential legal foundation for international commerce. Around 72 per cent of all global merchandise trade still takes place on the core most-favoured-nation (MFN) tariff terms negotiated and committed to by the WTO's 166 members. In terms of further trade negotiations, WTO members recently reached an important agreement on reducing harmful fisheries subsidies. Groups of WTO members have also made significant advances in plurilateral arrangements covering areas such as electronic commerce, investment facilitation for development and services domestic regulation, as well as a number of environmental initiatives. In its daily work, the WTO continues to provide a framework in which WTO members can address shared concerns, resolve potential disagreements and reduce uncertainty. Dispute settlement continues to be used at the WTO, often creatively and successfully, despite certain limitations due to the suspension of the Appellate Body.

The aim of this report is to offer an economic perspective on how and why the system works, how it evolved and adapted to earlier challenges, what it has delivered, and where new challenges lie. While the report stops short of recommending specific reforms, it examines how changes in the global economy are disrupting some of the mechanisms on which the trading system has long relied, and it indicates areas where changes in the system may be needed.

The report first examines how the multilateral trading system developed and what it has delivered. It then identifies the mechanisms that have supported its effectiveness and considers how shifts in economic power across members, the increasing prominence of government interventions, differences across economic systems, changes in the nature of trade and geopolitical tensions are placing those mechanisms under strain. In doing so, it identifies where adaptation may now be most necessary and valuable.

The economic lens of the World Trade Report

Governments cooperate on trade policy for several reasons. They may want to collectively limit the cross-border effects of their trade measures, capture gains from policy coordination, or strengthen the credibility of their own policy commitments in order to reassure investors and manage domestic political-economy pressures. This report touches on each of these rationales, but focuses mainly on the first: the problem that arises when trade policies adopted by one government impose costs on others.

This problem is often described as the “terms-of-trade” rationale for trade cooperation. When a government raises a tariff or restricts imports, it may benefit some domestic producers and shift part of the cost onto foreign exporters. But if other governments respond in the same way, the result can be mutually damaging: trade contracts, uncertainty rises, exporters lose markets, consumers face higher prices, and all economies may end up worse off. In this sense, unilateral trade restrictions can create a prisoner’s dilemma:¹ each government may have an incentive to protect its own market, but all governments can be better off if they cooperate to keep markets more open.

This lens helps to explain why the General Agreement on Tariffs and Trade (GATT), and later the WTO, took the institutional form that they did. At its core, the multilateral trading system provides a forum in which members can bargain over reciprocal, mutually beneficial market access commitments, extend those commitments through non-discrimination, secure them through binding rules, make them more predictable through transparency, and enforce them through dispute settlement.² The purpose is not to require every member to adopt free trade, but to help members to avoid beggar-thy-neighbour policies and to replace unilateral retaliation with negotiated, rules-based cooperation.

The multilateral trading system has delivered substantial gains, but not for all

The multilateral trading system has overseen a historic reduction in trade barriers. From an estimated average tariff among four major economies of around 22 per cent in 1947 before the first round

of the GATT, industrial tariffs have fallen to low single digits in many economies. The average tariffs of members that acceded to the WTO have fallen by almost 35 per cent since 2000. MFN treatment and commitments to tariff ceilings have helped to reduce trade policy uncertainty significantly. The Uruguay Round increased the share of bound tariff lines of non-agricultural products from 78 to 99 per cent for developed economies and from 21 to 73 per cent for developing economies. Today, non-tariff measures (NTMs) have a greater impact on trade costs for most economies than tariffs do, and WTO agreements such as the Agreement on Technical Barriers to Trade (TBT) or the Agreement on the Application of Sanitary and Phytosanitary (SPS) Measures have ensured that NTMs are subject to increased transparency and more stringent rules.

Lower trade barriers and broader reforms during the WTO accession process have contributed to rapid trade and income growth and have thereby raised living standards. Empirical estimates suggest that membership in the WTO has increased trade between members by around 140 per cent (Larch et al., 2025). One study of WTO accessions finds that economies that made deeper commitments and undertook domestic reforms under their WTO accessions packages grew on average 1.5 percentage points faster than economies that underwent no such process (Brotto et al., 2024; WTO, 2024b). Real incomes have also increased as a result of the inflation-moderating effect of WTO membership, with evidence suggesting that around 85 per cent of WTO members experienced a decrease in relative consumer prices as a result of their membership (Yalcin, Larch and Yotov, 2022).

Since the mid-1990s, integration into international markets has helped to drive faster growth in low-income and middle-income economies, sharply reduced global poverty, and narrowed the income gap of low-income and middle-income economies with high-income economies for the first time since the Industrial Revolution. Trade cost reductions are estimated to have accounted for between one-fifth and one-third of this convergence between 1995 and 2023.

WTO membership has supported resilience, and has contributed to a reduction in inter-state conflict. The rules-based trading system, designed to prevent a repeat of the protectionist breakdown of the early 1930s, was put to the test during the global financial

crisis of 2007-09 and the COVID-19 pandemic, and protectionism did indeed remain constrained. MFN treatment and tariff bindings, key components of the system, have helped to reduce trade policy uncertainty. One study estimated that the economic downturn during the global financial crisis increased import protection coverage by only 1 to 2 per cent of trade, as opposed to the 15 per cent that historic data had suggested (Bown and Crowley, 2013). International cooperation has also acted as a multiplier of the pacifying effect of trade. Research using WTO membership as an instrument for trade finds that WTO-facilitated trade has a significant peace-promoting effect (Aaronson, Abouharb and Wang, 2015; Huang and Li, 2024).

The WTO remains the key enabler of a global rules-based trading system. Over the past eight decades, the number of members first of the GATT and then of the WTO has increased from 23 to 166 economies, accounting today for around 98 per cent of global trade. An additional 22 economies are currently negotiating their WTO accession. As mentioned above, despite recent disruptions, around 72 per cent of global merchandise trade continues to cross borders under non-discriminatory MFN tariff terms negotiated and committed to by WTO members. This is a powerful reminder of the market-opening benefits and predictability that the system continues to deliver every day.

However, not all economies have shared equally in these gains. Least-developed countries (LDCs) still account for less than 1 per cent of world trade, and some commodity-dependent economies and those with a low level of participation in global trade have experienced limited improvements or fallen further behind. According to the WTO Trade Cost Index,³ the trade costs of LDCs in manufacturing and services exceed those of high-income economies by 50 per cent. While domestic factors can explain a significant part of this disparity, barriers within the trading system also play a role. For instance, the effectiveness of preference schemes for LDCs is limited by complex eligibility criteria and uncertainty around renewal. The proliferation of NTMs brings about compliance and certification costs that place a disproportionate burden on small exporters, which are prevalent within LDCs. A growing concentration of trade flows reduces pathways to export-led growth.

Meanwhile, within developed economies, outcomes from trade-opening have been uneven across people and regions. Import competition, technological

change and regional disparities have placed pressure on some workers and communities, leading to sustained income losses. Export opportunities have created new jobs, but often not for the same people or in the same places that were negatively affected.

An important lesson is that to sustain trade openness – and ensure that it delivers the desired outcomes – it needs to be accompanied by domestic policies that allow more people and places to participate in, adjust to and benefit from changing patterns of trade.

Avoiding a mutually destructive prisoner's dilemma

The market-opening achievements of the multilateral trading system and their durability are not accidental. Seen through the economic lens of this report, they are, in important part, the consequences of the institutional architecture of the GATT and the WTO, an architecture that was well-designed to address the basic problem described above: when a government restricts trade unilaterally, it often imposes costs that it does not fully take into account on trading partners. When this problem is left unaddressed, it results in too much trade protection from a global perspective.

A stylized example can help illustrate the point. If country A chooses its tariff on imports from country B to balance the benefits of the tariff with the costs imposed on its own economy but ignores the costs imposed on country B's exporters, A will naturally choose a higher tariff level than it would if it took into account the costs incurred by B's exporters. An analogous statement holds for country B and its tariff choice on imports from country A. When countries A and B make their tariff choices unilaterally, they have no reason to take the costs incurred by trading partners into account, so these higher tariffs will persist. Trade negotiations alter this status quo, because they provide an opportunity for each country to offer something of value to its trading partner in exchange for a tariff reduction from its trading partner, incentivizing its trading partner to reduce its tariff. Typically, what is offered by a country is a reciprocal tariff reduction of its own. Beginning from unilateral tariff choices, both countries can benefit from these reciprocal tariff reductions, which confirms that unilateral tariff choices result in "too much trade protection" from a global perspective.

This is not an assertion that any trade protection is necessarily too much, but rather that governments

acting alone may not account for the full costs of their choices, and that this may lead them to adopt beggar-thy-neighbour policies that produce a mutually destructive prisoner's dilemma. The WTO helps to address this problem by providing a forum in which members can negotiate reciprocal trade-volume-expanding market access commitments, which they can then secure in law and enforce through common rules.

Seen in this light, the apparently mercantilist logic of trade negotiations, where imports are regarded as concessions and exports as gains, becomes easier to understand. Governments seek better access for their exporters not because they view imports as undesirable, but because exporters are often the domestic actors most directly harmed by foreign trade barriers. Exporters can therefore help to identify the foreign measures generating the most important claims of cross-border spillovers. The WTO's role is to channel these claims into mutually beneficial bargains that open up market access, instead of leaving them to be addressed through unilateral retaliation.

Notably, this role for the WTO does not rely on the economist's case for free trade. The logic implies that governments would be expected to negotiate a "reduction of tariffs and other barriers to trade" as stated in the Preamble of the Marrakesh Agreement Establishing the World Trade Organization. But the logic does not prescribe how open any particular economy should be; that depends on governments' circumstances and objectives.

The multilateral trading system's core principles created an effective bargaining forum for market access

From the initial GATT Round in 1947 through the Uruguay Round that led to the creation of the WTO in 1995, reciprocity has supplied the political and economic engine of this liberalizing process. By linking domestic market-opening to improved market access abroad, reciprocity made trade-opening more feasible at home and more balanced abroad.

Non-discrimination, especially through the most-favoured-nation (MFN) principle, has made this bargaining process manageable. Without MFN treatment, each tariff change could have different effects on each trading partner, multiplying the number

of bargains needed by the number of products and of partners.⁴ MFN treatment also preserves the value of bargains once they have been struck, as a concession obtained in one negotiation would be worth less if it could later be eroded by a more favourable discriminatory deal between other partners.

Binding commitments, transparency and dispute settlement supply the legal infrastructure for trade bargaining. Tariff bindings and schedules of commitments anchor market access outcomes and enhance predictability, while transparency regarding trade measures reduces information costs and uncertainty, and dispute settlement provides a rules-based means of restoring balance when members disagree.

MFN treatment also shapes the distribution of bargaining gains. By diffusing the benefits of tariff cuts across the membership, it limits the ability of the largest economies to capture disproportionate advantages through bargaining power alone and gives smaller economies stronger reasons to participate.

However, MFN treatment did introduce a potential problem: a "free-rider" incentive, under which potential bargaining partners might remain on the sidelines of negotiations in the hope of benefiting from the MFN tariff bargains of others. This problem was well understood long before the GATT was created, and various attempts to mitigate its effects on the success of tariff bargaining were employed across GATT rounds.

The economic logic described above extends beyond tariffs. By design, tariffs played the leading role in the early GATT rounds of market access negotiations, since members were expected to convert their trade protection into tariffs and offer market access concessions through tariff bindings. But over time, as tariff barriers declined, the value of negotiated market access increasingly depended on domestic regulations, standards, subsidies and other behind-the-border measures. This brought issues such as national treatment, technical regulations, SPS standards and subsidies closer to the centre of the trading system.

This evolution changed the trade governance challenge: it became not just about opening markets, but also about preserving negotiated trading opportunities while maintaining policy space for legitimate domestic objectives like consumer

health and safety. The economic logic also extends to services trade commitments, where behind-the-border measures are the primary determinant of trading opportunities rather than tariffs.

The multilateral trading system is far from perfect. Nevertheless, its principles generated a self-reinforcing dynamic: reciprocity creates incentives to open markets; MFN simplifies bargaining, generalizes gains and constrains power-based discrimination; binding rules make concessions durable; and transparency and dispute settlement sustain confidence among trading partners. As trade-led growth increased, more economies had an incentive to join. As membership widened, the system became more valuable. As its value increased, members had stronger reasons to deepen cooperation.

This dynamic has produced the web of tariff bindings and market access commitments that support the global economy today.

Beyond market access, the multilateral trading system also fosters coordination gains, predictability and institutional credibility

The value of the WTO extends further still. WTO agreements address broader coordination problems in an integrated global economy, reduce uncertainty, support regulatory cooperation and help to avoid unnecessary regulatory divergence.

This broader role is particularly important in areas such as services and IP. In services trade, firms often incur large sunk costs when entering foreign markets, and depend heavily on stable and predictable regulatory conditions. The value of the WTO's General Agreement on Trade in Services (GATS) therefore lies not only in helping members to limit discrimination and take account of cross-border policy spillovers, but also in helping them to create credible expectations about future policy conditions. The WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) establishes minimum standards of IP protection across WTO members, reducing uncertainty for firms engaged in innovation, technology licensing and cross-border investment. By strengthening predictability and trust, these agreements support trade, investment and participation in GVCs.

Flexibility has helped to sustain cooperation, but it has also created trade-offs

The multilateral trading system was never meant to be rigid. Its rules include flexibilities to preserve cooperation under stress and to accommodate different capacities, development needs and political constraints. Safeguards, trade remedies, waivers, renegotiation provisions, regional trade agreements (RTAs) and special and differential treatment (S&DT) all serve this purpose in different ways. They allow members to adjust without abandoning the system, and recognize that members differ in their capacities and development needs.

At the same time, the WTO provides a common foundation that helps to limit fragmentation as cooperation develops through different channels. This is exemplified in the more than 380 RTAs notified to the WTO, all of which are shaped by the WTO rules that define the conditions under which exceptions to MFN treatment are granted for the purpose of forming free trade areas and customs unions.

However, flexibility entails trade-offs. Trade remedies, such as anti-dumping measures, can raise prices and divert trade. RTAs and narrower "targeted trade deals" (sectoral or otherwise limited trade agreements that are often focused on addressing non-tariff barriers through soft law provisions) in areas such as digital trade and critical minerals can support deeper cooperation by serving as a laboratory for rules that go beyond the WTO, but risk contributing to fragmentation. S&DT remains essential, but exemptions disconnected from trade capacity or need can weaken predictability and reciprocal bargaining.

The central question is how to ensure that, rather than substituting for multilateral disciplines, flexibility enhances participation and helps members to engage more fully in bargaining, transparency and implementation of trade agreements.

The WTO's day-to-day work remains central to cooperation among its members

The value of the WTO is not limited to what is achieved in major negotiating rounds. Much of its work is less visible but just as essential: negotiating

where convergence is possible, promoting dialogue, sharing information, monitoring policies and settling disputes.

Although the Doha Round was not concluded as a single undertaking, members have continued to use the WTO as a platform for negotiations and rule-making. The Trade Facilitation Agreement (TFA), which entered into force in 2017, and the Agreement on Fisheries Subsidies, as well as the Joint Initiative on Services Domestic Regulation and other plurilateral initiatives, show that members can use WTO structures creatively to negotiate and implement new disciplines.

Members also use the WTO to discuss how to respond to global crises and to resolve trade frictions before they escalate. General Council deliberations among WTO members and specific trade concerns raised in WTO committees show the value of the WTO as a forum for clarification, practical problem-solving, and crisis management.

Transparency is central to this role. Notification requirements reduce uncertainty and help members to understand one another's policies, but despite progress in some areas, the rates, timeliness and quality of notifications remain uneven, which increases bargaining difficulties and reduces trust. For example, the lack of transparency surrounding subsidies continues to hamper efforts to assess the scale and effects of government support. Between 2015 and 2024, only 59 per cent of WTO members submitted the required subsidy notifications to the WTO's Subsidies and Countervailing Measures (SCM) Committee, and 77 per cent of those notifications were late, with delays averaging more than one year.

Dispute settlement is another core function of the WTO. As designed, the system offers multiple paths to dispute resolution, ranging from consultations among WTO members to negotiated solutions to panel adjudication and appellate review. Since 1995, members have initiated hundreds of consultation requests, and participation has been broad, with many members initiating disputes or appearing as third parties. However, since mid-2017, members have been unable to agree on new Appellate Body appointments, amid concerns by some about overreach of Appellate Body decisions and delays in issuing findings. As of December 2019, the Appellate Body no longer has the quorum to function,

leaving panel reports open to appeals by members "into the void" that prevent adoption of the reports and therefore affect the certainty provided by the system.

Although the Appellate Body impasse has weakened enforcement, dispute settlement has not stopped functioning. Panel proceedings continue, many disputes are settled, and interim arrangements for resolving disputes have emerged among some members. Since December 2019, parties have resolved about half of the disputes, without appealing into the void. In particular, the rate of mutually agreed solutions has increased almost threefold when compared to the previous decade, showing that members are resolving their own disputes while continuing to seek a permanent solution to the impasse of the Appellate Body.

Allowing the system to erode would entail significant global economic costs

One of the WTO's greatest contributions has been preventing mutually damaging trade conflict. The system makes trade policy more predictable, constrains escalation in disputes and helps protect smaller economies from the full force of unilateral trade measures and power-based bargaining.

This report provides new evidence that a reversion to unilateral trade policy would impose large costs. According to recent simulations by WTO economists, published in this report, global GDP would fall by 5.1 per cent and global exports by 18.6 per cent in a "geo-fragmented world" scenario, in which the multilateral trading system splits into geopolitically aligned blocs. In an "FTA world" scenario, in which multilateral cooperation is replaced by a network of free trade agreements (FTAs) and the WTO no longer operates at all, global GDP would fall by 6.9 per cent and global exports by 26.9 per cent. Meanwhile, an "enhanced cooperation world" scenario, in which multilateral trade cooperation is reinforced, could raise global GDP by 2.9 per cent and global exports by 17.9 per cent. This implies that the gap between strengthened multilateral cooperation and erosion of the WTO is equivalent to roughly 5 to 10 per cent of global real GDP, depending on the scenario.

This report also describes simulations on the value of core WTO principles. MFN-based cooperation

outperforms fragmented or discriminatory tariff bargaining, and the disciplines of GATT Article XXIV (“Territorial Application – Frontier Traffic – Customs Unions and Free-trade Areas”) help to ensure that RTAs complement rather than undermine the multilateral system.

The costs of multilateral trade erosion would not be evenly distributed. Smaller and poorer economies would be especially vulnerable in a world of discriminatory deals and unilateral measures, losing more than three times as much as the high-income economies in a world with geopolitical frictions. Fragmentation would also make it harder to address inherently multilateral problems, including environmental issues, digital governance, supply-chain resilience and macroeconomic spillovers.

Preserving the WTO does not mean preserving the status quo. The choice for members is not between reform and continuity. It is between adapting rules-based cooperation to today's global economy or drifting toward less predictable, less inclusive and more power-based forms of trade governance that would likely leave most, if not all, worse off.

Developments that challenge the system

Four developments have rendered WTO cooperation among members more difficult. These are shifting economic power, the increasing prominence of government interventions and “interface” problems (i.e., challenges arising from economic and regulatory system differences within a single rules-based system), changes in the nature of trade, and geopolitical tensions. For each of these developments, the report asks why the challenge strains the system, how the system has tried to keep pace, and what is at stake if it falls short.

An increasingly dispersed distribution of economic power is straining old bargains and creating opportunities for new ones

The first challenge is an increasingly dispersed distribution of economic power. Since 1995, low and middle-income economies' share of global merchandise trade has nearly doubled and now

accounts for 45 per cent of trade. A broader and more diverse membership is therefore extending the potential for cross-border spillovers created by trade policy. This shift has opened a gap between current market realities and the tariff commitments established during the Uruguay Round. At the same time, it has created new opportunities for reciprocal tariff bargaining, both between developed and developing economies and among developing economies.

However, capturing these potential bargaining gains, especially those related to bargaining between developed and developing economies, poses challenges. Developed economies made substantial tariff reductions in earlier GATT rounds and therefore often have relatively little additional market access to offer, while some large developing economies retained higher tariff bindings and greater policy space even as their share of global trade and market power grew. This does not mean that further reciprocal MFN market-opening between these economies is impossible, but some potential new bargains could be hampered unless existing commitments could be recalibrated, so that rights, obligations and the distribution of market power are better aligned with current realities.

The issue of development has also become more complex than it was when the WTO was created. Developing-economy members now range from LDCs with limited capacity to globally competitive economies with substantial market power. S&DT remains essential, but flexibilities disconnected from capacity or market power can complicate balanced agreements.

The growing prominence of government interventions raises “interface” problems and concerns about ensuring a level playing field

A second challenge facing the WTO is the growing diversity in the degree and form of government involvement in markets. The WTO does not require members to adopt the same economic model; its pragmatic approach is to seek “interface” rules necessary for different economic systems to coexist without allowing subsidies, state trading or other public intervention to undermine negotiated market access commitments.

The interface issue is not new. The GATT and the WTO have long used accession commitments, subsidy disciplines, state-trading rules and transparency obligations to manage differences among economies.⁵ What has changed is the scale and importance of the issue. In practice, industrial policies, such as subsidies and public intervention, now occur across a much wider range of economies. Reflecting this change, discussions over interface-related issues have increased significantly in recent years.

Anti-dumping measures illustrate this trend. Among a sample of economies accounting for almost two-thirds of anti-dumping measures imposed over the past decade, the share of measures using an “interface methodology” to determine dumping and level the playing field in their own economies (allowing the government to reject the use of an exporter’s domestic sales prices in the determination of dumping on the grounds that a fair comparison with the export price cannot be established) rose from around one-quarter in 2015 to more than one-third a decade later.

There are, however, fewer instruments to address the interface problem when it arises in export markets, and when subsidies by other members distort competition in export markets, the options for levelling the playing field are confined largely to the WTO’s dispute settlement procedure. Moreover, transparency on subsidies remains a challenge, as notification gaps exist for both domestic support in agriculture and industrial subsidies.

The cost of unresolved level-playing-field concerns is systemic,⁶ as such concerns may affect confidence that the rules maintain the balance of negotiated commitments while preserving legitimate policy space. Where members consider that existing disciplines or remedies do not adequately address perceived spillovers, there is a risk that responses will shift towards unilateral measures or fragmented approaches. Greater transparency, clearer analytical distinctions and continued pragmatic rules-based cooperation can help to manage that risk.

The changing nature of trade is creating new cross-border spillovers

A third challenge facing the WTO is that trade itself is changing. GVCs, digitalization, artificial intelligence

(AI) and environmental policies are altering what is traded, how it is traded and how policy spillovers move across borders. These changes make WTO cooperation both more complex and more necessary.

While fostering technology transfer and growth, GVCs have deepened production interdependence. Goods, services, and intangible inputs move through complex networks, so tariffs or export restrictions can affect firms and inputs far beyond immediate trading partners. Relationship-specific investments can also create vulnerabilities for investors that traditional market-access rules may not fully address.

Digital technologies and AI have the potential to raise productivity, stimulate innovation and reduce trade barriers. WTO simulations project that AI could increase global trade by 40 per cent by 2040, with the largest gains concentrated in digitally deliverable services, and that it could add more than 13 per cent to global GDP over the next 15 years. By reducing the cost of trading services across the board, digital trade has opened new opportunities for trade-led growth. In 2025, trade in commercial services reached an estimated 27.6 per cent share of total global trade, reflecting in particular the rapid expansion of digitally delivered services, which grew by 10 per cent in 2025 alone.

The rising importance of services trade, with non-tariff measures and behind-the-border measures currently the primary determinant of trading opportunities, introduces challenges in negotiating market access under the GATS that were not present with the GATT. Divergent approaches to privacy, cybersecurity, competition and AI governance can increase trade costs and generate interoperability, accountability and strategic issues, creating new kinds of cross-border policy spillovers.

Environmental policies can also generate new spillovers. Carbon pricing, regulations, standards, subsidies and border adjustment measures can interact with WTO non-discrimination principles, alter the balance of market access commitments and affect the diffusion of clean technologies. The challenge is to support the environmental transition while preserving openness, predictability and cooperation by combining trade with environmental and complementary domestic policies.

Across these areas, the common challenge is that the policy measures shaping trade increasingly lie behind borders. Cooperation over regulation, standards,

data, subsidies, security and environmental measures that generate cross-border spillovers is inherently more complex than tariff bargaining, particularly within a diverse membership. Yet the growing reach of these cross-border spillovers also makes multilateral cooperation more, rather than less, necessary.

Geopolitical tensions are increasing pressure on rules-based cooperation

A fourth challenge facing the WTO is rising geopolitical tension, which has altered the perceived balance between the benefits and risks of interdependence. Concerns about supply-chain concentration, technological rivalry and national and economic security have led governments to reduce import dependence, limit technology flows and restrict investment.

WTO rules provide flexibility for national security measures. But when security rationales expand across sectors and instruments, clarifying the boundary between legitimate policy space and unilateral decision-making becomes more challenging and more consequential. As with other trade policy spillovers, measures taken by one government to reduce vulnerability can increase the perceived vulnerability of others, creating risks of mutually reinforcing restrictions.

A more multipolar global economy makes this challenge more acute. A system designed to facilitate integration must now also manage sharper rivalry among incumbent and emerging powers. Geopolitical rivalry does not negate the basic rationale for multilateral cooperation. Indeed, if major economies turn away from rules-based cooperation, smaller economies will face a less predictable environment,

cooperation on global challenges will become harder, and all economies may ultimately suffer.

The WTO must adapt to the world economy it helped create

The WTO's current challenges are not a reason for members to abandon its founding principles. They are a reason to renew the manner in which those principles are applied. The multilateral trading system has helped members manage cross-border spillovers, move trade relations from power toward rules, and make openness more reciprocal, predictable and enforceable.

These purposes are more relevant today, not less. Recent experience shows that the WTO continues to provide important value to its members. But the adaptation of its rules, commitments and practices has not matched the scale and speed of change in the world economy.

The future of the trading system will depend on members' ability to repair what is broken, update what is outdated, preserve what works, and adapt cooperation to new policy spillovers. The WTO has faced moments of strain before, and its history shows that the system has endured not by standing still, but by renewing the rules, commitments and practices through which its core principles are applied.

This report aims to support that task by explaining how the multilateral trading system works, what it has delivered, where its operation has become harder to sustain, and where adaptation may now be most needed and most valuable.

The world economy that the WTO helped to create does not weaken the case for rules-based cooperation; it makes renewal of that cooperation more urgent.

Endnotes

- 1 The prisoner's dilemma is a concept from game theory: two parties, each acting in their own self-interest, produce a worse outcome for both than if they had cooperated. In trade, "beggar-thy-neighbour" policies refer to policies (such as tariffs or currency devaluation) that benefit one economy at the direct expense of others, prompting retaliation and leaving all economies worse off.
- 2 This report's primary focus on the role of the GATT and WTO as a forum for negotiating and enforcing market access commitments does not extend to the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which is not a market access agreement, and the value of which therefore requires a different economic interpretation.
- 3 See <http://tradecosts.wto.org/>.
- 4 Beyond the difficulties for tariff bargaining that arise in the absence of MFN treatment, there are the additional considerations – also discussed in this report – of complexity that discriminatory tariffs introduce for the governments that must administer these tariffs and the firms that must navigate them – complexity that can create additional costs in terms of lost income and diminished consumer choice.
- 5 For example, when Poland joined the GATT in 1967, its non-market economy status was not in question. Accordingly, rather than committing to bind its tariffs, the heart of Poland's market access commitments in its protocol of accession came in the form of a commitment to grow the total value of its imports from GATT members at a pre-specified annual rate.
- 6 The term level playing field is used in the Report without prejudice to the scope and content of members' discussions on level-playing field issues in the context of WTO reform. Members vary in their definitions of what is included in the scope of the term.

Introduction

The World Trade Organization is at a critical juncture. More than ever, a rules-based multilateral trading system is indispensable to today's highly integrated global economy – a global economy that the WTO itself helped to create. But while the system continues to advance – as recent agreements on trade facilitation, fisheries subsidies and services regulation demonstrate – it is not evolving at the pace required by a rapidly changing world economy. Across core issues – from market access and state intervention to development and dispute settlement – WTO members are finding it increasingly difficult to find common ground and move forward, even as pressures on the trading system continue to grow. The system's last comprehensive reform, the Uruguay Round, concluded three decades ago, before the rise of new emerging economies, the spread of global value chains, and the transformative impact of the internet, digitalization, and now artificial intelligence (AI).

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The insufficient progress of the rules-based trading system is particularly striking when set against its extraordinary advances in the past.

What began in 1947 as a tariff agreement among fewer than two dozen economies – the General Agreement on Tariffs and Trade (GATT) – evolved into the most far-reaching framework for global economic cooperation in history – the modern World Trade Organization. It established comprehensive rules for global trade, a binding mechanism for dispute settlement and a unique forum where economies large and small, rich and poor, could address shared concerns. In doing so, it helped drive a 47-fold expansion in global merchandise trade volume and underpinned one of the most remarkable periods of economic growth and development in modern history.

Why is a system so central to the global economy finding it difficult to move forward?

This *World Trade Report* revisits the underlying logic of the multilateral trading system, the value it has generated, the trade-offs that have accompanied it and why it now faces mounting challenges. It argues that the system's foundational objectives – to progressively open up trade, limit damaging spillovers from national policies, and advance rules-based economic cooperation – remain as vital as ever. If the system is facing headwinds or difficulties, it is not because it has failed to achieve its original core purpose, but because it has largely succeeded. The market-opening, integration and interdependence that the system helped to foster have transformed the global economy in ways that now require the system itself to evolve: by updating trade commitments, broadening coverage, introducing more flexible forms of cooperation and evolving a more effective dispute settlement system, all anchored in a modernized framework of rules. The central challenge for the WTO is to adapt to the more integrated, complex and multipolar world economy it helped to create.

1. The logic of the multilateral trading system

To understand the current difficulties faced by the multilateral trading system, it is essential to understand the problems it was designed

to solve – and its success in solving them.

The logic of the system grew out of the illogic and “mistakes” of the 1920s and 1930s. Having seen how an increasingly closed and divided global economy, marked by escalating protectionism, rival trade blocs and beggar-thy-neighbour mercantilism, fuelled the economic depression, insecurity and tensions that helped to ignite the Second World War, post-war policymakers resolved to build a more open, cooperative and rules-based global economy instead. Freer trade would deliver shared growth and widening development; economic interdependence would give economies a stake in each other's successes; and international rules and institutions would promote stability, trust and collaboration. In place of zero-sum economic nationalism, the goal was positive-sum economic cooperation.

The multilateral trading system was central to that vision.

Its core purpose was to provide a framework in which economies could cooperate to reduce trade barriers progressively, limit damaging trade spillovers from national policies, and advance rules-based trade cooperation (VanGrasstek, 2013; Jackson, 1997; Bown and Irwin, 2017). The system was guided by four main principles – some inherited from the past, others new innovations – the interaction of which helps to explain its rapid expansion (Jackson, 1997; Bagwell and Staiger, 2002b).

The first principle was reciprocity. By linking domestic trade opening to equivalent trade-opening abroad – the idea that economies could expect to “get” something only if they “gave” something in return – reciprocity expanded market access on both sides, amplifying the gains from trade,¹ while mobilizing domestic support from exporters and other beneficiaries of open markets, helping to counterbalance protectionist pressures. This made liberalization not just economically beneficial, but politically sustainable.

The second principle was non-discrimination.

By requiring that any concession granted to one member be extended to all, the most-favoured-nation (MFN) rule transformed reciprocal bargains into system-wide liberalization. It encouraged major trading powers to negotiate with an expanding circle of partners, both to maximize reciprocal market-opening opportunities and, together with reciprocity,

to limit free-riding (i.e., when a member that does not make trade concessions nevertheless profits from tariff cuts and concessions made by other members in negotiations under the MFN principle) by significant trading economies. In this way, MFN treatment acted as a powerful “multilateralizer” of trade-opening.

The third principle was enforceable rules coupled with built-in flexibilities. Tariffication,² bindings,³ transparency requirements and other obligations, backed by enforceable dispute settlement, ensured that market access commitments could not be easily withdrawn or undermined, giving governments and firms the confidence to invest in deeper integration. At the same time, safeguards, waivers and special and differential treatment provided flexibility to accommodate political and economic realities.⁴ The result was a system designed to make trade opening both predictable and sustainable.

The fourth principle, multilateralism, suffused the others. By allowing members to negotiate across multiple partners and sectors simultaneously, it broadened the scope for reciprocal bargains and translated them into common rules and commitments. In doing so, it reduced the fragmentation and power asymmetries likely under more traditional forms of bilateral bargaining and reinforced the shift from power-based to rules-based trade relations.

These principles have been mutually reinforcing. Reciprocity increases the incentive to open markets; MFN multiplies the reciprocal gains; binding rules makes those gains durable; and multilateralism simplifies and expands trade cooperation. While these principles have generated substantial benefits, they have also involved trade-offs and have not always achieved their full potential in practice. Nevertheless, together they have generated a cumulative, self-reinforcing dynamic: as trade-led growth expanded, more economies had an incentive to join the system; as membership widened, the system's value increased; and as its value increased, so did the incentive to deepen cooperation.

Yet the system's very success has also generated new challenges. Deeper integration has increased both the gains from cooperation and the scope for friction among economies with different structures and levels of development.

Expanded rules have enhanced stability but added complexity as trade increasingly intersects with non-trade policies. More binding dispute settlement has increased confidence that negotiated commitments will be respected, but it has also heightened the legal and political significance of those commitments, raising concerns about unintended restrictions on sovereignty and making members more cautious about undertaking new commitments, rendering negotiations more difficult. Meanwhile, the rise and integration into the system of new economic powers have broadened trade opportunities but introduced greater multipolarity, complicating leadership and collective decision-making while creating growing tensions between existing commitments and current economic realities. In short, many of today's central challenges – increasing tensions, more complex negotiations and a wider range of actors with higher stakes – are a direct consequence of the system's past accomplishments.

These challenges are not entirely new. Throughout their evolution, the GATT and then the WTO have grappled with how to balance international commitments with domestic policy space, manage the interface among diverse economic systems, accommodate regional arrangements within a multilateral framework, deal with latecomers to liberalization, address developmental, social and environmental concerns, discipline state intervention, ensure coherence between trade, finance and other policies, and help manage the rise of new economic sectors and powers (Hudec, 1975; Jackson, 1997). In attempting to resolve these challenges, the system has faced recurring crises, periodic doubts about its relevance and repeated calls for reform.

What has changed is the scale, complexity and systemic importance of these challenges. The GATT began as a relatively small group of more like-minded economies focused primarily on reducing tariffs in goods trade and establishing basic disciplines on discriminatory and restrictive trade measures. The WTO is now a near-universal organization operating in a deeply integrated, highly diverse and increasingly multipolar global economy. Global value chains have come to span continents, while services, data, technology and intellectual assets have become as central to international commerce as trade in goods. As traditional border

barriers have fallen, significant trade spillovers increasingly arise from domestic policies – from climate and industrial strategies to subsidies, state-owned enterprises, technology regulation and national security measures.

The multilateral trading system was built on a simple but powerful premise: that reciprocal and non-discriminatory market-opening, embedded in a framework of agreed rules, would generate prosperity, development and ever-deeper economic integration, which would, in turn, help to foster peaceful and mutually beneficial relations among economies. To a large extent, this premise was successful. Trade expanded, barriers fell, new economies were integrated into the global market and economic interdependence deepened.

Yet those very achievements transformed the environment in which the system operates. A larger, more diverse, more integrated and more multipolar world economy has created new sources of friction, raised the stakes of cooperation and made collective decision-making more demanding. The paradox confronting the WTO is that the world economy it was designed to create is, in many important ways, the source of the challenges it must now confront.

If the system is to continue delivering the benefits that have underpinned decades of growth and development, it will need to adapt to these new realities. This may require updating commitments to reflect changing economic circumstances, extending cooperation into new areas of economic activity, developing more flexible negotiating approaches better suited to a larger, more diverse and more multipolar membership, and strengthening mechanisms for transparency, dialogue and compliance with agreed rules. The challenge is not to abandon the principles that have guided the system's success, but to adapt the institutions, commitments and forms of cooperation through which those principles are pursued.

2. Structure of the *World Trade Report 2026*

Chapter A examines the history of the multilateral trading system. The chapter

shows that this history has been characterized by evolutionary adaptation rather than revolutionary change, with successive generations building on inherited principles and institutions to create a more multilateral, inclusive and far-reaching global trade architecture. It also demonstrates that the system did not evolve in a straight line, but has passed through periods of expansion and retrenchment, success and crisis, optimism and pessimism. Many of the challenges it currently faces are not entirely new – but what is new is their scale, complexity and systemic significance. Understanding how the system emerged and how it managed similar pressures in the past is important for charting its current condition.

Chapter B assesses what the multilateral trading system has delivered and describes how its rules can be given an economic interpretation. It begins by examining the system's contribution to economic growth, trade expansion and the creation of a more open, predictable and stable trading environment. It also considers why the gains from global integration have not always been shared evenly across economies and groups. The chapter then explores the economic logic of rules-based cooperation, including how trade policy cooperation reduces uncertainty and cross-border spillovers, how GATT and WTO principles facilitate bargaining and compromise, how flexibilities and exceptions help to accommodate differing needs, and how the WTO's institutional functions support day-to-day cooperation. Finally, it uses economic modelling to assesses the economic costs of a world without the WTO.

Chapter C examines the challenges now confronting the multilateral trading system. It begins with the implications of a more diverse distribution of economic power, which is straining existing bargains, reshaping market relationships and complicating collective decision-making. It considers the continuing debate about special and differential treatment and the growing relevance of differences in economic systems and government interventions, which heightens the challenge of managing trade relations among economies with different institutional and policy frameworks. The chapter also explores how changes in the nature of trade itself – including the rise of global value chains, the growing

importance of services, the digital economy and AI, and the aim to transition to net-zero emissions – are creating new sources of cross-border spillovers and policy complexity. Finally, it examines how broader geopolitical tensions, together with concerns about

interdependence, economic security and production concentration, are increasing the pressures causing trade fragmentation. Together, these developments help to explain why a system that has delivered so much is now increasingly being tested.

Endnotes

- 1 It should be noted that negotiations under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) operate in a manner different from traditional GATT/WTO negotiations. While reciprocity remains relevant at a broad systemic level – indeed, the TRIPS Agreement was a key pillar of the “grand bargain” that concluded the Uruguay Round – TRIPS is not fundamentally based on reciprocal market access exchanges in the same way as goods or even services negotiations. Instead, it establishes minimum standards of protection applicable across all WTO members. The same might be said of the Trade Facilitation Agreement (TFA), which was shaped not by market access trade-offs, but by the search for cooperative solutions to shared challenges, such as standardizing customs procedures, harmonizing documentation requirements and improving information exchanges.
- 2 E.g., procedures relating to the agricultural market-access provision by which non-tariff measures are converted into equivalent tariffs.
- 3 E.g., the maximum duty level on a product listed in a member's schedule of commitments that may not be exceeded without compensating the affected parties.
- 4 Obligations vary widely across WTO members, with various types of differential treatment across WTO agreements. For example, under the GATT, members schedule country-specific commitments for tariffs on goods and in quantifiable areas such as agricultural subsidies. In the General Agreement on Trade in Services (GATS), there are even more detailed means of scheduling country-specific commitments. Several categories of provisions in the WTO's rules differentiate among members' rights and obligations. There are special and differential treatment provisions for developing economies and least-developed countries (LDCs) across the GATT, the GATS, the TRIPS Agreement, the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) and the Agreement on Technical Barriers to Trade (TBT Agreement). Plurilateral agreements (e.g., the Agreement on Government Procurement and the Agreement on Trade in Civil Aircraft) create rights and obligations only for those WTO members that have accepted them.



A short history of the long evolution of the multilateral trading system

The current multilateral trading system was formally established after the Second World War, but its legal, economic and political roots extend much further back. Many of its core principles – notably reciprocity, non-discrimination and rules-based cooperation – can be traced to the dense network of bilateral trade treaties that emerged in Europe during the second half of the 19th century. In this sense, the post-war trading system was an evolutionary development, building on earlier structures and practices while adapting them to new circumstances. Yet the immediate impetus for creating a multilateral trading system was not the success of 19th-century globalization, but its collapse. Between 1914 and 1945, war, depression, protectionism and economic fragmentation reversed decades of growing integration and cooperation, interrupting the first age of globalization with a prolonged period of deglobalization. The architects of the post-war order sought not only to restore an open world economy, but also to address the institutional weaknesses that had contributed to its breakdown, helping to usher in a new era of re-globalization. Understanding how the system emerged from this, and how it has adapted to successive periods of expansion, crisis and reform, is essential for understanding the challenges it faces today.

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KEY POINTS

- The core principles of the multilateral trading system – reciprocity, non-discrimination and rules-based cooperation – were developed over more than a century, beginning with a network of European treaties in the 19th century, which were progressively refined through successive generations of agreements.
- The post-Second World War multilateral trading system was designed in direct response to certain systemic failures in the period between the two world wars and during the Great Depression of 1929-39. The experiences of protectionism, discriminatory trade blocs, monetary instability, weak institutions and a leadership vacuum convinced policymakers that an open global economy required stronger rules and international institutions.
- The success of the General Agreement on Tariffs and Trade (GATT) and WTO transformed the challenges they were created to address. As trade has expanded, GATT and then WTO membership has broadened, economic integration has deepened, trade negotiations have become more complex and domestic policies have become more central to trade relations. However, managing cooperation among increasingly diverse economies has also become more demanding.
- Just as trade, investment and productivity growth once reinforced one another in a virtuous circle, weaker growth since the 2008-09 global financial crisis and the slowdown in trade integration risk creating a vicious circle in which slower growth, rising protectionism and stalled trade reform become mutually reinforcing. Breaking that cycle may require a renewed trade cooperation agenda and institutional reform capable of generating stronger, more inclusive and more resilient global growth.

1. From bilateral treaties to a multilateral system

(a) First age of globalization, underpinned by Europe's bilateral trade treaties (1860-1914)

The first age of globalization emerged during the 19th century, driven above all by the Industrial Revolution. As is the case today, technological innovation was a powerful force knitting the world economy together, reducing transport and communication costs and expanding opportunities for trade and investment. Governments were also beginning to develop new, if still rudimentary, forms of international economic cooperation, supported by bilateral commercial diplomacy, the spread of the gold standard (i.e., whereby economies set the value of their currencies at a specified quantity of gold), and Britain's role as the leading economic and financial power in sustaining an open international economy. The result was an increasingly interconnected world linked by trade, investment and communications – the first truly open global economy.

The first institutional pillar of this emerging global economy was the growing network of bilateral commercial treaties that linked Europe's major economies. A pivotal moment came with the 1860 Cobden–Chevalier Treaty between Britain and France, negotiated against a backdrop of British unilateral tariff reform, French industrial modernization, and a long history of geopolitical rivalry. In the preceding decade, Britain had embarked on a programme of unilateral tariff liberalization, culminating in the repeal of the Corn Laws, aimed in part at lowering food prices, raising real incomes, reducing production costs, and strengthening the country's international competitiveness.¹

The Treaty combined reciprocal tariff concessions with unconditional most-favoured-nation (MFN) treatment. Britain extended its already liberal tariff regime on an unconditional MFN basis, while France introduced a dual tariff structure consisting of a higher general tariff and lower treaty-negotiated (“conventional”) tariffs.² The Treaty demonstrated how reciprocity and MFN could work together: reciprocity created incentives for market opening, while MFN enabled bilateral bargains to widen rapidly into a network of liberalization. Because France's lower treaty rates were automatically

extended through unconditional MFN clauses, other European economies had strong incentives to join the expanding treaty network in order to secure the same treatment. A cascade of treaties followed – with Belgium (1861), the German Zollverein (1862), Italy (1863), Switzerland (1864) and others – rapidly linking most of Europe's major economies into an increasingly integrated commercial network. Because many of these states also governed extensive overseas empires, this European treaty network quickly acquired a global reach.

A second pillar of this liberal order was the international gold standard. Following Britain's lead, Germany fixed its currency to gold in 1872, and other European economies and the United States followed over the next decade.³ By the late 1880s, much of the world had converged on a common monetary framework, stabilizing exchange rates and sharply reducing the risks and transaction costs of international trade and investment. Together, the spread of reciprocal trade agreements and monetary integration created powerful conditions for expanding cross-border economic activity.

These developments were underpinned by Britain's pre-eminent position in the global economy. As the leading industrial, financial and naval power of the age, Britain helped shape an environment conducive to open trade and capital flows. Its repeal of the Corn Laws (1846) and Navigation Acts (1849), and its leadership in initiating the Cobden–Chevalier Treaty, set the tone for wider trade liberalization. The role of the pound sterling as the dominant international currency and the global reach of British financial institutions reinforced integration, while Britain's naval supremacy helped it to secure the then key physical infrastructure of the trading system – open sea lanes.

A defining feature of this 19th-century system was that it emerged through decentralized, bottom-up cooperation rather than formal, top-down design. Economies liberalized their trade through reciprocal bilateral agreements, which in turn spurred others to negotiate similar agreements to avoid trade diversion or competitive disadvantage – essentially a process of “competitive liberalization”. Through the most-favoured-nation (MFN) mechanism, concessions were automatically extended across the network, producing *de facto* multilateralization and tariff convergence without centralized coordination. What emerged was not

multilateralism in an institutional sense – there was no overarching organization or uniform body of trade rules – but a form of proto-multilateralism based on contractual interdependence.

Yet the very features that fuelled the system's expansion also revealed its fragility. Its reliance on decentralized agreements left no binding framework to monitor compliance, resolve disputes or update rules. The balance of power and diplomatic practice substituted for formal enforcement, leaving the system vulnerable to shifting political and economic conditions. As integration deepened, interdependence intensified – but without institutions to manage the resulting tensions. When geopolitical and economic rivalries sharpened in the late 19th and early 20th centuries, the system lacked the resilience to withstand them, exposing the limits of a system that was dynamic but not institutionally anchored.

(b) Deglobalization, fuelled by war, economic depression and fragmentation (1914–1945)

The outbreak of the First World War in 1914 abruptly ended the first age of globalization, ushering in three decades of economic fragmentation. War disrupted trade, undermined the international gold standard and redirected national economies toward military production. The collapse of empires and the emergence of new states further complicated the economic landscape, as fragile institutions, fiscal pressures and nation-building priorities reshaped trade policies.

Despite efforts to restore the pre-war order, the interwar years failed to rebuild a stable and open global trading system. Initiatives under the League of Nations aimed to revive cooperation, and the gold standard was partially restored in the 1920s, but these efforts lacked both political resolve and institutional support. The earlier model of decentralized integration proved ill-equipped to manage mounting economic and geopolitical strains, and the system gradually unravelled. Several structural weaknesses – many rooted in the design of the 19th-century order – became increasingly evident.

First, the absence of effective and enforceable disciplines made commitments fragile and allowed protectionism to spread unchecked. Facing economic distress, governments raised tariffs to protect domestic industries and employment. The trend intensified during the Great Depression: the US

Smoot–Hawley Tariff Act of 1930 triggered widespread retaliation. The reciprocal liberalization dynamic of the previous century gave way to escalating protectionism, as states acted defensively in the absence of credible constraints (Eichengreen and Irwin, 2010).

Second, the erosion of non-discrimination allowed the system to fragment into competing preferential blocs. The 1932 Ottawa Agreements institutionalized imperial preference by granting British Commonwealth economies preferential access to one another's markets, while various trade and currency blocs further divided the global economy. Instead of reinforcing openness, trade policy increasingly favoured intra-bloc exchange and excluded outsiders, reversing earlier moves toward broader integration.

Third, macroeconomic instability compounded the downturn in trade. The collapse of the gold standard, exchange-rate volatility, and persistent balance-of-payments crises pushed governments to impose exchange controls, quantitative restrictions, and bilateral clearing arrangements. Trade became increasingly entangled with monetary instability, reinforcing inward-looking policies and further undermining international economic cooperation and integration.

Fourth, the absence of effective global economic leadership was a major obstacle to restoring international economic cooperation. Britain, weakened by the First World War, could no longer play its traditional stabilizing role, while the United States, the emerging economic hegemon, was unwilling to assume it. The resulting leadership vacuum hindered efforts to restore a stable international economy. As Charles Kindleberger argued in his seminal study of the Great Depression, “the international economic system was rendered unstable by British inability and United States unwillingness to assume responsibility for stabilizing it” (Kindleberger, 1975).

Fifth, and most fundamentally, the interwar system lacked the rules and institutions needed to sustain cooperation under stress. Unlike the post-1945 architecture – which would include the International Monetary Fund (IMF), the World Bank and the General Agreement on Tariffs and Trade (GATT) – there was no effective multilateral framework to enforce commitments, resolve disputes or encourage cooperation. The League of Nations provided a forum for dialogue, but lacked the authority,

binding rules and economic focus needed to stabilize the system against a backdrop of growing tensions. As a result, economic interdependence – which had once reinforced prosperity and cooperation – became a channel through which shocks, instability and conflict could spread.

The US Reciprocal Trade Agreements Act of 1934 represented a partial attempt to reverse this trajectory by reintroducing reciprocity as a mechanism for liberalization. By empowering the executive branch of the US government to negotiate bilateral tariff reductions and extend them to treaty partners through unconditional MFN treatment, the Act restored key elements of the earlier liberal trading order while providing practical experience with reciprocal tariff bargaining and the negotiation of trade rules (Dam, 2005). In doing so, it revived the 19th-century logic of reciprocity, while foreshadowing the multilateral negotiating framework later embedded in the GATT. By the end of the Second World War, the United States had concluded 32 reciprocal trade agreements covering 29 trading partners, helping to slow – and partially reverse – the protectionist drift of the interwar years and laying important foundations for the post-war multilateral trading system. Yet the initiative came too late to restore an international economy already weakened by economic fragility, nationalism and geopolitical rivalry, forces which, together, helped to create the conditions that ultimately culminated in the Second World War.

The interwar experience underscored a critical lesson: once confidence in international cooperation began to erode, self-preservation became individually rational. In the absence of effective leadership, strong institutions and mutual trust, each economy faced a stark choice – to keep its markets open while bearing the costs of other economies' protectionism, or to respond in kind. Tariff increases invited retaliation; currency depreciations triggered counter-depreciations; each act of economic nationalism made the next more likely. The result was a self-reinforcing downward spiral in which efforts to enhance national economic security ultimately left all countries worse off. As Kindleberger put it, "When every country turned to protect its national private interest, the world public interest went down the drain, and with it the private interests of all" (Kindleberger, 1975). Zero-sum economic rivalry, it turned out, was negative-sum. That lesson would profoundly shape the design of the post-war multilateral trading system.

(c) Re-globalization, starting with the limited-membership GATT (1947)

"The statesmen who planned the post-war economic order were haunted by the mistakes of the twenties and thirties," historian Richard Gardner has observed (Gardner, 1956). Having seen how protectionism, discriminatory trade blocs, and economic nationalism had helped turn economic crisis into geopolitical conflict, they sought to construct an open, non-discriminatory, and rules-based trading system instead (Wolff, 2023; Dam, 2005; Hudec, 1975). Their conviction was that prosperity and peace were mutually reinforcing: expanding trade would promote growth and development, while growing prosperity and economic interdependence would strengthen the foundations of international cooperation and peace. As President Roosevelt argued near the end of the Second World War, "We cannot succeed in building a peaceful world unless we build an economically healthy world" (Roosevelt, 1945).

The initial plan was to establish an International Trade Organization (ITO) alongside the IMF and the World Bank, created at the 1944 Bretton Woods Conference – to oversee tariff negotiations and strengthen trade rules. These institutions were conceived as three complementary pillars of an open global economy. The IMF's mandate to maintain fixed exchange-rate stability and provide balance-of-payments support was aimed at restoring financial stability, curbing competitive currency devaluations, and thereby minimizing trade uncertainty and disruption. The World Bank's focus on reconstruction and development sought to rebuild and expand productive capacity and thus increase participation in international commerce. It is not too much of an exaggeration to say that the Bretton Woods system was central to the new United Nations – and that a multilateral trading system was central to Bretton Woods (Gardner, 1956).

Before the ITO Charter could be finalized in 1948, a smaller "core" group of economies (initially 15, later 23) launched a parallel tariff-reduction initiative: the GATT. This reflected concerns that a comprehensive agreement would be difficult to achieve among the more than 50 states engaged in the broader ITO process (Irwin, Mavroidis, and Sykes, 2008).

Even within this smaller group, differences persisted. The first set of differences concerned how

tariff concessions should be negotiated and extended among participants. The United Kingdom and several others favoured across-the-board tariff cuts, while the United States – constrained by congressional authority to negotiate only bilaterally – promoted a hybrid approach. The outcome was a system of “multilateralized bilateralism”: economies conducted simultaneous bilateral request-and-offer negotiations, whose results were then extended to all participants under the unconditional MFN principle (Irwin, Mavroidis and Sykes, 2008). However, tariff commitments alone could not sustain a rules-based trading system. Without broader disciplines, their value could be circumvented or eroded through discriminatory treatment, quantitative restrictions, customs practices, subsidies or other non-tariff measures. Thus, to protect these commitments, the GATT incorporated the draft commercial policy provisions of the ITO Charter with only minor modifications. In other words, the tariff schedules created the bargain, while the GATT rules protected them.

A second set of differences concerned how far common rules should constrain discriminatory practices and how much flexibility they should allow. The United States generally sought to eliminate discriminatory trade arrangements and restrict the use of quantitative controls, while the United Kingdom and other European economies resisted abandoning imperial preference systems and balance-of-payments restrictions. The resulting compromises revealed an enduring tension at the heart of the trading system between the objective of non-discrimination and the need to accommodate political and economic realities. Existing colonial preferences were carried over or “grandfathered” into the GATT as a transitional concession to established arrangements. By contrast, GATT Article XXIV represented a deliberate departure from strict MFN treatment, permitting customs unions and free trade areas on the grounds that regional integration could complement, rather than undermine, multilateral liberalization.⁴ Similarly, the GATT allowed economies facing external financial difficulties to maintain temporary trade restrictions for balance-of-payments reasons, reflecting the view that trade-opening had to be compatible with macroeconomic stability and reinforcing the complementary roles of the GATT and the IMF within the broader Bretton Woods framework. From the outset, therefore, the GATT combined a commitment to universal rules with carefully circumscribed flexibility.

Despite these divisions – and several near-breakdowns in the talks – the first Geneva Round (1947) achieved an average reduction of about 26 per cent in industrial tariffs (WTO, 2007).⁵ More importantly, it demonstrated that multilateral negotiations, anchored in reciprocity, non-discrimination and binding commitments, could deliver substantive results (Hudec, 1975). Between 1947 and the conclusion of the Dillon Round in 1962, GATT membership almost doubled – from 23 to around 45 – while successive rounds delivered tens of thousands of tariff concessions, progressively lowered industrial tariffs, and established a pattern of continuous trade-opening and expansion that would characterize the system for the next three decades. Yet even at this early stage, tensions between multilateralism and bilateralism, between non-discrimination and preferences, and between early liberalizers’ commitments and latecomers’ expectations were already evident.⁶

(d) Towards more variable geometry: the Kennedy and Tokyo Rounds (1964-79)

By the time of the Kennedy Round (1964–67), the GATT’s success in cutting tariffs and attracting new members had generated new and more complex challenges. A system that had doubled in size in less than two decades now found it harder to negotiate further tariff reductions. Integrating developing economies – by expanding their export opportunities without requiring full reciprocity – became a central issue. At the same time, as tariffs declined, non-tariff barriers became more prominent, exposing gaps in existing GATT rules. The emergence of the European Economic Community (EEC) in the late 1950s added further complexity, creating for the first time a negotiating counterweight to the United States. In short, the very successes of earlier rounds – expanded membership, deeper integration and lower tariffs – had begun to make subsequent negotiations more demanding.

The Kennedy Round reflected these tensions. The outcomes from opening trade, helped by the adoption of a formula-based approach, were impressive, with industrial tariffs reduced by an average of 38 per cent (Preeg, 1970; WTO, 2007). But agriculture remained largely untouched because of persistent disagreements, and progress on trade rules was uneven. Although the round produced important innovations, including Part IV of the GATT (“Trade and Development”) – providing for preferential, non-

reciprocal treatment for developing economies – and the Anti-Dumping Code,⁷ broader efforts to update disciplines on non-tariff measures fell short. The round therefore showed both the continuing power of reciprocity and the growing difficulty of extending it across a more diverse membership and a wider policy agenda.

These unresolved issues, together with the growth of the EEC, the rising influence of developing economies, and instability in the world economy following the collapse of the Bretton Woods system and sharp increases in energy prices, provided the impetus for launching the Tokyo Round (1973–79). With 102 participants, it was the most ambitious and wide-ranging negotiation up until that point, but also one of the most complex. Transatlantic tensions, particularly over agriculture, remained a major obstacle, while differences between developed and developing members became increasingly pronounced. Once again, the system's growing scope and success made consensus harder to achieve. Although the round achieved further industrial tariff cuts – averaging about 33 per cent – progress on agriculture remained limited.

To overcome the mounting difficulty of reaching agreement on trade rules, negotiators adopted a more flexible approach. A series of plurilateral agreements or “codes” was concluded on subsidies, anti-dumping, technical barriers to trade, import licensing, customs valuation and government procurement (Winham, 1987). These allowed members to opt in or out, introducing a degree of “variable geometry” into the system. While this flexibility enabled progress where unanimity was impossible, it also added complexity. Because several of the codes generated benefits that were effectively extended beyond their signatories – either through MFN application or through the general operation of national trade regimes – non-participants could in some cases benefit from concessions without assuming corresponding obligations. As a result, the Tokyo Round's most innovative response to growing diversity – flexibility – also raised concerns about fragmentation and uneven rule application, highlighting once more the trade-offs inherent in the system's evolution. It is not coincidental that the Tokyo Round was the longest multilateral negotiation up until that point, lasting five and a half years, two years longer than expected.

(e) A “single undertaking”: the Uruguay Round (1986–94)

By the time of the Uruguay Round, the GATT system had grown to 123 members. The constellation of major trading powers now included not only the United States and the EEC, but also a rapidly rising Japan, increasingly influential developing economies such as India and Brazil, and soon the new transition economies that were emerging after the fall of the Berlin Wall. This expansion – one of the system's great achievements – nevertheless also made consensus harder to reach.

The Uruguay Round took four years to launch and a further eight to conclude, twice its planned duration, reflecting in part the breadth and ambition of its agenda. This agenda extended far beyond tariffs to encompass non-tariff measures, agriculture, textiles, services and intellectual property, reflecting both the deepening of global trade, the growing importance of services and knowledge-based industries, and the increasing expectations placed on the system.

The round's defining innovation was the “single undertaking” – the principle that all members would accept the full package of negotiated outcomes, replacing the Tokyo Round's opt in, opt-out approach. This restored coherence, reduced fragmentation and eliminated ambiguity created by the limited participation in earlier plurilateral codes, including those on subsidies, technical barriers to trade, customs valuation, import licensing and anti-dumping.⁸ It also reflected the need to manage growing complexity through broader trade-offs across issues and members. Some exceptions persisted: negotiations on services proceeded on a separate track and produced a distinct agreement – the General Agreement on Trade in Services (GATS) – reflecting certain sensitivities, particularly among developing economies. Over time, the agenda itself evolved, culminating in the decision to establish a new institutional framework: the World Trade Organization.

The success of the Uruguay Round also benefitted from negotiating innovations from previous rounds. For example, as GATT membership expanded and negotiating rounds grew more complex, the system needed a way to track progress toward consensus. Even a basic

drafting challenge required innovation, and led to the introduction of bracketed text (see Box A.1).

The Uruguay Round delivered the most far-reaching trade reform package in the system's history.⁹ It cut non-agricultural tariffs by over 30 per cent, extended disciplines to agriculture and textiles, introduced rules on services and intellectual property, strengthened dispute settlement and created the WTO. For many, this achievement confirmed the value of the single undertaking approach, as it appeared that comprehensive negotiations allowed broader trade-offs and generated the political momentum needed to reach agreement.

Yet the experience also revealed new constraints. The Uruguay Round's length, complexity, and near-failures raised questions about whether continually larger and more ambitious negotiations were viable.¹⁰ Moreover, key issues – particularly in market access for agriculture and services – remained only partially resolved and were deferred to future talks under the so-called “built-in agenda”. In this sense, the very ambition that made the Uruguay Round so successful also exposed the limits of the traditional negotiating model in an increasingly complex trading system.

(f) End or beginning of the road? – the unfinished Doha Round

In hindsight, it is unsurprising that the Doha Development Agenda (DDA), launched in 2001, faced even greater difficulties. It sought to tackle the most politically sensitive and technically complex issues left unresolved by the Uruguay Round, such as agricultural subsidies, services liberalization, tariff peaks and escalation, preference erosion and non-tariff barriers. It also involved the largest and most diverse membership in the history of either the GATT or the WTO. With China (which became a WTO member in 2001), the Russian Federation (which became a WTO member in 2012) and many recently acceded economies at the negotiating table, the Doha Development Agenda became the first truly global trade negotiation. And it encompassed the broadest policy agenda of any negotiation round up until that point, including proposed work on “new issues”, such as trade facilitation, investment and competition policy.

At the same time, the DDA arguably applied an even stricter version of the single undertaking, further reducing flexibility in how talks could

proceed. In the Uruguay Round, the principle that “nothing is agreed until everything is agreed” mainly meant that members could not selectively accept the final results. But in the Doha Round, the same principle came to mean that almost no part of the negotiation could be definitively closed, implemented or harvested separately until the entire round was completed. This limited members' ability to advance selectively, differentiate commitments, or adjust the agenda as conditions evolved. The result was a growing mismatch between the system's rigid negotiating model and the realities of a more complex, interconnected and multipolar global economy.

Although the DDA produced some important incremental progress, it ultimately failed amid deep and persistent divergences among members. As a result, the DDA was never concluded as a comprehensive round. For the first time since 1947, a major multilateral negotiation stalled indefinitely without producing a full outcome. This inability to complete the DDA raised questions about the viability of ever-expanding negotiating rounds in a system nearing universal membership. It also exposed a core tension between universality and manageability: the more inclusive, diverse and ambitious the system had become, the harder consensus proved to achieve, and the more a one-size-fits-all approach became an obstacle to progress.

Yet the stagnation of the DDA also prompted a shift in negotiating practices. Members began decoupling specific issues from the comprehensive DDA and pursuing more targeted agreements, as was agreed at the 2011 Geneva Ministerial Conference. The first breakthrough came at the 2013 Bali Ministerial Conference with the conclusion and adoption of the Trade Facilitation Agreement (TFA), which had been unbundled from the DDA and focused narrowly on customs procedures, transparency and administrative simplification. The 2015 Nairobi Ministerial Conference produced further results, including the elimination of agricultural export subsidies – the first major multilateral reform in agriculture in two decades – and the expansion of the Information Technology Agreement (ITA). The 2022 Geneva Ministerial Conference produced the Fisheries Subsidies Agreement, the first multilateral WTO agreement to place an environmental objective – the conservation of global fish stocks – at the centre of its disciplines.

Box A.1: An early example of “reform by doing”: the history of bracketed text in the GATT

Bracketed text is one of the oldest procedural conventions in the GATT system, yet it was never formally codified in the GATT rules themselves. It evolved instead as a practical drafting device that let negotiators distinguish between language enjoying broad agreement and provisions still contested by members, and its use grew increasingly important as the multilateral trading system matured.

In the early GATT rounds – Geneva (1947), Annecy, Torquay, Geneva (1956) and the Dillon Round – bracketing was comparatively rare. Negotiations centred on tariff schedules rather than lengthy legal texts, legal drafting was handled by small groups of officials, and disagreements were more often managed through alternative papers or chairs’ notes than through heavily bracketed treaty language. The original 1947 GATT itself was negotiated largely through successive consolidated drafts rather than the heavily bracketed texts familiar today.

Brackets became common practice during the Kennedy and Tokyo Rounds, as negotiations shifted toward non-tariff barriers, anti-dumping rules, customs valuation, subsidies and technical regulations and drafting grew far more complex. Negotiators adopted the convention that unbracketed text represented language enjoying broad agreement, while bracketed text flagged provisions on which one or more delegations held reservations, allowing a single negotiating text to keep evolving without spawning multiple competing drafts.

The Uruguay Round (1986–94) made brackets central to the negotiating process. With the GATS, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), the Agreement on the Application of Sanitary and Phytosanitary (SPS) Measures, revised technical barriers to trade (TBT) rules, agriculture, the Dispute Settlement Understanding and the Marrakesh Agreement Establishing the World Trade Organization itself all being drafted simultaneously, many documents carried hundreds or even thousands of brackets. By this stage brackets carried an understood procedural meaning: a government could insist that language remain bracketed until it was ready to accept it, removing brackets signalled consensus, and deleting a bracketed alternative reflected a negotiated choice among competing options. As one history of the GATS negotiations put it, bracketed text signalled disagreement among participants by GATT custom.

The best-known response to this proliferation was Arthur Dunkel’s 1991 Draft Final Act, the “Dunkel Draft”. Rather than producing yet another text filled with competing brackets, Dunkel issued a “clean” chairman’s text that largely eliminated brackets by choosing a single formulation wherever negotiators had been unable to agree. This shifted the political dynamic: governments no longer negotiated among dozens of alternatives but instead negotiated deviations from one consolidated text, a change that many scholars regard as one of the key reasons the Uruguay Round was ultimately concluded.

Brackets served several practical purposes, and not all of them signalled the same thing. They kept negotiations moving while disagreements persisted, identified exactly which words remained controversial, preserved negotiating options without requiring wholesale redrafting, and let chairs gauge progress by literally counting how many brackets remained – negotiators often spoke of “reducing the brackets” as shorthand for progress. Experienced negotiators also recognised that brackets came in different forms, from alternative wording (“shall” versus “should”) and alternative conceptual approaches to political placeholders awaiting instructions from capitals and cross-issue brackets that could not be resolved until agreement was reached elsewhere, for example between agriculture and services. The mere presence of a bracket therefore did not necessarily indicate deep disagreement.

Bracketing was never prescribed in the GATT treaty or in any formal negotiating rules; it emerged as a diplomatic drafting convention that eventually became standard practice well beyond the GATT and the WTO, including in environmental treaties, arms control negotiations and UN conferences. Notably, early GATT practices relied on brackets far less than today’s WTO negotiations do – a shift that reflects the growing complexity of trade agreements, from the relatively straightforward tariff concessions of the 1950s to the highly detailed regulatory disciplines negotiated among a widening set of members from the Tokyo Round, and especially the Uruguay Round, onward.

At the same time, members have increasingly explored plurilateral initiatives, allowing subsets of participants to advance where universal agreement is unnecessary or unlikely. Early successes with the Government Procurement Agreement (GPA),¹¹ the Information Technology Agreement (ITA) (concluded by 29 participants at the First Ministerial Conference in 1996) and the expansion of the ITA (concluded by over 50 members at the Tenth Ministerial Conference in 2015) demonstrated that plurilateral agreements, both non-MFN and MFN, could deliver substantial market-opening. More recently, at the 11th Ministerial Conference in 2017, like-minded groups of WTO members issued joint statements launching discussions on e-commerce, investment facilitation and services domestic regulation, which have since produced new plurilateral outcomes. Other plurilateral initiatives pursuing environmental objectives – from plastics pollution and fossil fuel subsidy reform to the circular economy – have likewise gathered increasing momentum. In addition, informal working groups on micro, small and medium-sized enterprises (MSMEs) and on trade and gender have broadened the WTO's agenda and created new avenues for dialogue and cooperation. In 2020, the European Union, China and several other members established the Multi-Party Interim Appeal Arbitration Arrangement (MPIA) in response to the Appellate Body impasse, creating a voluntary appeal mechanism under Article 25 of the DSU that has enabled participating members to preserve a functioning two-stage dispute settlement process.

More broadly, these developments reflect a wider pattern of institutional adaptation that has increasingly characterized the WTO in recent years. Rather than relying solely on comprehensive negotiating rounds or formal amendments to the WTO Agreements, members have often responded to new challenges through incremental, practical innovations in the WTO's day-to-day work – what has become known as “reform by doing”. This has included not only flexible negotiating formats such as joint initiatives and the MPIA, but also procedural improvements, including streamlining committee practices, expanding standardized electronic notification systems, and making greater use of committees such as TBT and SPS to identify and resolve specific trade concerns. Individually, these innovations have often been modest. Collectively, however, they demonstrate that

the WTO has continued to evolve – not only through major negotiating rounds, but also through the cumulative effect of practical adaptations developed by members in response to changing circumstances.

2. The challenges facing the system today

(a) Victim of success

Against the backdrop of the system's long history of ever-increasing cooperation, the WTO's more limited progress in recent years has intensified debate about its future direction. Increasingly, the question is not whether reform is needed – that point is now widely accepted – but where reform should focus, how it should proceed, and at what pace. The challenges confronting members are diverse, but they share a common feature: many stem not from the failure of the system, but from its achievements.

The reason is that the system has transformed the environment in which it operates. As trade expanded, barriers fell and economic interdependence deepened, the gains from cooperation increased – but so too did the complexity of managing that cooperation. A larger, more integrated, diverse and multipolar global economy has created new sources of friction, raised the stakes of collective action and made agreement more difficult to achieve.

The first challenge has arisen from the very success of economic integration itself. Deeper integration has increased the scope for friction among economies with different structures and levels of development. As tariffs fell to historically low levels, the focus of trade policy shifted from border barriers to behind-the-border domestic regulatory regimes. Issues that received relatively little attention when the system was created – from food safety regulations to industrial strategies to national security measures – now sit at the centre of trade tensions and disputes (Cooper, 1968; Lawrence, Eichenbaum, and Evans, 1996; Jackson, 1997; Baldwin, 2011).

Many of the most salient trade tensions today have arisen not simply from ordinary trade disputes, but from deep structural differences between national political and economic systems operating within an increasingly interlinked global economy – what economist Sylvia Ostry has described as “system friction” (Ostry, 1992). These

tensions are often more difficult to manage because they arise not from traditional border restrictions, but from domestic policies and institutional arrangements that reflect broader national economic and social choices. The system's historic task of facilitating trade integration, on the one hand, and managing the interface among differing economic systems, on the other – what John Jackson described as the “interface mechanism” (Jackson, 1989) – has therefore become significantly more complex and multifaceted.

Likewise, the expanding scope of trade rules has increasingly blurred the boundary between trade and other policy domains. Macroeconomic policies, development strategies, environmental measures and technological regulation now shape trade flows and market access as much as traditional border barriers. These so-called “trade-plus” issues increasingly influence trade outcomes, yet many lie beyond the capacity of the trading system alone to address (Sutherland Report, 2007; Keohane and Victor, 2011; VanGrasstek, 2013). The architects of the Bretton Woods system recognized the importance of such linkages and designed the post-war system around complementary institutions responsible for trade, finance and development (Gardner, 1956). Today, however, these interconnections are broader, deeper and more complex than ever. Some have argued that many of the WTO's current difficulties stem from the fact that trade governance can no longer be neatly separated from broader questions of macroeconomic, environmental, technological, development and security governance (Keohane and Nye, 2012; Woods, 2010; Kocharekar, 2023).

The growing breadth, diversity and multipolarity of the membership – developments that the system itself helped foster – pose another major challenge. As the number of actors has expanded and their interests have become more diverse, against a backdrop of shifting trade patterns, changing market shares and rapid technological change, reaching consensus has become increasingly difficult. The informal decision-making practices that characterized the GATT era are rendered increasingly obsolete in a near-universal organization with far more heterogeneous members and interests.

At the same time, broad flexibilities originally designed to accommodate different levels of development are proving harder to sustain as economic realities diverge within traditional developed, developing and least-developed

country groupings. This has prompted growing debate over whether more individually tailored or variable-speed approaches are needed to advance cooperation while preserving inclusiveness (Hoekman, 2025). More fundamentally, the current balance of WTO rights and obligations reflects the cumulative outcomes of past negotiations and the economic relationships of earlier eras, not necessarily the distribution of economic weight and trade shares that exists today.

These challenges do not exist in isolation; they reinforce one another. Reciprocity and MFN are harder to balance when commitments are misaligned with new economic realities. Binding rules are harder to update when consensus requires the agreement of a near-universal and highly diverse membership. And the multilateral process itself is harder to sustain when the trade stakes and geopolitical differences appear greater than at any point in the system's history (Wolff, 2023). Together, these pressures help to explain why a system that proved remarkably effective at promoting integration now finds adaptation increasingly difficult.

(b) From virtuous to vicious circle

The slowdown in the evolution of the trading system has also coincided with a broader slowdown in global trade integration and economic growth. Between 1995 and 2008, the volume of world merchandise trade grew by an average of 5.9 per cent per year, while global GDP growth averaged 3.5 per cent, and the US dollar value of foreign direct investment (FDI) increased by around 12 per cent annually. Major trade-opening initiatives, such as the Uruguay Round, falling trade costs and the expansion of global value chains reinforced one another, creating a virtuous cycle in which trade, investment, productivity and growth advanced together. Other one-off developments, including the spread of the internet, the ongoing integration of China into the global economy and the opening up of Central, Eastern and Southeastern Europe after the end of the Cold War, also contributed to the exceptionally strong trade growth of this period (François and Wörz, 2011; Freund and Weinhold, 2000).

Since the global financial crisis of 2008-09, however, that momentum has weakened. Merchandise trade growth has fallen to roughly one-third of its pre-crisis pace, averaging around 2.0 per cent per year, while global GDP growth has

slowed to 2.8 per cent and growth in FDI has halved to around 6 per cent annually. While the difference may appear modest, compounded over more than a decade it translates into trillions of dollars in foregone global output. Had growth continued at its pre-2008 rate, the world economy would be nearly 8 per cent larger today. Many factors help explain this slowdown, including the legacy of the global financial crisis, weaker productivity growth, and more recently geopolitical tensions. Yet the weakening pace of trade-opening and economic integration appears to be an important part of the story.

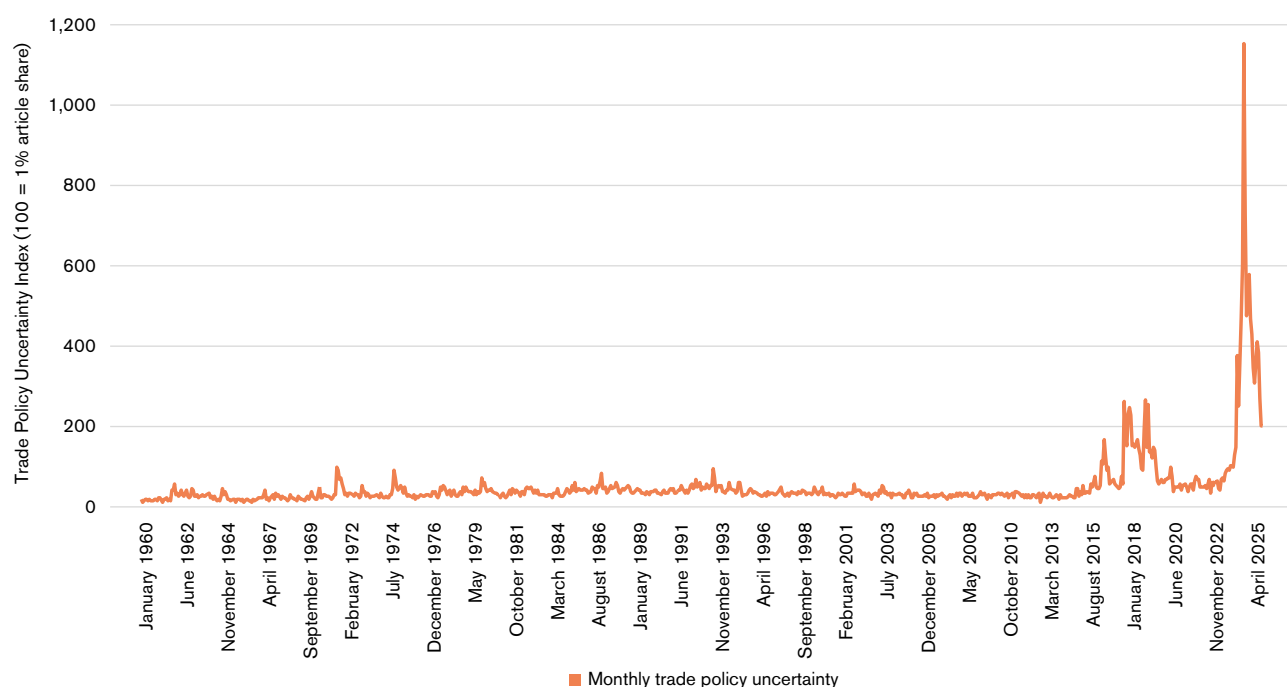
Since then, however, there has been no equivalent of the Uruguay Round to drive a new wave of global trade-opening and rule-making. Although the multilateral trading system has demonstrated remarkable resilience under unprecedented pressures – and members have continued to deliver important outcomes, including the TFA (which entered into force in 2017) and the WTO Agreement on Fisheries Subsidies (which entered into force in 2025) – the broader momentum toward trade integration has weakened. At the same time, protectionist measures and unilateral trade

actions have proliferated, particularly in recent years, contributing to the most significant strains on the trading system since its creation (see Figure A.1). Whereas roughly 80 per cent of world trade was conducted on an MFN basis in 2022, that share had fallen to about 72 per cent by early 2026. Since 2015, moreover, world trade has grown broadly in line with global output, suggesting that the decades-long trend toward ever-deeper economic integration has largely stalled (see Figure A.2).

This matters because the relationship between trade integration and economic growth runs in both directions. Just as trade liberalization, investment and productivity gains once reinforced one another in a virtuous circle, slower trade integration and weaker growth can also become mutually reinforcing. A less dynamic trading system reduces competition, slows technology diffusion, limits gains from specialization and weakens productivity and income growth – which in turn can erode support for economic openness and international cooperation.

Periods of robust growth tend to foster a positive-sum outlook, reinforcing the

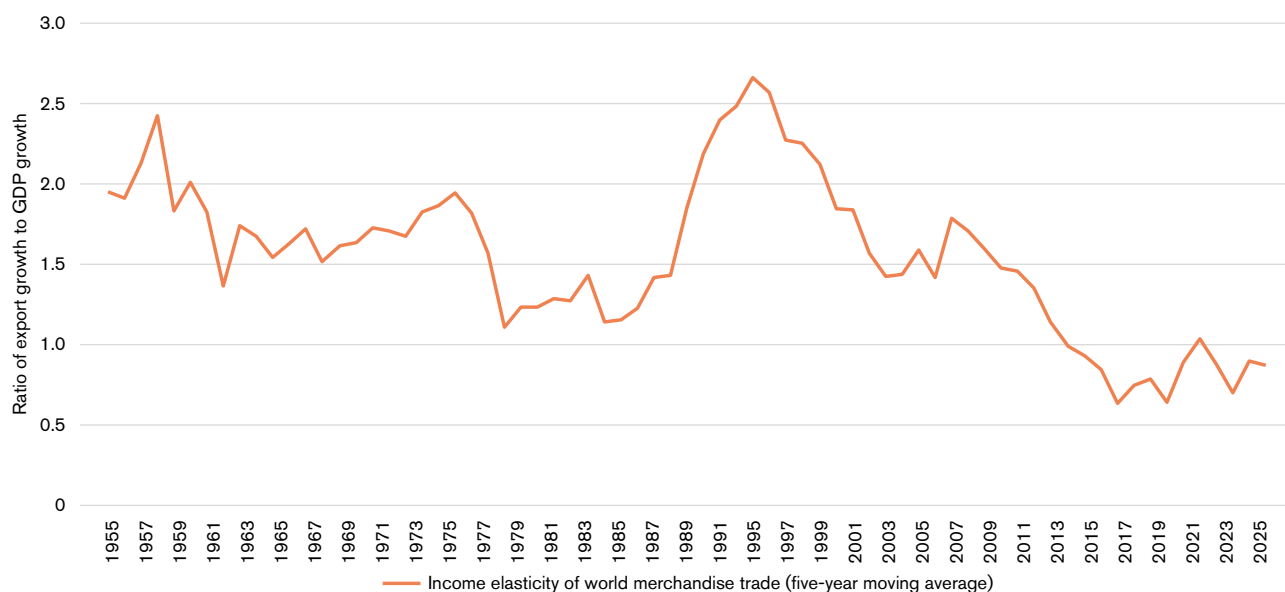
Figure A.1: Trade policy uncertainty has risen to unprecedented levels in recent years



Source: WTO Secretariat calculations based on Trade Policy Uncertainty Index (<https://www.policyuncertainty.com/>).

Note: The Trade Policy Uncertainty Index tracks trade policy uncertainty back as far as 1900 using archives from a number of major newspapers in several economies. It measures the frequency of articles discussing trade policy uncertainty as a share of total news articles with the index normalized so that a 1 per cent article share equals 100. Displayed coverage is monthly, beginning in January 1960 and running through May 2026.

Figure A.2: Income elasticity of world merchandise trade has largely stalled



Source: WTO Secretariat calculations.

Note: Exports refers to world merchandise export in volume terms. GDP refers to real GDP at market exchange rates. Analysis excludes negative periods and rebounds.

perception that all economies can benefit from expanding trade and investment. By contrast, periods of stagnation encourage a zero-sum mindset, in which one economy's gain is increasingly viewed as another's loss. The result is rising pressure for protectionism, beggar-thy-neighbour economic nationalism and geopolitical rivalry, which can further weaken trade and growth. The virtuous circle that helped drive decades of globalization can thus give way to a vicious circle in which slower growth, rising protectionism and economic fragmentation reinforce one another.

Yet despite these challenges, the logic that gave rise to the multilateral trading system remains as compelling as ever. If anything, the unprecedented integration and interdependence of the modern global economy have made the system more necessary, not less. Globalization has amplified the cross-border spillovers generated by domestic policies, increasing rather than diminishing the need for international cooperation (Cooper, 1968;

WTO, 2023c). No bilateral, regional or plurilateral arrangement, however ambitious, can adequately address the growing range of inherently global challenges – including digitalization, environmental sustainability, industrial policy, macroeconomic imbalances and economic security – that shape trade relations today.

There is ultimately no effective substitute for a rules-based multilateral system. Despite its shortcomings, its foundational purpose – to expand opportunities for trade, restrain beggar-thy-neighbour unilateralism, manage the interface among diverse economies and advance rules-based cooperation – remains essential to global prosperity and stability. The central question is not whether these objectives are still worth pursuing, but whether institutions, commitments and modes of cooperation designed for an earlier era can continue to deliver them in a world that has become far more integrated, complex and multipolar. That is the challenge the remainder of this report addresses.

Endnotes

- 1 Richard Cobden, like others in the Anti-Corn Law League, frequently argued that British manufacturing needed “cheap food” in order to compete abroad (Richard Cobden, 1908).
- 2 France’s tariff system distinguished between a higher general tariff (*tarif général*) and lower treaty-negotiated tariff rates (*tarif conventionnel*) agreed with particular trading partners. Because these agreements typically included unconditional MFN clauses, the lower treaty rates granted to one partner were automatically extended to other treaty partners, encouraging additional economies to join the expanding treaty network.
- 3 The 19th-century gold standard originated in an action by the Bank of England in 1821 to make all its notes convertible to gold (although Britain had operated a *de facto* gold standard from as early as 1717).
- 4 The grandfathering of imperial preferences was done under Article I:2, together with annexes A through F. The addition of Article XXIV appears to have been advocated by the United States to allow for the possibility of free trade agreements in the future (Chase, 2006).
- 5 “In this first round of multilateral trade negotiations, members concluded 123 agreements, covering around 15,000 tariff items, and affecting about 40 per cent of world trade” (WTO, 2007).
- 6 E. Wyndham White, the GATT’s first Director-General, highlighted the bargaining power issue faced in the 1950-51 Torquay Round: “A number of European countries with a comparatively low level of tariff rates considered that they had entered the Torquay negotiations at a disadvantage. Having bound many of their rates of duty in 1947 and 1949, what could these low-tariff countries offer at Torquay in order to obtain further concessions from the countries with higher levels of tariffs?” (Interim Commission for the International Trade Organization, 1952).
- 7 Formally titled the Agreement on Implementation of Article VI of the GATT, the Kennedy Round’s Anti-Dumping Code was the first separate multilateral agreement to elaborate common rules governing anti-dumping investigations and measures.
- 8 These agreements applied only to their limited number of signatories, creating uncertainty about the relationship between the codes and the general GATT rules. Addressing the status of the codes was important to many developing as well as developed members, but for opposite reasons. While code members were concerned about non-members “free riding” on their commitments, non-members were concerned about ambiguity surrounding the code’s non-discriminatory application.
- 9 The largest trade agreement of its time was embodied in more than 26,000 pages.
- 10 As an alternative to cumbersome, slow-moving, “all or nothing” rounds, some members argued that the new WTO – with its stronger institutional structures and increased opportunities for policy dialogue and information-sharing – should provide a forum for more focused, efficient and continuous sector-by-sector negotiations.
- 11 The GPA originated as the plurilateral Tokyo Round Government Procurement Code, concluded in 1979 by a small group of six parties in developed economies (see GATT official document MTN/NTM/W/174). The agreement was substantially renegotiated during the Uruguay Round and re-established as the GPA 1994. The revised agreement expanded coverage beyond goods to include services and construction procurement, strengthened transparency and procedural disciplines, and introduced more comprehensive market access schedules. A further major revision, GPA 2012, modernized the agreement, updated procurement practices to reflect digital and electronic procurement, expanded coverage commitments, and sought to facilitate broader participation by developing economies. Over time, membership has expanded significantly, and at time of writing the GPA counted 49 members, including a growing number of economies that acceded recently to the WTO (i.e., to become WTO members) or that are in the process of acceding.

B The value of the World Trade Organization

This chapter explores the value of the multilateral trading system. First, it reviews what the system has delivered – such as contributing to lower trade barriers and enabling wider participation in world trade – while recognizing that benefits have been distributed unevenly. Second, it explains how the system delivered these results, by helping to avoid "beggar-thy-neighbour" policies, enhancing the credibility of domestic commitments, fostering coordination and reducing trade policy uncertainty. The chapter outlines the economic logic of reciprocal market access bargaining and the rules pertaining to those bargains, shows how successive rounds of negotiations led to deeper commitments, and explains the need for flexibilities. Third, the chapter looks at the WTO's institutional role and the value of its negotiating, transparency and monitoring, and dispute settlement functions. Finally, the chapter assesses what would be at stake if WTO-based cooperation were allowed to erode.

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Key points

- WTO membership has been a powerful driver of trade, growth and prosperity. By lowering trade barriers, increasing trade policy predictability and supporting domestic reform, the WTO has expanded trade, strengthened participation in global value chains, raised living standards and contributed to poverty reduction, economic resilience and sustainable development across the world economy.
- However, the gains from WTO membership have been unevenly distributed. Least-developed countries (LDCs) still account for less than 1 per cent of world trade, and the benefits of trade have been unevenly shared across workers, firms and regions. While domestic factors partly explain these disparities, barriers within the trading system – including non-tariff measures and a high concentration of trade within a core group of economies – also play a role.
- The WTO's rules-based architecture, including the non-discrimination principle of most-favoured-nation treatment, reciprocity and binding commitments, make trade cooperation possible by balancing commitments with policy flexibility, helping to reduce the complexity of international trade relations.
- The WTO's institutional functions beyond trade negotiations – the transparency of trade measures, monitoring trade policies, committee work and dispute settlement mechanisms – help WTO members to manage trade obstacles, improve regulatory cooperation and avoid unnecessary disputes.
- Weakened multilateral cooperation would impose significant economic costs, particularly on developing economies. New simulations by WTO economists suggest that the erosion of WTO-based cooperation could reduce global GDP by 5 to 10 per cent by 2050. If cooperation were replaced by an unstructured network of free trade agreements, LDCs could lose 16.5 per cent of GDP, more than three times the losses projected for high-income economies. Conversely, deeper multilateral cooperation could increase global GDP by 2.9 per cent, with relative gains of 7.7 per cent for LDCs.

1. The multilateral trading system has delivered substantial gains for many but not all

This section documents the main achievements associated with the multilateral trading system.

Consistent with the objectives articulated in the Preamble to the Marrakesh Agreement Establishing the World Trade Organization (also known as the Marrakesh Agreement), the focus is on how the system supported the expansion of trade, more inclusive and sustainable economic growth, and higher living standards. It highlights in particular how reducing trade barriers and enhancing predictability have been critical to achieve these objectives.

The GATT and the WTO have contributed to large reductions in obstacles to trade and to the expansion of world trade. Successive multilateral negotiations and GATT and WTO accessions have embedded market-opening commitments within a framework of agreed rules among a rapidly growing membership. Beyond lowering average levels of protection, the GATT and the WTO have increased the transparency and predictability of trade policy through tariffication and binding commitments. This has reduced policy uncertainty faced by firms and investors and supported long-term investment, supply-chain formation, and resilience, which has been a key factor behind rapid trade growth.

The expansion of trade under a predictable multilateral framework has contributed to higher economic growth and convergence across many economies. Increased trade has boosted growth through many channels, including technology diffusion and scale effects. Beyond trade growth, WTO commitments have often served as external anchors for growth-enhancing domestic reform, particularly in the context of accession, where governments have used the multilateral framework to support institutional change and credibility-enhancing reforms. At the same time, outcomes have varied widely both across and within economies, reflecting differences in initial conditions, complementary policies and patterns of participation.

The multilateral trading system has not only contributed to trade and GDP growth, but also to resilience during crises, and it has been associated with a peace dividend. The series of shocks to the global economy over the past two

decades, including the global financial crisis of 2008-09 and the COVID-19 pandemic, each contributed to a sharp decline in trade, but recovery after each crisis was quick and comprehensive, and the escalation of trade restrictions seen after earlier crises was avoided. Instead, trade often helped to cushion the immediate impact of the shock by providing the affected economies with alternative sources of supply of critical products. Beyond economic gains, increased trade has also been found to significantly reduce the probability and intensity of conflicts between nations.

(a) The achievements of the multilateral trading system

Over the past 80 years, the multilateral trading system has contributed to substantial achievements, both economic and non-economic. The system's most direct impact of reducing trade frictions has helped trade to grow dramatically, boosting GDP and reducing poverty. Yet it was not the reduction in trade frictions alone, but also further reforms and commitments, for instance during accession processes, that helped economies to grow faster and to reduce trade and GDP volatility. Growing interdependence among members of the multilateral trading system, as well as these additional commitments, has also contributed to evidence that trade integration reduces conflict, especially in the context of multilateral liberalization.

(i) Reducing trade barriers and boosting trade

The GATT and the WTO have overseen a historic decline in trade barriers among its members.

The WTO provides a forum for negotiating mutually beneficial reductions in trade costs and administers multilateral and plurilateral agreements that ensure that trade barriers are set in a non-discriminatory and transparent manner. Successive GATT rounds and accessions led to sharp declines in average industrial tariffs in advanced economies (see Figure B.1a), while the Uruguay Round (1986-94) extended coverage to agriculture, textiles and clothing, services and intellectual property – all historically sensitive areas subject to high protection. Plurilateral and sectoral initiatives within the WTO, such as the Government Procurement Agreement and the Information Technology Agreement and its expansion, have further reduced protection in specific sectors, as has the expansion of their membership. Estimates

put average tariffs among major economies between 20 and 25 per cent prior to the first GATT Round in 1947, declining to around 3 per cent by 1995 (Bown and Irwin, 2017). According to WTO data, the average tariff among economies that acceded to the WTO fell from 10.5 per cent before accession to 7 per cent subsequently (see Figure B.1b).

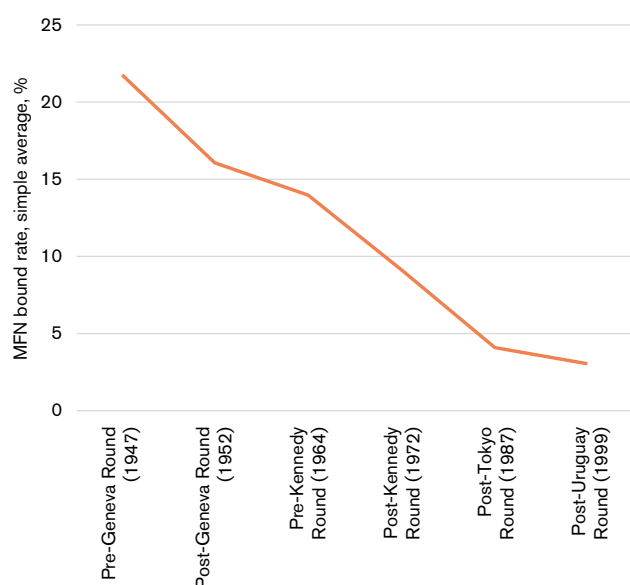
Even prior to the GATT, several GATT founding members applied GATT's key bargaining principles of reciprocity and non-discrimination to reduce record high tariffs. The stark tariff decline during the GATT period complemented sharp tariff reductions by several GATT founding members in the 1930s and 1940s. These reductions relied on reciprocity – a balanced exchange of market access commitments – and non-discrimination, the same principles that would form the foundation of GATT. For instance, by 1946 the United States had signed 32 bilateral agreements under the Reciprocal Trade Agreements Act of 1934 (US Department of Commerce, 1946), which allowed the then US President to negotiate bilateral tariff cuts of up to 50 per cent in exchange for reciprocal concessions without needing formal Congressional approval. The effective tariff rate of the United States declined from close to

60 per cent in 1932 to 25 per cent in 1946 (US Census Bureau, 1965). The negotiated tariff reductions were extended unconditionally to all economies that had been accorded most-favoured-nation (MFN) status. The early pre-GATT tariff reductions paved the way for the GATT and provided evidence of the effectiveness of its key principles.

Trade barriers fell not only as a result of reduced tariff levels, but also due to the increase in the predictability and transparency of trade barriers through tariff bindings. A large body of literature has established that trade policy uncertainty acts as a substantial barrier to trade (Handley and Limão, 2022). The GATT principle of tariff bindings, i.e., legal ceilings on applied tariff rates, provides certainty and anchors expectations for businesses that wish to engage in long-term investments in foreign markets, even in the absence of a reduction of applied rates. One study finds that tariff ceilings significantly reduce the probability of a tariff increase, even when the bound tariff is above the MFN applied rate (Jakubik and Piermartini, 2023). Another study shows that lowering bound rates increases both exporting probability and the magnitude of export volumes, even without lowering

Figure B.1: WTO members have sharply reduced tariffs

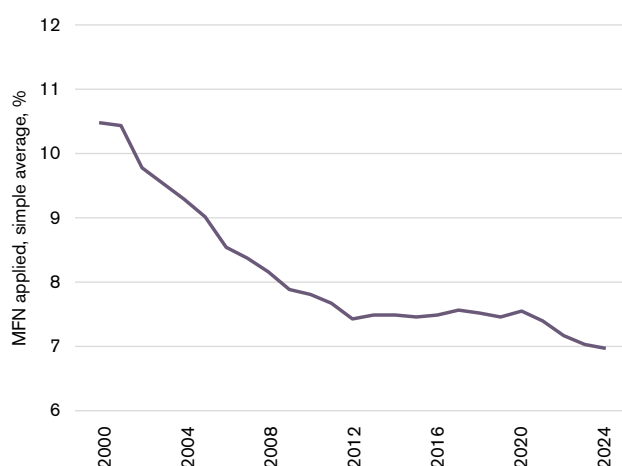
B.1a: GATT rounds and reduced tariffs



Source: Bown and Irwin (2017) based on WTO (2007).

Note: Trade-weighted average for the European Community or European Union, Japan, United Kingdom and United States.

B.1b: WTO accessions and reduced tariffs



Source: WTO Secretariat calculations.

Note: Average across 22 WTO members that acceded under Article XII of the Marrakesh Agreement with sufficient data coverage. Missing years filled with data from closest year.

applied rates, and finds that trade policy uncertainty from differences between bound and applied tariffs is equivalent to a tariff level of between 1.7 and 8.7 percentage points (Osnago, Piermartini, and Rocha, 2018). For example, evidence from Australia's tariff schedule shows that by binding commitments, market entry at the export-product level increased by 7 per cent between 1993 and 2001, suggesting that reducing uncertainty generates more market entry than unilateral trade-opening (Handley, 2014).

The GATT and the WTO also increased the transparency of trade barriers through tariffication. Several GATT provisions, most notably Article II ("Schedules of Concessions") and Article XI ("General Elimination of Quantitative Restrictions"), and the Agreement on Agriculture effectively encourage members to replace quotas, licences and other types of border measures with *ad valorem* duties, a more transparent and predictable instrument. This implies, for example, that surges in *ad valorem* equivalent trade costs due to currency fluctuations would be less frequent. A study on the Smoot-Hawley tariffs (further to the US Smoot-Hawley Tariff Act of 1930, which raised import duties during the Great Depression) found that the prevalence of specific duties in the United States in combination with deflation doubled the impact of the statutory duty increases of the early 1930s (Irwin, 1998).

Multilateral negotiations led to substantially more predictable and simplified trade barriers. GATT rounds substantially reduced the number of tariff lines without bound rates. For instance, the Uruguay Round increased the share of bound tariff lines of non-agricultural products (excluding petroleum products) from 78 per cent to 99 per cent for developed economies, from 21 per cent to 73 per cent for developing economies, and from 73 per cent to 98 per cent for transition economies. For agricultural products, the Uruguay Round commitments on tariffication resulted in the binding of virtually 100 per cent of agricultural import duties (GATT, 1994). GATT members turned increasingly away from specific duties on industrial goods – although these remained common in agriculture – toward *ad valorem* duties (Tanzi et al., 1981).

The reduction in trade barriers goes beyond tariffs, as WTO agreements also provide rules linked to regulations, transparency and other areas. After the eight multilateral rounds of tariff

reduction under the GATT, tariffs accounted in 2022 on average for only 14 per cent of all trade policy-related trade costs for goods. Non-tariff measures (NTMs) and information and transaction costs are now a substantially larger component of trade costs (Rubinová and Sebtí, 2021; UNCTAD and World Bank, 2018). These non-tariff barriers are often particularly burdensome for small economies and firms (WTO, 2016). From trade policy reviews to notification requirements to trade facilitation, WTO agreements reduce policy uncertainty and information asymmetries, and simplify costly customs procedures. As more components of trade costs have been addressed by new agreements, WTO disciplines now, to some extent, regulate almost all trade policy-related trade costs and, importantly, have been extended to barriers in the services sector through the General Agreement on Trade in Services (GATS) and to intellectual property through the Agreement on Trade-Related Aspects of Intellectual Property (TRIPS).

Agreements on NTMs help to achieve legitimate policy objectives while minimizing costly restrictions to trade. For instance, the Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary (SPS) Agreements provide guidance so that regulations on issues such as the protection of human and animal life and health respect key disciplines, including non-discrimination, the avoidance of unnecessary barriers to trade and the use of international standards as a basis for technical requirements. They do so by promoting the conclusion of mutual recognition or equivalence agreements for purposes of trade facilitation, and by serving as a forum for promoting good regulatory practices. The TBT Committee adopted guidelines to support regulators in the choice and design of appropriate and proportionate conformity assessment procedures, while the SPS Committee agreed on recommendations in relation to SPS approval procedures. These committees also enhance regulatory transparency by making proposed measures visible early in the regulatory process, subjecting them to systematic peer review, and providing an opportunity for technical dialogue. More than 95,000 TBT and SPS measures have been notified to the WTO since 1995.

The relevance of agreements on NTMs is steadily increasing. As noted, recent data highlights that for most economies NTMs now drive trade costs to a larger extent than tariffs (UNCTAD,

2026). In line with this, research consistently shows that NTMs, such as technical requirements and verification procedures, tend to reduce trade (World Bank, 2025). However, regulatory harmonization based on international standards, mutual recognition and equivalence agreements, as supported by WTO agreements, can limit this negative impact even for developing economies (Chen and Mattoo, 2008; Disdier, Fontagné and Cadot, 2015; Schmidt and Steingress, 2022). In addition, estimates suggest that non-notified regulations can be equivalent to a 28 per cent tariff, whereas transparency can reduce trade costs by 19 per cent (UNCTAD, 2026).

Evidence suggests that the TBT and SPS Agreements have enhanced transparency, limited trade-restrictive effects of NTMs and promoted good regulatory practices.

The TBT and SPS Committees have consistently helped to resolve disagreements before they become elevated to disputes by providing a non-litigious forum for technical dialogue. Although more than 1,500 specific trade concerns have been raised in the two committees, only around 100 disputes in these areas have been initiated, with only 27 of them resulting in a ruling (see Figure B.17). In anticipation of the creation of the WTO and the entry into force of the WTO TBT Agreement in 1995, membership in the International Organization for Standardization (ISO) increased sharply among low-income and middle-income economies. The number of ISO technical committees and sub-committees had already increased substantially after the GATT's 1979 Tokyo Round led to the conclusion of the initial TBT Agreement (World Bank, 2025). Similarly, the International Plant Protection Convention (IPPC) issued its first international standard on plant health in the lead-up to the entry into force of the SPS Agreement in 1995 to help its application (FAO and IPPC, 2006), and has since issued 47 further international standards on plant health. In line with this, the adoption of international as opposed to national standards is increasingly prevalent. For instance, of the 26,000 standards that make up the Swiss set of standards, 25,000 are regional or global standards, compared to only 1,000 national standards (Swiss Association for Standardization, 2026).

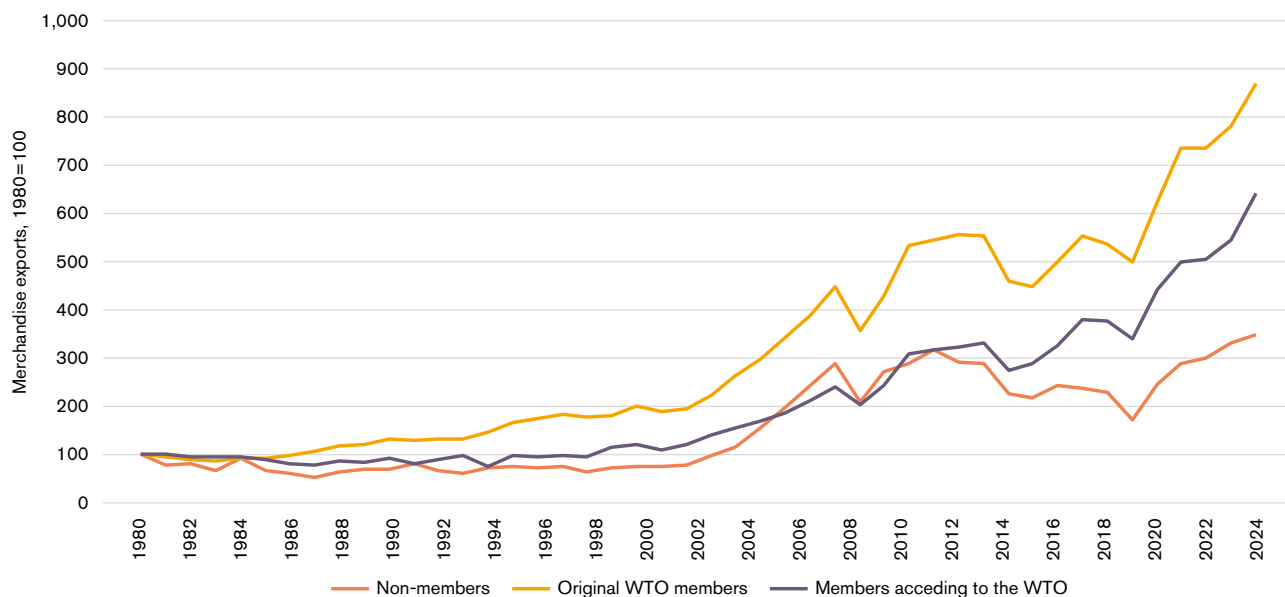
Trade has grown considerably since the creation of the GATT in 1947. Lower and more predictable trade costs have contributed to unprecedented levels of trade, both in absolute terms and as a share of

GDP. According to estimates, the global trade to GDP ratio was about 16 per cent in 1949 (Klasing and Milionis, 2014), compared with close to 60 per cent today. Trade growth in nominal terms, which expanded from around US\$ 60 billion in 1949 to more than US\$ 35 trillion in 2025 – an almost 600-fold increase, according to WTO and UNCTAD estimates – was even more extreme, and far outpaced GDP growth over the same period. Over the past two decades, trade growth has been driven by services trade, especially digitally delivered services, which has expanded even faster than goods trade. Services exports, when measured on a balance-of-payments basis,¹ now account for approximately 28 per cent of global trade and increased by about 8 per cent in 2025. Trade in digitally delivered services reached US\$ 5.26 trillion in 2025, up by 10 per cent. These services, which are traded cross-border through computer networks, accounted for 15.2 per cent of total world exports of goods and services (WTO, 2026a).

Empirical evidence suggests that the GATT and the WTO have contributed significantly to the increase in trade.

One study estimates that in 2000, relative to a counterfactual world without the WTO, world imports were higher by about 120 per cent, or about US\$ 8 trillion (Subramanian and Wei, 2007). More recent work finds that GATT and WTO membership, on average, increased trade between members by around 140 per cent, and between members and non-members by about 88 per cent over the period between 1980 and 2016, with gains concentrated among economies making more substantial policy commitments, and sectors where barriers were initially high and subsequently reduced (Larch et al., 2025). A meta-analysis on 71 studies complemented with state-of-the-art estimation reaches similar conclusions by finding a significant and positive, but heterogeneous, trade effect of the WTO (Campos et al., 2024). The role of commitments also stands out in Figure B.2, which highlights not only that export growth has been stronger for WTO members compared with non-members, but also that, over the past two decades, this effect has been most pronounced for those members which made more stringent commitments as part of their WTO accession under Article XII of the Marrakesh Agreement (i.e., new members since 1995).

Figure B.2: Export growth has been higher for WTO members



Source: WTO Secretariat calculations, based on data available at stats.wto.org (Series: Merchandise export value fixed-base indices – annual (2015=100)).

Note: Data for 148 economies for which sufficient observations available: eight non-members, 117 original WTO members, 23 members that acceded to the WTO from 1995. Data re-indexed to 1980.

WTO commitments facilitated not only the growth of traditional trade, but also the rise of global value chains (GVCs). Binding and comprehensive policy commitments particularly benefitted trade through GVCs, as value chains involve intense firm-to-firm interactions characterized by contracting over specialized products and investment (Antràs and Chor, 2022). Moreover, the back-and-forth trade through GVCs leads to trade cost accumulation effects (Escaith, 2017) that WTO tariff reductions minimized. As a result, GVC trade as a share of global trade rose from 35.2 per cent in 1995 to 48.7 per cent in 2022 (UIBE et al., 2023). A large cross-country study confirms the importance of the WTO for this expansion. It estimates that WTO accession increases GVC participation on average by almost 8 per cent (Fernandes, Kee and Winkler, 2022).

Trade growth arises not only from GATT commitments but also the additional agreements that form part of the WTO. For instance, one study finds that agreements that reduce fixed market entry barriers, such as the Trade Facilitation Agreement (TFA), significantly amplify the competitive gains from trade by expanding supplier entry and lowering supplier markups (Huang et al., 2026). Estimates suggest that the TFA has helped

reduce trade costs by 1.5 to 4 per cent on average (Duval and Utoktham, 2026). Research also shows that the TFA has increased trade, in particular in agriculture, between developing economies that made commitments; estimations indicate that agricultural trade increased by 5 per cent, while total trade increased by 1.17 per cent as a result of TFA implementation. Trade gains from the TFA accrued in particular to least-developed countries (LDCs), whose exports increased by 2.4 per cent overall and 17 per cent in agriculture (Beverelli et al., 2023). These effects are driven by implementation of the TFA rather than simple ratification (Kumari, 2024).

Evidence on sectoral trade highlights the benefits of the WTO's plurilateral agreements.

The Information Technology Agreement and its 2015 expansion lock in zero tariffs on hundreds of information and communications technology (ICT) products, accounting for roughly 97 per cent of global trade in ICT goods. Global trade in ICT products has grown more than three-fold since the ITA entered into force in 1997 – rising from US\$ 1.4 trillion to US\$ 5.31 trillion by 2022. A study on the ITA finds that the complete tariff elimination increased imports by 13 per cent within a broad machinery sector that constitutes one-third of world trade, highlighting additional benefits of bringing tariffs to zero (Henn

and Gnutzmann-Mkrtchyan, 2018). By contrast, non-signatories saw their participation in ICT GVCs fall by more than 60 per cent between 1995 and 2009 (Long and Ezell, 2023). Evidence from the 2016 Phase II expansion of the ITA shows that the import price indexes of participants fell by 1.4 percentage points on average, and that nearly half of the market access gains reflected positive coordination benefits that magnified contributions from individual tariff cuts and reduced policy uncertainty (Chochua and Iodice, 2025).

Another plurilateral agreement, the WTO's Government Procurement Agreement (GPA), stimulates more efficient international sourcing of the public sector. Government procurement accounts for about 12 per cent of global GDP (Mulabdic and Rotunno, 2022). Studies show that the GPA increased trade between participants (Chen and Whalley, 2011), especially trade in services through non-discriminatory provisions such as those on transparency (Mulabdic and Rotunno, 2022). The GPA has also led to more competition by creating the possibility of awarding a contract to a foreign firm and decreasing the number of contracts with single bidders. This, in turn, has lowered the probability that the procurement price is higher than the estimated cost (Taş et al., 2019). In contrast, research finds that local content requirements for government procurement come at a substantial cost. One study estimates that limiting the use of foreign inputs at government suppliers may create local employment, but at a cost of close to US\$ 250,000 per job (Bombardini et al., 2024).

Binding services trade policy commitments and supporting good regulatory practices through the GATS and other instruments has contributed to services trade growth. As mentioned above, services trade has been a major driver of trade growth over the past decades, with its share in total trade, on a balance-of-payments basis, more than tripling since 1970 (WTO, 2019). Recent work highlights that the rise of services value chains plays an important part in this, as services now contribute more value to overall value chain trade than goods (UIBE et al., 2025). The WTO has supported this rise by providing policy certainty through binding commitments and encouraging good regulatory practices. Most recently, a number of WTO members have adopted disciplines on services domestic regulations. Evidence suggests that, even where policy bindings in services allow for significantly more

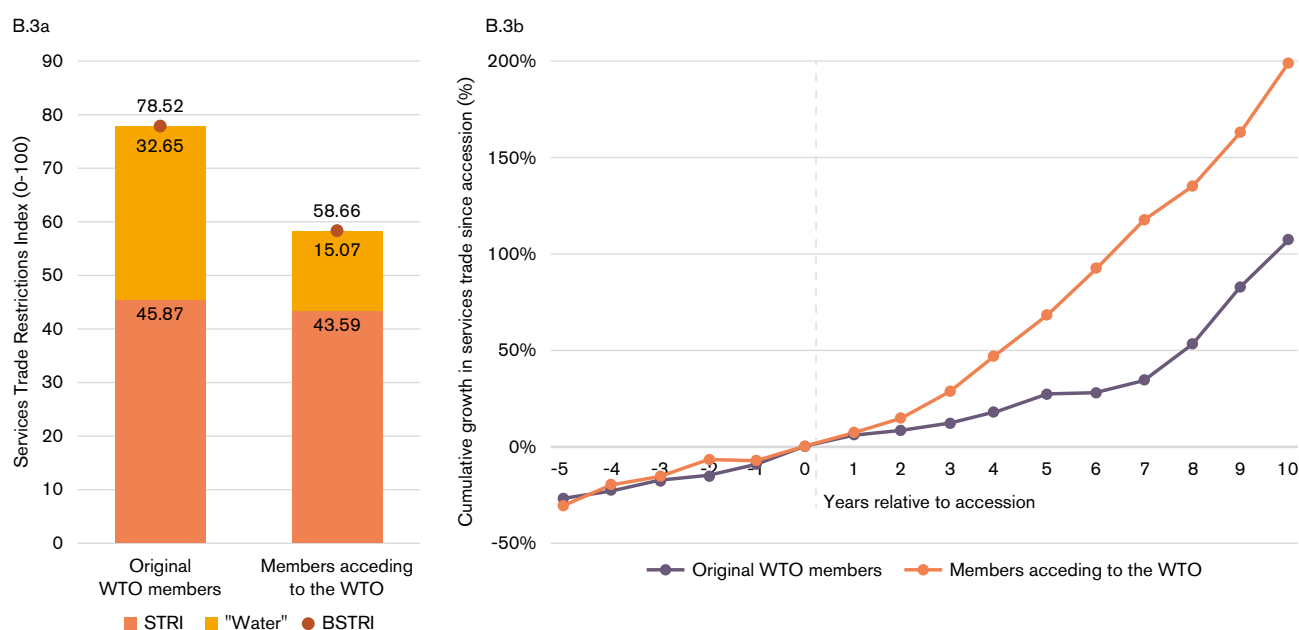
restrictive policies than the currently applied policies, the additional certainty provided by bindings does lead to an increase in services trade, with positive and significant effects especially in telecommunications, professional services and financial services (Ciuriak, Dadkhah and Lysenko, 2020; Lamprecht and Miroudot, 2020; Ciuriak, 2022). A recent study finds that the scheduling of the reference paper on telecommunications, which makes a set of regulatory best practices legally binding, is associated with an increase in total services trade, driven by digitally deliverable services (Nordås, 2026).

Economies with less restrictive applied policies and more stringent commitments on services trade have benefitted disproportionately from the rise of services. World Bank-WTO Services Trade Restrictions Indices² on applied and bound services regimes show that economies that acceded to the WTO under Article XII of the Marrakesh Agreement have, on average, less restrictive regimes and have taken more commitments than comparable original WTO members. This implies less trade policy uncertainty due to smaller differences between applied regimes and bound commitments, i.e., what is called “water” in commitments (see Figure B.3a). In turn, services exports relative to GDP are particularly high among these economies, and post-accession services export growth has been faster in members that acceded to the WTO compared with original WTO members, in line with the value of open trading regimes and of the certainty provided by WTO commitments (see Figure B.3b). This is in line, for example, with recent evidence finding that services exports from the United Kingdom between 2016 and 2018 suffered most in sectors with more trade policy uncertainty (Ahmad et al., 2023). Model-based estimates suggest that the removal of water in services commitments would increase services trade volumes by 12.65 per cent (Egger et al., 2025).

(ii) Higher incomes and sustainable inclusive development

The expansion of trade described in the previous sections has been an important engine of growth. Access to foreign markets and import competition allows the most productive firms within an economy to expand. Imported intermediate and capital goods facilitate technology diffusion and learning, allowing economies to adopt frontier technologies. In addition, larger export markets enable firms to exploit economies of scale, which enhances productivity

Figure B.3: WTO accession under Article XII is associated with higher services exports



Source: WTO Secretariat calculations, based on World Bank-WTO Services Trade Restrictions Index (STRI).

Note: The figure compares mean services trade restrictiveness across 128 WTO members covered in the Bound Services Trade Restrictions Index (BSTRI) data, split into Article XII acceders and original WTO members. The sample includes only economies with non-missing STRI and BSTRI averages. Values are simple averages across economies. "Water" as a measure of trade policy uncertainty is defined as BSTRI minus STRI.

Source: WTO Secretariat calculations, based on World Bank World Development Indicators (WDI) data.

Note: The figure shows cumulative growth in total services trade around WTO accession for Article XII acceded members and original WTO members. Each point represents the group average in a given year relative to accession.

and increases product variety. These channels are amplified when trade is embedded in broader reforms that strengthen institutions, improve the business environment and reduce policy uncertainty.³ In line with this, econometric evidence finds that a 1 per cent increase of globalization more broadly, including technology transfer and foreign direct investment (FDI), raises incomes by 0.5 per cent (Feyrer, 2019), of which about half can be assigned to goods trade (Feyrer, 2021). One study suggests that trade reforms add between 1 and 1.5 percentage points to annual GDP growth in developing economies, potentially lifting incomes by 10 to 20 per cent over a decade (Irwin, 2025). Quantitative trade modelling further suggests that for the median economy, the real income gains associated with 2007 levels of trade relative to autarky, i.e., no trade, were on the order of 50 per cent (Ossa, 2015).

The WTO contributes to income gains through trade by providing a reliable, rules-based framework that supports sustainable openness.

As discussed in more detail in Section B.2, the WTO enables members to lower trade barriers cooperatively and in a mutually beneficial way (Bagwell and Staiger, 1999). This mechanism has become even more important with the rise of GVCs that have reinforced the negative effects tariffs can have on trade partners (see Chapter C). One study estimates that GVCs have magnified the welfare gains from trade cooperation by almost 50 per cent (Beshkar and Lashkaripour, 2020). Moreover, by credibly binding restrictive trade policies, WTO members can help provide the predictability and certainty that firms require for long-term investments in export-oriented activities and in sectors linked to GVCs (Handley and Limão, 2022; Osnago, Piermartini and Rocha, 2018). In this sense, the WTO functions as an external commitment mechanism that facilitates domestic reform in favour of growth. For a first-hand perspective of the income gains from trade and a business perspective of WTO contributions to business value, see the opinion pieces by Anne Ewurabena S. Sarfo and John W. H. Denton AO.

How the WTO supports my international trade: a small business perspective

by Anne Ewurabena S. Sarfo

Founder and CEO, Annes Perfections, Ghana

In the early stages of building my business, I had little awareness of the global systems that govern trade. My education is solely in the sciences, and my entrepreneurial skills were developed through hands-on experience and family role models engaged in business. The World Trade Organization was not part of my vocabulary until 2021, when I attended export readiness trainings that introduced me to the Trade Facilitation Agreement (TFA) and the International Trade Centre (ITC) platform, a joint initiative of the WTO and United Nations that soon became central to my international trade decisions.

As founder of Annes Perfections, a Ghana-based food company producing premium and safe food products including peanut butter, chocolate-based butters, roasted nuts, breakfast cereals, dried fruits and healthier snack alternatives, my access to market intelligence has been critical. Through my growing understanding of the WTO TFA, I have come to appreciate the importance of transparent and efficient trade systems for small businesses engaged in international trade.

On several occasions, when I travelled for trade shows and business-related events to countries including Canada, Côte d'Ivoire, South Africa and the United States, I noticed that customs procedures were often smoother than I had expected. Goods and exhibition materials were processed without excessive delays or prolonged holding at customs. While several factors contribute to this efficiency, I believe global trade facilitation rules and customs modernization efforts under agreements such as the WTO TFA play a major role.

As I continue working towards exporting my products to additional markets, I have also realized how important access to information is. Details relating to labelling requirements, customs documentation, import procedures, food compliance standards, tariffs and other regulatory requirements are readily accessible and clearly published. This has made it easier to make the necessary adjustments and modifications in labelling, packaging and documentation ahead of shipment.

The ITC's tools also taught me to see trade as a system to be studied and navigated. I used them to research market opportunities, identify promising export destinations and analyse international price benchmarks for raw materials. This information reshaped how I positioned Annes Perfections and helped to ensure that our products aligned with international expectations for quality and standards.

Practical constraints, however, remain. Even with access to information, small and medium-sized enterprises often face certification costs, quality control requirements, logistics challenges and financing gaps. For food businesses, meeting international standards requires technical knowledge, infrastructure and continuous adaptation. While these standards are important for ensuring quality and consumer confidence, the associated costs can be challenging for smaller businesses seeking to expand internationally.

Despite these limitations, WTO-supported platforms continue to play a meaningful enabling role by translating complex trade frameworks into practical tools. For my business, these resources directly influenced which markets I targeted, how I adapted product formulations, and how I approached compliance and export readiness.

As global trade becomes increasingly interconnected and competitive, ensuring that the smallest participants in the global economy can effectively understand and utilize these systems will become even more important. Hence, bridging the gap between policy and practice and between global frameworks and local enterprises will be essential.

For businesses like mine, the opportunity is clear. The question is whether the system can continue evolving in a way that ensures that opportunity is not just theoretical, but truly accessible.

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Opinion pieces are the sole responsibility of their authors. They do not necessarily reflect the opinions or views of WTO members or the WTO Secretariat.

The value of the WTO: a business perspective

by John W. H. Denton AO

Secretary General, International Chamber of Commerce

The global network of the International Chamber of Commerce (ICC) reaches more than 45 million companies in over 170 countries. Most are small and medium-sized enterprises. They do not experience the WTO as an institution in Geneva. They experience it through the conditions that allow them to trade: whether a product can cross a border without arbitrary delays, whether a digital service can reach a customer abroad, whether rules are transparent enough for a smaller firm to understand and follow.

That is the business value of the WTO. It is not only a negotiating forum. It is the treaty and institutional infrastructure that has helped to make global trade operate according to rules rather than power. It reflects decades of negotiated disciplines and commitments that no bilateral or regional agreement can fully replicate, and it gives businesses – especially smaller ones – a baseline of predictability without which cross-border trade becomes the preserve of those large enough to absorb uncertainty. That infrastructure would be almost impossible to build today.

What the rules were designed to do – and where they have worked

The original bargain was straightforward: bind market access through negotiated commitments, discipline discrimination between trading partners and between domestic and foreign goods and services, and provide a common forum in which differences could be settled by reference to law rather than relative power. For governments, this offered a credible mechanism to negotiate liberalization while preserving regulatory authority. For businesses, it offered the certainty needed to invest, contract and plan across borders.

Even in the current geopolitical climate, the system continues to act as a form of systemic safety net. Independent modelling commissioned by ICC found that the dissolution of the WTO would cause a 33 per cent drop in developing economies' non-fuel goods trade and a permanent 5 per cent loss of their GDP, with the heaviest costs falling on Sub-Saharan Africa and South Asia.

Elements of that framework continue to shape behaviour. Tariff bindings limit escalation. Disciplines on TBT and SPS measures influence regulatory

approaches. Trade facilitation rules support more efficient border procedures, with disproportionate benefits for smaller firms.

Where the system has not kept pace

The rulebook has not evolved in areas now central to modern trade – most clearly the digital economy, but also the unfinished agenda on services. The application of existing rules is increasingly uneven, with growing reliance on unilateral measures outside the multilateral framework. The dispute settlement system, long a cornerstone of the bargain, is operating at reduced capacity – and enforceability is not a procedural detail. It is what gives commitments their economic weight.

This is creating a widening gap between the framework that exists and the realities it is meant to govern. The result is a more fragmented operating environment, where policy direction is harder to anticipate and risk is harder to price, affecting investment decisions, supply chain design, and whether smaller firms can participate in cross-border trade at all.

What businesses ultimately rely on is not perfection, but a degree of confidence – that rules will be applied with a measure of consistency, that markets will remain open, and that differences can be managed within a common framework.

As uncertainty becomes the defining feature of the global economy, the WTO remains the only framework with the reach, legitimacy and structure to provide that common foundation at a global scale. Sustaining it will require flexibility – including more variable approaches that can accommodate the diversity of all WTO members while preserving the integrity of the system as a whole. The task is to ensure that the WTO can continue to do so in a way that reflects how trade is actually conducted and that continues to support firms of all sizes.

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Empirical evidence suggests that WTO membership has a positive impact on income and economic growth.

An econometric study on 135 economies finds that accession to the WTO can increase a developing economy's growth rate by about two percentage points for approximately five years when the accession process involves rigorous commitments. Although the acceleration in growth is temporary, the level effect is permanent: the economy remains about 20 per cent larger than it would have been had it not acceded to the WTO (Tang and Wei, 2009). Extending the analysis to 32 newly acceded economies, a subsequent study confirms the positive impact of WTO membership. It estimates that five years after accession, an economy is 30 per cent larger, and that the impact of WTO entry on growth persists beyond the first five years (Brotto, Jakubik, and Piermartini, 2021). Quantitative trade modelling finds that 30 per cent of the aggregate gains from trade are due to participation in trade agreements (Beshkar and Lashkaripour, 2020). It is likely that the GATT and WTO account for the majority of this impact, given that around 72 per cent of all goods trade is conducted under the WTO's MFN tariff terms, compared with only 16 per cent benefitting from preferential tariffs (WTO, 2026a). In absolute terms, one study estimates that the WTO membership achieved a total increase in global prosperity of around US\$ 855 billion, which corresponds to an average gain of about 4.5 per cent of GDP per member. The largest absolute gains have accrued to the United States, China and Germany (Felbermayr et al., 2019).

Real incomes have also increased because globalization and WTO membership moderated inflation.

The three decades preceding the COVID-19 pandemic were not only a period of rapidly expanding trade volumes, but also one of historically low inflation. Trade barriers such as tariffs increase prices by driving a wedge between exporter and importer prices. Recent evidence suggests that pass-through of tariffs to import prices is high (Amiti, Redding and Weinstein, 2019; Flaaen et al., 2025; Gopinath and Neiman, 2026) (see Box B.2), which typically results in higher consumer prices. Lower trade barriers also intensify competition and reduce markups, providing another disinflationary impact. Yalcin, Larch and Yotov (2022) estimate that around 85 per cent of WTO members experienced a decrease in relative consumer prices compared to the rest of the world because of WTO membership. In line with this, macroeconomic

evidence finds that globalization has been an increasingly relevant factor behind the moderation of inflation since the creation of the WTO (Attinasi and Balatti, 2021; Borio and Filardo, 2007; Pehnelt, 2007), and an empirical study has shown that a 1 percentage point increase in import penetration from China in a product category caused a 1.9 per cent decline in US consumer prices, relative to less exposed product categories (Jaravel and Sager, 2019).

Domestic reforms play an important role in the growth impact of WTO accession.

WTO accession often entails comprehensive reforms of trade regimes, state trading enterprises, subsidy policies and regulatory frameworks. When accession is embedded in broader reform packages, it can induce more efficient resource allocation, reduce rents associated with trade protection, and foster a more competitive and transparent economic environment. In the previously cited study by Tang and Wei (2009), results persist even after controlling for the effect of accession on trade as a share of GDP, suggesting an additional growth impact from policy commitments and institutional reforms beyond pure trade volume effects. Brotto et al. (2021) show that the pro-growth effects of WTO accession are stronger for accessions that require comprehensive domestic reforms. Analysing the impact of reforms during WTO accession explicitly, recent research finds that economies that implemented reforms and made deeper commitments during their WTO accession negotiations grew on average 1.5 percentage points faster than WTO members that underwent no such process (Brotto et al., 2024; WTO, 2024b).

The positive impact of trade on knowledge diffusion and innovation is key to its growth-enhancing effect.

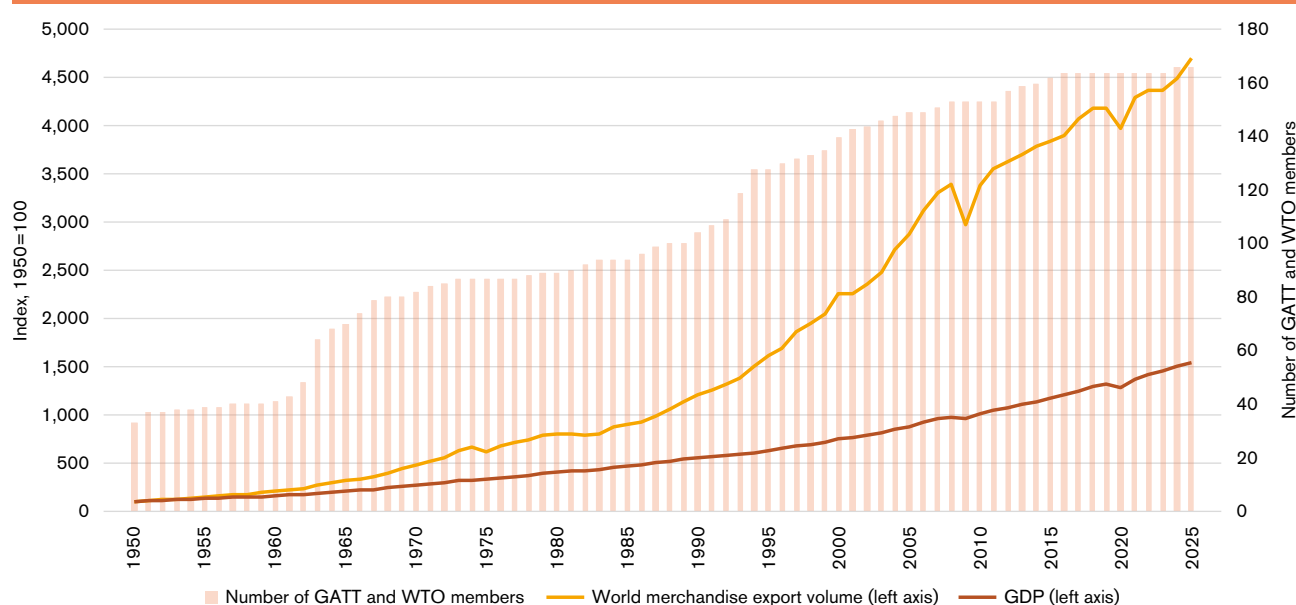
Trade does not only create static gains through scale and specialization; it can also increase dynamic gains from innovation and the diffusions of knowledge, for instance through trade in intermediates (Cai, Li and Santacreu, 2022; Melitz and Redding, 2023; Keller, 2026). Investments in research and development (R&D) require predictability, as provided by the WTO, due to their risky and long-term nature, and they benefit from scale, as provided by market access through WTO membership. Evidence suggests that WTO accession leads to increased innovation (Choi and Choi, 2025), with particularly large effects in sectors facing initially greater trade policy uncertainty (Liu and Ma, 2020).

For innovation, incentives for investors are also necessary. R&D often depend on large upfront costs, while returns are uncertain. Intellectual property (IP) rights can reduce this uncertainty and thereby encourage innovation. IP protection can also increase trade and FDI flows toward low-income and middle-income economies by providing legal instruments to foreign firms and investors. On the other hand, IP protection may inhibit knowledge diffusion and limit competition (Maskus, 2019). By guaranteeing minimum standards of IP protection, the WTO TRIPS Agreement can contribute to a balanced outcome. While there is consistent empirical evidence of economic benefits to IP rights-holders, more recent work also highlights the benefits of IP rights (IPR) for low-income and middle-income economies (Saggi, 2016; Maskus, 2019; Neves et al., 2021). For instance, there is evidence that in economies with weak IPR regimes, firms source fewer inputs from each supplier to reduce the risk of imitation. Under strong IPR regimes, imitation risk is minimal and supplier concentration is highest, which facilitates knowledge diffusion (Eppinger et al., 2026). Particular gains from IP rights appear to accrue to previously marginalized innovative groups; for example, China's WTO accession in 2001 disproportionately boosted patenting by female inventors (Agrawal et al., 2024).

The positive impact of trade on knowledge diffusion, as well as trade in green goods, is also instrumental in supporting the green transition and sustainable growth. A decomposition of carbon emission growth from 1995 to 2018 shows that increased emissions from higher output have been partly offset by a concurrent fall in the carbon intensity of production (WTO, 2023c). Trade is critical for this fall in carbon intensity, as it ensures access to green technologies and knowledge globally at affordable prices. Kavlak, McNerney and Trancik (2018) estimate that about 40 per cent of the recent decline in solar-power costs can be attributed to scale economies, which are made possible in part by international trade and cross-border supply chains. In keeping with this, Helveston, He and Davidson (2022) find that if trade in solar photovoltaic modules had been more restrictive over the decade preceding 2020, prices of these products in 2020 would have been 54 per cent higher in China, 83 per cent higher in Germany and 107 per cent higher in the United States.

The benefits of trade spread around the world with a steadily growing membership of the GATT and then the WTO, contributing to more inclusive globalization. The evolution from 23 GATT signatories to today's 166 WTO members has coincided with a substantial expansion of trade and GDP (see Figure B.4) and demonstrates the

Figure B.4: Growing membership of the multilateral trading system coincided with more trade and higher GDP



Source: WTO Secretariat calculations.

Note: Exports refers to world merchandise export in volume terms. GDP refers to real GDP at market exchange rates.

organization's enduring appeal. In 2025, WTO members accounted for around 98 per cent of global trade and 94 per cent of the global population, up from 87 and 69 per cent, respectively, in 1995. This has extended the benefits of trade cooperation to an additional 2 billion people over the last 30 years – further strengthening the global relevance of the multilateral trading system (Zhang, 2025).

WTO membership has generated substantial economic benefits in many low-income and middle-income economies, contributing to sustained income convergence and poverty reduction. The share of trade between developing economies in global trade increased from 9.8 per cent in 1995 to 24.6 per cent in 2022 (D'Andrea et al., 2024). Evidence finds that between 1980 and 2016, GATT/WTO membership increased exports of poorer economies relatively more than those of advanced economies (Felbermayr et al., 2024). From 1995 to 2023, the average global per capita income, adjusted for inflation, increased by about 65 per cent, but it nearly tripled in low-income and middle-income economies. Between one-fifth and one-third of this unprecedented income convergence can be attributed to trade cost reductions in low-income and middle-income economies. This rise in income contributed to substantial poverty reduction in the growing economies, and the percentage of individuals living in extreme poverty decreased from 40 per cent in 1995 to 10 per cent in 2024.⁴ As discussed above, the income gains were larger in economies that made more stringent commitments when acceding to the WTO.

Membership in the GATT and the WTO has also led to substantial benefits for high-income economies since 1947, with more recent gains linked to services trade and IP. Prior to the latest period of income convergence, evidence suggests that goods trade gains from membership in the GATT and the WTO were larger among high-income economies (Kohl, 2017). Data on more recent years highlights that structural change within high-income economies has shifted the source of trade gains of those economies away from goods and towards services, supported by the GATS and TRIPS Agreements. WTO statistics show that the world's top three exporters of services – the United States, the United Kingdom and Ireland – account for 26.2 per cent of commercial services exports. Among the 20 largest services exporters, 18 are high-income economies. At the same time, services

exports are growing particularly rapidly in many developing economies. In 2025, Africa recorded the fastest regional growth in services exports (14 per cent), while several developing economies in Asia also posted strong growth. These trends suggest that services trade is becoming an increasingly important source of export growth across a wider range of economies. With regard to IP, and as discussed above, the TRIPS Agreement can benefit economies with strong innovation ecosystems through increased licensing and commercialization opportunities, while also facilitating access to knowledge and technology in importing economies.

(iii) The effects of the multilateral trading system on resilience and peace

The multilateral trading system has helped economies to respond to shocks without imposing large costs on their trade partners. For example, during the 2008-09 global financial crisis, WTO trade monitoring documented that although G20 economies introduced some trade-restrictive measures, these were limited in scale and most were subsequently rolled back, and the beggar-thy-neighbour spiral of the interwar period did not materialize (Pedersen et al., 2018). Using pre-crisis relationships between macroeconomic shocks and trade policy, one study estimates that the downturn could have triggered a much larger wave of new temporary trade barriers than what was observed; however, by the end of the recession, total import protection had increased by only 1 to 2 per cent as opposed to the 15 per cent that the model had forecast (Bown and Crowley, 2013). Similarly, during the COVID-19 pandemic, most trade-restrictive measures introduced at the outset of the pandemic were subsequently withdrawn, and many trade-opening measures were simultaneously introduced to facilitate flows of essential medical supplies (WTO, 2021). More general evidence shows that more stringent tariff bindings reduce the likelihood of responding to import shocks by raising tariffs, suggesting that without bindings, economies would be 4.3 times more likely to raise tariffs (Jakubik and Piermartini, 2023).

The WTO's transparency and monitoring infrastructure has played an active role in enhancing resilience during crises. During the COVID-19 pandemic, real-time WTO monitoring provided visibility into the trade measures governments were adopting, and this reduced

uncertainty in global markets due to a lack of information. Working with vaccine manufacturers and other international organizations, the WTO identified bottlenecks in vaccine supply chains and contributed to efforts to increase production volumes and decentralize manufacturing capacity. The Agricultural Market Information System (AMIS),⁵ an inter-agency platform co-managed by the WTO and partner agencies, tracks supplies of key agricultural commodities, reassuring markets when supplies are adequate and coordinating policy responses when they are not.

Policy restraint and transparency have supported the fast and comprehensive recovery of trade after recent crises. A system that results in low and non-discriminatory tariffs and more transparent and harmonized NTMs significantly facilitates crisis adaptation for firms and helps them to build resilience through agility. In line with this, trade has proven highly resilient over the past two decades despite major consecutive shocks. Although the global financial crisis, the COVID-19 pandemic and the war in Ukraine all led to sharp contractions in trade of certain products, trade rebounded quickly and comprehensively (UIBE et al., 2025). WTO analysis found that even economies highly dependent on cereal imports from Russia and Ukraine were able switch to alternative suppliers within months (WTO, 2023a).

The system's agility and resilience help broader economic recovery, lowers GDP volatility and limits crisis-induced price increases. Model-based simulations at the onset of the war in Ukraine estimated that in a counterfactual situation of cascading export restrictions, wheat prices could have risen by up to 85 per cent in some low-income regions, compared with the actual increase of 17 per cent (WTO, 2023a). As GDP often recovers more rapidly in economies with stronger pre-existing trade linkages, trade openness was key to broader economic resilience and recovery during the COVID-19 pandemic (WTO, 2021). This may help to explain why more trade integration has been shown to be associated with lower GDP volatility (Caselli et al., 2020), and why more local supply chains would have implied larger welfare losses during the COVID-19 pandemic (Bonadio et al., 2021).

Beyond resilience and economic security, the multilateral trading system has contributed to a reduction in incidences of inter-state conflict. Commercial interdependence promotes peace by

raising the economic cost of conflict. A substantial body of research finds that higher bilateral and multilateral trade interdependence reduces the probability of militarized disputes (Polachek, 1980; Oneal and Russett, 1999; Barbieri and Peters, 2003; Gartzke and Li, 2003; Hegre, Oneal and Russett, 2010). While some research has questioned these findings (Barbieri and Levy, 1999; Kim and Rousseau, 2005; Martin, Mayer, and Thoenig, 2008), more recent work with updated methodologies consistently confirms the pacifying effect of trade (Lee and Pyun, 2016; Yakovlev and Spleen, 2022; Feng et al., 2026). At the same time, recent geopolitical developments have heightened concerns about strategic dependencies arising from the concentration of production in certain critical sectors. These issues are discussed further in Chapter C.

International cooperation acts as a multiplier of the pacifying effect of trade. Regional and multilateral trade cooperation further increases the opportunity costs of conflict and incentivizes third parties to defuse conflicts between trade partners to minimize losses they themselves may suffer as a result of those conflicts (Maoz, 2009; Martin, Mayer and Thoenig, 2012; Lupu and Traag, 2013). Empirical evidence reveals that shared membership in international organizations reduces governments' propensity for violent conflict at a bilateral level (Russett, Oneal and Davis, 1998; Bakaki, 2018), in particular among those who share more joint memberships (Dorussen and Ward, 2008; Böhmelt, 2009). Research using WTO membership as an instrument for trade finds that WTO-facilitated trade has a significant peace-promoting effect, with deeper tariff reduction commitments associated with greater reductions in conflict incidence (Aaronson, Abouharb and Wang, 2015; Huang and Li, 2024).

(b) The benefits of trade cooperation have not been shared equally

The large average gains from WTO membership may hide the fact that the benefits are distributed unequally both across and within economies. As described in detail in the *World Trade Report 2024* (WTO, 2024b), uneven convergence and structural transformation have remained a defining feature of the post-1995 trade landscape. Almost three decades of income convergence between low- and middle-income economies and high-income economies have not changed the fact that a subset of developing economies remains at the margins of the global trading

system. Instead, gains have accrued primarily to certain regions, which has led in some instances to high levels of trade concentration. Moreover, income convergence between low- and middle-income economies and high-income economies took a backward step during the COVID-19 pandemic. In addition, despite aggregate gains at the economy-wide level, some individuals within many economies have suffered sustained losses from the adjustment pressure that trade brings about. Complementary national policies to redistribute gains and facilitate adjustment often display gaps and are under-researched.

(i) Uneven income convergence and increasing concentration

WTO membership has not led to universal income convergence. Between 1996 and 2021, per capita GDP in about one-third of low-income and middle-income economies grew slower than the average high-income economy. While middle-income economies also account for about half of the group, many diverging economies – i.e., economies with slower GDP growth, in which incomes are diverging from those of high-income economies – are LDCs. In line with this, LDCs still account for less than 1 per cent of world trade. Africa and Latin America and the Caribbean are the most affected regions, while there are no diverging economies in Asia and Europe. A lack of political stability, as well as exposure to conflict, can explain divergence for a relevant share of this group, although other factors play a role as well (WTO, 2024b).

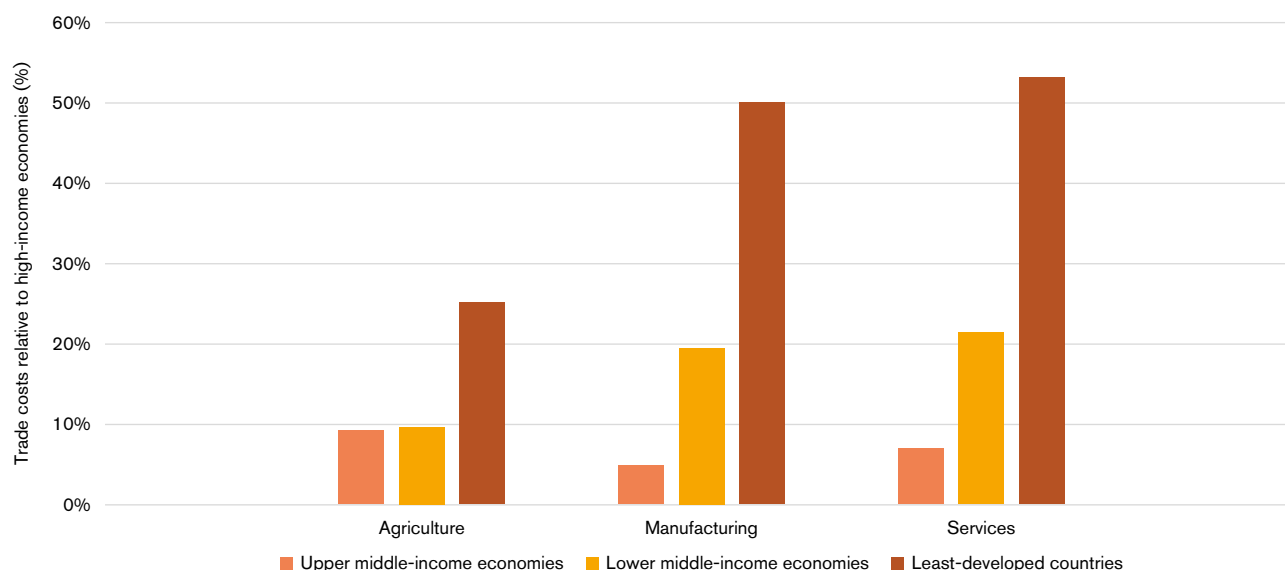
The trade and investment profiles of diverging economies differ significantly from those of converging economies, providing insights into the causes of divergence. Diverging economies typically exhibit low participation in international trade, low levels of FDI, or commodity dependence. Their trade often involves non-complex products with few partners. Three-quarters of diverging economies have exhibited trade participation that is below the average of their income group. The remaining quarter has had high trade participation, but has mainly been limited to primary commodity trade, and has failed to bring about structural transformation toward higher value-added manufacturing and services. As a result, these economies have not achieved sustained economic growth (UNCTAD, 2023; WTO, 2024b).

Limited trade participation and low growth are driven by a variety of factors, including

structural domestic constraints. Underdeveloped infrastructure and geographical challenges impede sustained economic development – for example, landlocked economies and small-island developing states face particularly high trade costs. In many diverging economies, the impact of underdeveloped infrastructure is magnified by a lack of competitive conditions for the supply of infrastructure and distribution services. For instance, there is a large gap between low-income and high-income economies in terms of the liberalization of electricity and telecommunication services (WTO, 2024b). Weak financial and legal institutions among diverging economies further raise trade obstacles, as international trade relationships are particularly dependent on contract enforcement and trade finance (Ahn, Amiti and Weinstein, 2011; Antràs and Foley, 2015). Poorly functioning capital, labour and land markets prevent productive firms from expanding and reaching the scale necessary to be competitive in international markets. Such obstacles or frictions also make it harder for populations to develop the skills required by firms engaged in trade. The prevalence of distortions and market failures has prevented diverging economies from integrating into global markets or benefitting from its existing trading relationships (Atkin et al., 2022).

High trade costs continue to hold back the trade participation of many diverging economies. The WTO Trade Cost Index,⁶ a measure of all the frictions that affect international trade relative to domestic trade, including both structural and policy factors, shows that relatively poorer economies continue to face substantially higher trade costs. LDCs are particularly affected, as they face by far the highest trade costs among all income groups. Indeed, in manufacturing and services, the trade costs of LDCs exceed those of high-income economies by 50 per cent, impeding trade-led structural transformation. In agriculture, a major exporting sector for LDCs, the difference is smaller, but at 25 per cent, it remains substantial (see Figure B.5).

Trade policy contributes to the high trade costs faced by diverging economies. Applied tariffs stand at around 12 per cent on average for low-income economies and LDCs, compared with 5 per cent in high-income economies. Diverging economies apply even higher tariffs compared with other economies in their income group, and this difference has increased in the past decade. The differences in bound tariffs are even larger, with the

Figure B.5: Trade costs are higher in lower-income economies

Source: WTO Secretariat calculations, based on the WTO Trade Cost Index.

Note: The figure illustrates the average trade costs in low-income and middle-income economies relative to high-income economies in 2022 by sector. The analysis covers 80 economies, of which eight were LDCs in 2022. The income groups are based on the 2022 World Bank classification. The LDC group is based on the United Nations (UN) classification..

average among LDCs and low-income economies exceeding 50 per cent, compared with 24 per cent in high-income economies, introducing significant trade policy uncertainty (see Figure B.8). Diverging economies' progress on implementing the Trade Facilitation Agreement, which reduces administrative red tape at borders, has also been slow, delaying customs procedures and increasing compliance costs. In 2023 the TFA implementation rate by low-income and lower middle-income economies was about 25 percentage points below that of high-income economies (WTO, 2024b). Applied services trade policies are also more restrictive in low-income and lower middle-income economies compared with those in higher-income economies (Baiker et al., 2025). The recently released World Bank-WTO Bound Services Trade Restrictions Indices⁷ further highlights that, as low-income economies have made fewer commitments at the WTO, their policies are not only more restrictive, but there is also greater trade policy uncertainty mirroring the same patterns as for goods (Baiker et al., 2026).

The multilateral trading system has not been able to remove relevant trade barriers for diverging economies, despite supporting preferential market access schemes. While the trade policies of diverging economies raise import costs, policies

by trade partners also contribute to the high trade costs observed in Figure B.5. Tariffs on exports of low-income economies are comparatively low, as these economies benefit from preferential schemes such as the Generalized System of Preferences (GSP) – preferential treatment granted to developing economies by certain developed economies – or complementary regimes. However, eligibility conditions and other factors limit take-up. For instance, about 40 per cent of imports qualifying for GSP entered the United States without claiming the preferences between 1997 and 2008, largely because of complex rules of origin (Hakobyan, 2015). Moreover, multilateral trade-opening and regional trade agreements (RTAs), of which low-income economies and LDCs are rarely a part, have eroded the preferential margins afforded by GSP, as a substantial share of trade is duty-free on an MFN or RTA basis (Gonciarz and Verbeet, 2025; Acharya and Parajuli, 2025). Frequent renewal requirements introduce permanent uncertainty about preferential programmes (Handley and Limão, 2022), especially since expiry or withdrawal has a large and sustained chilling effect on trade (Hakobyan, 2020; Gnutzmann and Gnutzmann-Mkrtchyan, 2022; Tanaka, 2022). In addition, exclusion criteria, such as the GSP's competitive need limitations, tend to hurt the most productive exporters and prevent sustainable trade growth (Hakobyan, 2017).

Non-tariff barriers and subsidies particularly distort the competitive environment for low-income economies. Compliance with TBT and SPS measures often requires substantial investments in testing, certification, traceability and quality infrastructure. While such measures pursue legitimate public policy objectives, fixed compliance costs can represent proportionally larger barriers for smaller exporters in developing economies, particularly where technical and financial capacities remain limited (WTO, 2022). A large body of literature finds that an increase in TBT and SPS measures reduces exports of developing economies (World Bank, 2025). Similarly, limited fiscal capacity in poorer economies can lead to an uneven playing field in sectors subject to domestic support or industrial subsidies. Data from the Organisation for Economic Co-operation and Development (OECD) show that agricultural producer subsidies are increasingly used not only by high-income economies, but also by large middle-income economies, and such distortions are affecting an ever-growing share of global demand in a sector that is critical for exports from low-income economies (WTO, 2024b).

The increasing concentration of trade limits opportunities for diverging economies. The substantial reduction of trade barriers supported by the multilateral trading system, as well as technological change, has supported patterns of specialization that can lead to concentration, especially when fuelled by government support. In particular, the rise of GVCs has been linked to hyper-specialization, and this may make meaningful trade-led development harder to achieve (Baldwin, 2013; Antràs, 2020). In line with this, estimates suggest that trade has become substantially more concentrated since 2000. For goods, the share of trade in products with a concentrated supply more than doubled from about 8 per cent in 2000 to 18 per cent in 2017, with a slight decline to 16 per cent subsequently (Majune, Piermartini and Stolzenburg, 2026). In services, sectors with a concentrated supply accounted in 2025 for 32 per cent of total services trade, up from around 20 per cent in 2005 (Stolzenburg and To, 2026).

Long-standing unresolved issues at the WTO – most notably the stalled Doha Development Agenda – are linked to many of the issues faced by diverging economies. The suspension of the Doha Round has remained a point of concern for LDCs and other low-income economies. These concerns include ongoing exposure to subsidized

competition in industries such as cotton, and challenges associated with diversification into higher value-added activities and market access commitments for agricultural products and labour-intensive manufactured goods. Over time, the prolonged impasse may have reinforced structural disadvantages for economies that rely heavily on commodities. Simulations suggest that a Doha agreement would have delivered measurable, even if limited, development gains: at the time of the negotiations, a study estimated that a prospective Doha Development Agenda package could reduce poverty for 4.3 million people living on the poverty line of US\$ 1 per day line by 2015. Moreover, a Doha merchandise trade package could have raised developing-economy welfare by about US\$ 16 billion annually, and increased exports from developing economies by about US\$ 78 billion, including US\$ 41 billion in agriculture, US\$ 25 billion in textiles and clothing, and US\$ 12 billion in other manufactures (Anderson, Martin and van der Mensbrugghe, 2006).

Major global trends provide new opportunities, but they may also reinforce concentration and disparities in global trade in the absence of multilateral cooperation. The growing importance of digital infrastructure, data-intensive production and artificial intelligence (AI)-related technologies may widen income gaps. Economies with limited digital infrastructure, weak technological capabilities or constrained access to energy and digital networks may face additional challenges in integrating into emerging digitally enabled trade. Evidence indicates that unilateral policy support in high-income and upper middle-income economies is widening the digital divide (WTO, 2025). Climate change is also estimated to be having a disproportionate impact on poorer regions (WTO, 2022b). Evidence indicates that cooperative measures would be significantly more efficient in limiting emissions without harming developing economies than unilateral measures (Bekkers et al., 2025), but progress to that effect has been limited. Finally, geopolitical tensions have already led to fragmentation of trade and a rewiring of global supply chains that are excluding regions considered risky in light of the rise in unilateral trade measures (WTO, 2023c; UIBE et al., 2025).

(ii) Uneven outcomes within economies

The gains from trade integration have been distributed unevenly within economies. Aggregate gains from trade typically arise due to a shift in resources within economies, from

relatively less to more productive firms or sectors. In the labour market, this shift naturally leads to disparate outcomes, for instance between workers in contracting sectors as opposed to workers in sectors with a comparative advantage, or between workers in export-dependent regions as opposed to workers in import-competing regions. As a result, effective adjustment mechanisms are required to ensure that individuals do not suffer sustained losses from trade (WTO, 2024b). However, a large literature has documented substantial adjustment frictions in both developing and advanced economies (Atkin et al., 2022; Dix-Carneiro and Kovak, 2026).

Empirical evidence finds that a rise in trade can lead to stark differences in worker outcomes across many dimensions, including firms, sectors, regions and occupations. Data on exporter wage premiums highlight that workers at large exporting firms benefit significantly more from trade than workers at smaller firms (Bernard et al., 2007; Brambilla, Depetris Chauvin and Porto, 2017). Effects also differ substantially across sectors and regions; for example, following a rise in trade with China between 1990 and 2008, US regions specialized in manufacturing experienced a relative decline in income, while regions more specialized in agriculture or services benefitted from relative income gains (Autor, Dorn and Hanson, 2013; Caliendo and Parro, 2023). Similar regional and sectoral diverging effects were observed in Germany after an increase in trade with China and Central Eastern Europe in the early 2000s (Dauth, Findeisen and Suedekum, 2014), highlighting the importance of both sectoral and regional exposure to trade impacts. Research has also identified that effects differ across different occupations or across workers with different skillsets, which in some cases are even more divergent than across sectors (Amiti and Davis, 2012; Ebenstein et al., 2014; McCaig and Pavcnik, 2018; Basco et al., 2024).

While the initial exposure to an increase in trade determines short-term impacts, the ability to adjust is critical for longer term outcomes. Employment and income losses among import-competing workers will arise in most cases after trade-opening, but evidence suggests that the speed of adjustment determines longer-term outcomes. Recent evidence from Switzerland finds that positive earnings effects after a trade surge in 2015 were largest for workers that switched jobs (Arni et al., 2024). Exploiting a historic episode of a grain import

surge in Prussia around 1900, another study shows that persistent negative income effects on affected workers were avoided due to a strong labour mobility response toward other sectors and regions (Bräuer and Kersting, 2024). In contrast, evidence from regions in Brazil and the United States that were hit by import competition shows relatively long recovery periods, driven by slow adjustment (Dix-Carneiro and Kovak, 2017; Autor, Dorn and Hanson, 2023).

Addressing market distortions and adjustment frictions is critical to share the gains from trade as broadly as possible. Various factors, such as informality, firm-level market power or mobility costs, prevent individuals from moving toward gains from trade. For example, studies on Brazil and Mexico have found that, in response to import shocks, workers enter the informal sector and remain in informality for extended periods, rather than migrating to other regions or sectors that offer more formal employment opportunities (Arias et al., 2018; Dix-Carneiro and Kovak, 2019). Similarly, monopsony power in the labour market – i.e., where there is only one large employer in a particular region – reduces incentives to move toward large productive exporters. Evidence shows that in regional labour markets with few employers relative to workers, firms are more likely to use export revenue to raise profits rather than wages (Amodio and Roux, 2024; Amodio, Medina and Morlacco, 2025; Felix, 2026). A lack of adequate infrastructure has been found to reduce worker mobility toward locations specialized in comparative advantage sectors (Fajgelbaum and Redding, 2022). The costs associated with these barriers are large. Estimates based on worker mobility across occupations, sectors and regions suggest that they can reach the equivalent of several times a worker's annual wage (Artuç, Chaudhuri and McLaren, 2010; Dix-Carneiro, 2014; Traiberman, 2019).

Adjustment costs are larger for certain economies and individuals than for others. In developing economies, adjustment costs are estimated to be, on average, 33 per cent higher than in high-income economies (Artuç, Lederman and Porto, 2015). Limited access to capital and other barriers particularly impede the ability of smaller firms to respond to export opportunities (IFC and WTO, 2022; 2023). Even when smaller firms can access the supply chains of large multinationals, limited bargaining power leads to an uneven distribution of export profits (Boudreau, Cajal-Grossi and Macchiavello, 2023). Many barriers, from societal

norms to limited access to capital and business networks, contribute to the fact that firms owned by women are less likely to engage in international trade, and tend to adjust to trade shocks less well, than firms owned by men (WTO, 2024b). Rural regions often lack the economic diversification that would make new opportunities available to workers who face import shocks (Eurostat, 2013; Macheras and Stanley, 2017; ILO, 2019).

Despite uneven outcomes, trade-opening is, nonetheless, not associated with higher inequality or unemployment. Trade openness and inequality are only weakly, and negatively, correlated, and the slight decline in within-country income inequality over the past 30 years coincided with a large increase in trade (WTO, 2024b). This is because uneven outcomes can benefit poorer parts of the population and because negative wage effects can be offset by positive consumption effects through lower prices. Evidence from several developing economies shows that trade-opening increased inequality in some of these economies, but decreased it in others (Artuç, Porto and Rijkers, 2019). In the United States, trade has been estimated to have disparate effects mainly within income deciles, leaving overall inequality nearly unchanged (Borusyak and Jaravel, 2024). Trade has also been found to lead to small declines in unemployment (Dutt, Mitra and Ranjan, 2009; Felbermayr, Prat and Schmerer, 2011). One reason for this is that trade-opening can reduce distortions in the labour market or lead to the expansion of sectors with fewer labour market difficulties (Carrère, Grujovic and Robert-Nicoud, 2020; Dix-Carneiro et al., 2026).

2. The system has delivered gains through rules-based cooperation

The multilateral trading system has delivered economic and broader benefits by enabling reciprocal market access bargaining, strengthening credibility of commitments and supporting sustained cooperation over time. The multilateral trading system created a practical bargaining forum through which governments could take account of the cross-border costs of their trade policies, exchange market-access commitments, and have confidence that those commitments would be durable. This economic logic can be given a formal representation through the terms-of-trade theory.

In practical terms, governments negotiate to expand market access and secure trading opportunities that unilateral policies would otherwise restrict. While providing such a bargaining forum has been a core function of multilateral trading system rules, the gains from cooperation in the multilateral trading system also extend beyond those gains attributable to the expansion of market access. The discussion in this section focuses on the economic functions that the multilateral trading system was designed to perform, while recognizing that the mechanisms underpinning cooperation also involve important trade-offs and have not always delivered their full potential in practice.

This section proceeds in four steps. It first explains why governments may restrict trade even when openness creates aggregate gains, and why cooperation can improve on unilateral policymaking. Second, it discusses how core principles of the GATT and WTO – particularly reciprocity, MFN treatment and tariff bindings – facilitate the negotiation of reciprocal market access commitments, reduce bargaining frictions and support mutually beneficial cooperation at the multilateral level. It also shows how the outcome of successive negotiating rounds is consistent with this logic. Third, it explains how additional GATT and WTO disciplines have preserved the value of negotiated concessions and extended cooperation beyond tariffs, while also extending the gains from cooperation beyond the expansion of market access. Fourth, it considers the role of flexibilities, showing how they help to preserve the value of negotiated commitments over time, while allowing governments to respond to shocks and adjustment pressures, thereby facilitating the implementation and durability of commitments, but also creating trade-offs.

(a) Trade policy cooperation can improve the openness and predictability of trading conditions

Despite the gains associated with trade openness, trade restrictions have remained widespread across economies and over time. Governments continue to use tariffs, subsidies, regulatory measures and other trade instruments to pursue domestic objectives such as redistribution, industrial development, fiscal revenue, strategic interests and macroeconomic stabilization. As a result, it has often proved difficult to sustain unilateral trade-opening politically and economically. Economic theory identifies several reasons why governments may deviate from free trade, even when openness

generates aggregate welfare gains. A broad survey of this landscape – spanning economic, political science and legal approaches – can be found in the 2007 *World Trade Report* (WTO, 2007).

Governments may deviate from open trade based on national welfare (measured in real national income) considerations. These may include the possibility of influencing their terms of trade through trade policy. As the British economist and Nobel laureate James Meade (1955) observed, an economy that opens up unilaterally may lose more from a deterioration in its terms of trade than it gains from the expansion of trade. As Meade noted, this is a consideration that makes unilateral trade liberalization strategically unattractive, even when reciprocal liberalization could benefit all parties.

Governments may also deviate from open trade due to domestic political economy pressures arising from the uneven distribution of the gains and losses from trade. According to standard trade theory, changes in trade policy can be expected to create winners and losers across sectors, firms, regions and workers, and governments may use trade policy to redistribute income toward groups viewed as economically, socially or politically salient. Other reasons for governments to deviate from open trade emphasize tariff revenue considerations. While, in principle, better policies than trade policies can be used for these kinds of objectives, in practice governments do not always have access to these alternative policies, and they may see trade policy intervention as the best available option.

All of these motives are complementary. In practice, governments often face simultaneously strategic incentives, developmental concerns, fiscal constraints and political pressures that make unilateral trade liberalization difficult to sustain. A more comprehensive treatment of these motives is provided in Box B.1.

Trade agreements can often help governments achieve better collective outcomes than what would emerge from unilateral policymaking alone. But any rationale for cooperation must identify an inefficiency that would exist in the absence of cooperation and that, if addressed by the agreement, would create additional value for the parties of the agreement that they could distribute among themselves. The economic literature identifies several complementary rationales for such cooperation. First,

agreements help governments to “internalize”, or take into account, negative cross-border effects that unilateral trade policies impose on trading partners through terms of trade and related spillovers. Second, agreements can serve as credibility-enhancing mechanisms that provide assurance to domestic and foreign stakeholders that policy conditions will remain stable over time, and that can help governments to sustain trade liberalization in the face of domestic political economy pressures. Third, agreements can facilitate coordination in areas where policy alignment generates positive cross-border gains and reduces unnecessary trade frictions or obstacles.⁸

These rationales for trade policy cooperation are not mutually exclusive, and the WTO fulfils all of these functions to varying degrees. Some WTO disciplines are closely linked to reciprocal market access bargaining and the management of cross-border spillovers, while others play broader roles in coordinating regulation, reducing uncertainty, supporting credibility and enabling deeper forms of economic integration. The relative importance of these different functions has also evolved over time as the trading system expanded from overseeing tariffs on goods to services, IP, standards, customs procedures and other behind-the-border measures.

Among these rationales, the terms-of-trade framework occupies a central analytical role in the economics literature: it explains not only why governments may seek reciprocal trade agreements, but also why the GATT developed the institutional architecture it did. Importantly, this framework does not need to take a stand on the underlying motivation for trade policy intervention, be it directed toward national income, developmental concerns, fiscal constraints or redistribution; once these policies affect market access or international prices, they generate cross-border effects that trading partners do not fully internalize. From the perspective of affected trading partners, the source of the policy matters less than the negative cross-border effect it creates. This gives the terms-of-trade framework broad analytical relevance for understanding trade cooperation among economies with diverse objectives, and for understanding the logic of the reciprocal market access bargaining that lies at its core. At the same time, the WTO framework increasingly performs functions that also extend beyond reciprocal market access bargaining alone, and for many members the credibility and coordination rationales may also be a primary source of value from participation in the system.

Box B.1: Why governments might deviate from free trade

Even a government that cares only about aggregate national welfare may find it optimal to impose tariffs unilaterally in some circumstances. Such unilateral policies often feature a “beggar-thy-neighbour” dimension because they improve domestic outcomes at the expense of trading partners. Economic theory identifies several mechanisms through which such cross-border effects arise.

One mechanism arises when governments possess market power in international markets and can influence the prices at which they trade with foreign partners. When an economy imposes a tariff, it reduces its demand for foreign exports, and this decline in import demand depresses the world price of the imported good. Part of the tariff burden is therefore shifted onto foreign exporters in the form of lower export prices – the terms-of-trade effect. As formalized by the classic literature on optimal tariffs (Johnson, 1953), when multiple economies attempt to exploit their market power simultaneously, the result is excessive protection that leaves all economies worse off than under coordinated restraint.

A related mechanism operates through the location of production or the distribution of profits. Trade policy can be used to influence where firms choose to produce by affecting market access, trade costs and the relative attractiveness of different locations – the production-relocation effect (Venables, 1987). Under imperfect competition, governments may also use tariffs, subsidies and other strategic instruments to redistribute profits toward domestic firms – the profit-shifting motive (Brander and Spencer, 1985; Ossa, 2012). While these mechanisms were initially presented as analytically distinct, Bagwell and Staiger (2016) show that they can be given a terms-of-trade interpretation: the cross-border distortions they generate fit within the same general framework of policy spillovers that trade agreements are designed to correct.

Governments may also rely on trade restrictions because tariffs constitute an important source of public revenue. This motive has historically been particularly relevant for developing economies, where administrative capacity constraints may limit the ability to raise revenue through broad-based domestic taxation. Tariffs are comparatively easy to collect at the border and can therefore play a significant fiscal role, especially in low-income economies or in periods of state formation and institutional transition (Cagé and Gadenne, 2018; Besley and Persson, 2013). Although the importance of tariff revenue generally declines with development and tax system modernization, fiscal considerations can still influence trade policy choices and shape governments’ willingness to liberalize.

A further rationale for deviating from free trade arises from infant industry and broader development considerations. Under certain conditions, temporary protection can help emerging industries to overcome coordination failures, learning externalities, or scale disadvantages that prevent them from becoming internationally competitive. In this perspective, trade policy is viewed not only as a tool for static resource allocation, but also as an instrument for influencing long-term patterns of specialization and industrial development (List, 1841; Rodrik, 2004). Related arguments emphasize dynamic gains from comparative advantage, technological upgrading and learning-by-doing. In practice, however, distinguishing temporary and efficiency-enhancing intervention from persistent and politically captured protection is difficult. The empirical evidence on the long-term effectiveness of infant industry protection remains mixed and depends on the design and implementation of related policies, and on the broader economic context within which they are applied (Krueger and Tuncer, 1982; Melitz, 2005; Krugman, Obstfeld and Melitz, 2014; Juhász and Lane, 2024).

Governments may also deviate from free trade because they place weight on the distributional consequences of trade-opening or on domestic political economy pressure, and not only on aggregate welfare. Trade openness creates winners and losers across sectors, regions, firms and workers, and – even setting aside terms-of-trade motives or development objectives – governments may face strong domestic incentives to use trade policy to redistribute income toward groups viewed as economically, socially or politically important. Political economy mechanisms can reinforce these tendencies. The key mechanism is the asymmetric distribution of gains and losses from trade: trade-opening generates diffuse

benefits spread across consumers and firms, while its costs are concentrated among specific sectors, regions or workers. This distributional asymmetry gives rise to collective action problems: groups that bear concentrated losses from trade liberalization have strong incentives to organize and seek protection, whereas beneficiaries are less likely to mobilize politically (Olson, 1965; Findlay and Wellisz, 1982; Hillman, 1982; Baldwin, 1987). Political incentives over the electoral cycle may strengthen these pressures further, since adjustment costs from liberalization are immediate and politically salient, while many of the gains are delayed or diffuse, and support for trade-opening varies systematically with electoral horizons (Conconi, Facchini and Zanardi, 2012). As a result, trade policy may become systematically biased toward protection even when trade openness would increase overall welfare (Grossman and Helpman, 1994).

In principle, governments could address distributional concerns more efficiently through domestic taxes and transfers rather than trade restrictions. Such policies would represent the first-best response because they target these distributional effects more directly. In practice, however, administrative constraints, political limitations, weak fiscal capacity or the political attractiveness of less transparent instruments may make tariffs and other trade measures a more readily available tool for redistribution and political support, particularly in developing economies or politically sensitive sectors.

The following subsections examine these rationales for trade policy cooperation in turn.

They do so in the order that best reflects the analytical architecture of the multilateral trading system, beginning with the terms-of-trade rationale that can explain the system's core institutional design, before turning to the credibility-enhancing and coordination functions that complement it.

(i) Cooperation mitigates negative cross-border policy effects

Unilateral trade policies impose cross-border costs on trading partners that governments do not fully internalize, or take into account, when they act alone. These cross-border effects or externalities are often described as “beggar-thy-neighbour” policies, because they improve domestic outcomes partly at the expense of other economies. The terms-of-trade framework developed in the economics literature provides the canonical explanation for this problem. This logic, first formalized in the classic literature on optimal tariffs (Johnson, 1953), provides an explanation for why trade policy may be inefficient in a non-cooperative equilibrium.

Trade cooperation corrects for these cross-border effects of unilateral trade policies. In the terms-of-trade framework, the core problem is that unilateral tariff-setting allows governments to exploit their market power to manipulate world prices in ways that shift costs onto trading partners – the terms-of-trade externality described above (see Box B.1). While

the terms-of-trade framework typically expresses this problem as one of importing governments actively manipulating world prices with their tariff choices, the problem can also be stated as one of importing governments simply not accounting for the costs that their tariff choices impose on foreign exporters through lower prices and profits (Staiger and Sykes, 2011). However, when multiple economies attempt to exploit their market power simultaneously, the result is excessive protection and reduced global welfare – a “prisoner’s dilemma” in which individually rational policies generate collectively inefficient outcomes. Trade agreements can address these problems by structuring cooperation as a reciprocal exchange of market access.

By linking domestic trade liberalization to foreign market access, reciprocity can make the gains from trade more visible and politically salient. Governments can present trade liberalization not as a unilateral concession, but as part of an exchange that delivers concrete benefits to domestic producers. This helps to reframe the domestic debate from one focused primarily on import competition to one that also emphasizes exports. As Cordell Hull, the US Secretary of State from 1933 to 1944, recognized, the reciprocal reduction of trade barriers enables each economy to point to concessions obtained abroad as a justification for concessions granted at home. In this way, reciprocity helps make trade liberalization politically sustainable in a way that unilateral opening cannot. Of course, the gains to domestic producers from liberalization abroad implies the existence of a cross-border effect of foreign trade policies; the

terms-of-trade externality provides the engine for the political salience or importance of reciprocity.

Reciprocity not only makes liberalization politically feasible; it also provides the economic mechanism through which governments take into account cross-border effects. Changes in market access, in fact, capture the central economic channel through which unilateral trade policies generate cross-border spillovers. Hence, the terms-of-trade framework can be reinterpreted in the practical language of market access. Trade agreements that encourage the reciprocal exchange of market access commitments can be understood as mechanisms through which governments neutralize the incentive to manipulate world prices (Bagwell and Staiger, 1999, 2002b). In this view, the core function of a trade agreement is not simply to promote trade liberalization, but to correct a specific cross-border effect associated with unilateral tariff-setting. This also helps to explain why governments might construct a trade agreement that calls for mutually beneficial and reciprocal reductions in tariffs, but not necessarily call for free trade. When each government accounts for the costs that its tariffs impose on its trading partners, tariffs should be lowered; but whether a government would lower a given tariff all the way to zero would depend on that government's individual circumstances and objectives.

Although this theory was originally developed in the context of tariffs on goods, its underlying logic extends more broadly to other forms of trade and policy instruments. In services trade, for example, market access restrictions typically take the form of regulatory measures rather than border tariffs. Adding to this complexity, services may be supplied through multiple modes, according to the GATS: cross-border supply (mode 1), consumption abroad (mode 2), commercial presence (mode 3) and the movement of natural persons (mode 4).⁹ These features complicate the application of the standard terms-of-trade framework. Nevertheless, when policy measures affect foreign suppliers and alter market conditions in ways that shift economic rents across borders, similar strategic incentives arise. The logic is particularly relevant where regulatory measures affect the ability of foreign firms to supply services across borders (mode 1); but it is also relevant where regulatory measures affect the ability of foreign firms to establish a commercial presence in the domestic market (mode 3). In this sense, the terms-of-trade framework provides a useful benchmark for understanding trade agreements even where

the instruments and channels of trade differ from traditional goods trade.¹⁰

At the same time, and particularly in the area of services where cross-border investments loom large, trade agreements are likely to play additional complementary functions. Such functions would be linked to credibility, coordination, regulatory compatibility and the management of deep economic interdependence. The terms-of-trade framework therefore provides an important benchmark for understanding trade cooperation, but it does not exhaust the broader institutional roles performed by the WTO system. The next subsection examines some of these additional roles.

Empirical research provides broad support for the view that trade agreements address cross-border effects of unilateral trade policies. Three main findings emerge from the literature. First, trade restrictions imposed by one party tend to affect that party's trading partners, meaning that market power is widespread across economies and products, and the costs of protection are often shared across borders. Second, governments appear to take these cross-border effects into account when setting their tariffs outside of a trade agreement, meaning that they tend to set higher tariffs where they have more market power and their trading partners are bearing more of the cost. Third, when joining the WTO, governments tend to reduce their tariffs the most on products where they have the most market power, meaning where other WTO members were bearing more of the costs (for a more detailed description of these findings, see Box B.2).

On the whole, these findings highlight a central implication of the economic logic of trade agreements. While giving up market power may appear costly in isolation, the benefits become clear once similar restraint is expected from and reciprocated by trading partners. When all economies act in this way, the outcome is mutually beneficial, reflecting the logic of reciprocal cooperation and an escape from the "prisoner's dilemma".

Importantly, these cross-border spillovers arise regardless of why governments choose to intervene in trade in the first place. Governments may have different incentives for imposing unilateral trade policies, but once such measures affect market access or international prices, they impose cross-border costs on trading partners that are not fully taken into account. From the perspective of affected

Box B.2: Empirical evidence on the cross-border effects of unilateral trade policies

A first strand of evidence examines the incidence of tariffs, that is, who ultimately bears their cost. While much of the burden typically falls on the economy imposing the tariff, a non-negligible share is borne by trading partners through lower export prices. Evidence from the trade tensions between the United States and China in 2018 initially pointed to almost complete tariff pass-through to final US consumers (Amiti, Redding and Weinstein, 2019; Fajgelbaum et al., 2020; Cavallo et al., 2021). More recent studies, however, find that between 5 per cent and 40 per cent of the burden may be shifted to foreign exporters (Flaaen et al., 2025; Soderbury and Tobias, 2025; Adão et al., 2026; Bai et al., 2026; Barwick et al., 2026; Freund, 2026; Ganapati and Hottman, 2026; Gopinath and Neiman, 2026), depending on the economy or product under consideration and the timeframe (short run versus long run) of the analysis. These findings imply that unilateral trade policies do often generate cross-border effects, providing a direct empirical basis for the existence of international policy interdependence.

A second approach examines whether governments exploit these cross-border effects when setting trade policies. If the terms-of-trade logic is relevant, economies with greater market power should impose higher tariffs. Empirical work by Broda, Limão and Weinstein (2008) provides support for this prediction. Examining economies that were not members of the multilateral trading system, they showed that even relatively “small” economies possess market power in at least some sectors, and that tariffs are systematically higher where this market power is greater. This evidence suggests that unilateral trade policy reflects strategic incentives linked to cross-border effects.

A third strand of evidence focuses on how trade agreements alter these incentives. If trade agreements are designed to constrain the strategic use of trade policy, then the relationship between market power and tariffs should weaken once economies commit to negotiated disciplines. Evidence from accessions to the multilateral trading system supports this prediction: economies undertaking accession commitments reduce tariffs more in sectors where they initially possessed greater market power (Bagwell and Staiger, 2011). This evidence is consistent with the idea that trade agreements internalize cross-border effects by limiting the ability of governments to manipulate world prices.

trading partners, the source of the policy matters less than the cross-border effect it creates. This is what gives the terms-of-trade framework its broader analytical relevance: it provides a common language for understanding why cooperation becomes valuable across a wide range of policy motivations.

(ii) Cooperation acts as a credibility-enhancing device and reduces trade policy uncertainty

Trade agreements can also act as credibility-enhancing mechanisms, helping governments to make credible commitments to resist domestic political economy pressures, and “locking in” policies against potential reversals.

As discussed in Box B.1, governments are concerned not only with the economic efficiency of policies – including trade policies – but also with their political and distributional consequences. In practice, policy choices are shaped by the need to maintain domestic support, reflecting the preferences of individuals and

firms that are affected by trade and that influence political outcomes through voting and other channels (Findlay and Wellisz, 1982; Hillman, 1982). If policymakers would prefer to liberalize but find that protection-seeking interests or time-inconsistency problems (i.e., when optimal ex-post policies might differ from optimal ex-ante strategies) prevent them from doing so credibly, embedding and “locking in” policy choices in an international agreement raises the political and reputational costs of reversal and alters the domestic bargaining environment in favour of reform-oriented actors (Maggi and Rodríguez-Clare, 1998). An analogous point holds when establishing the credibility of policies with respect to domestic investors and producers (Staiger and Tabellini, 1987, 1989, 1999), or when enabling governments to resist domestic pressure to replace tariff protection with production subsidies (Brou and Ruta, 2013).

The external anchor of an international commitment makes trade liberalization more credible to domestic and foreign

stakeholders alike, as it supports the investment and specialization decisions through which the gains from trade materialize. This approach helps explain why governments may value trade agreements even when protection primarily reflects domestic political economy pressures or distributional objectives and does not generate important cross-border effects. By raising the costs of policy reversal and reshaping domestic incentives, trade agreements can help sustain liberalization that governments might otherwise struggle to maintain unilaterally.

This credibility-enhancing function is evident in trade negotiations and accessions, where governments often undertake significant legal and institutional reforms and bind them internationally. By doing so, they provide assurance to domestic and foreign stakeholders that policy conditions will remain stable over time, thereby supporting investment, specialization and integration into global markets. These international commitments shift domestic political equilibria in favour of sustained reform by increasing the political and reputational costs of backtracking. In this way, cooperation addresses not only international (positive or negative) cross-border effects, but also internal credibility and political constraints.

This mechanism is particularly important in services trade, where foreign suppliers often incur substantial sunk costs associated with establishing commercial presence, adapting to domestic regulation, or developing long-term commercial relationships. In this context, the value of trade agreements lies not only in improving market access conditions, but also in creating credible expectations about the future stability of policy regimes. Binding commitments and obligations can therefore support investment, integration into GVCs and long-term cross-border economic relationships in ways that extend beyond the traditional terms-of-trade logic.

Reciprocity can be seen to strengthen this function by reshaping domestic political incentives in favour of trade liberalization. When liberalization is negotiated on a reciprocal basis, governments do not simply reduce their own trade barriers, they do so in exchange for improved access to foreign markets. This linkage fundamentally alters the domestic political economy of trade policy. Export-oriented firms and sectors, which benefit from improved access abroad, gain a direct stake in the liberalization process and become active proponents of reductions of trade barriers at home. In this way,

reciprocity helps to mobilize pro-liberalization constituencies or interests that can counterbalance protectionist pressures (Baldwin and Robert-Nicoud, 2015; Blanga-Gubbay, Conconi, and Parenti, 2024). It is worth recalling from Section B.2(a)(i) that their interest in foreign market access arises from a terms-of-trade motive; hence, the credibility-enhancing function of trade agreements can help to interpret the power of reciprocity, but only if that function is joined with the function to mitigate cross-border policy effects featured by the terms-of-trade theory.

A related but distinct source of value arises from the reduction of trade policy uncertainty itself – operating not through domestic political equilibria but through the expectations of private firms, investors or consumers. Even when applied tariffs or other trade barriers are low, the absence of credible commitments creates uncertainty and risk about future policies, discouraging the investment and specialization needed for the gains from trade to fully materialize. Binding commitments and transparency obligations limit discretion and anchor expectations. WTO tariff bindings, for example, reduce the likelihood that economies will raise tariffs in response to shocks, while the prospect of retaliation further discourages protectionist responses. Counterfactual analysis suggests that, in the absence of such commitments, economies would be several times more likely to increase tariffs when faced with shocks (Jakubik and Piermartini, 2023).

Empirical evidence shows that reducing trade policy uncertainty promotes economic integration. Clear and credible commitments encourage export entry, FDI and participation in GVCs. By shaping expectations about future policy, cooperation in trade agreements influences current economic decisions in ways that extend beyond static tariff reductions. In particular, Handley and Limão (2015) show that the removal of policy uncertainty – distinct from reductions in the level of tariffs – significantly increases export entry, especially for firms facing large sunk entry costs. The negative impact of trade policy uncertainty is higher in the presence of GVCs, or for economies with low quality of institutions (Osnago, Piermartini and Rocha, 2018). This mechanism is also important in services, where investment and commercial presence involve substantial sunk costs. By “locking in” liberalization, binding commitments provide assurance to foreign investors and suppliers that regulatory conditions will not tighten unexpectedly (Lamprecht and Miroudot, 2020).

(iii) Cooperation also generates coordination gains

Trade agreements also create value by enabling governments to coordinate in areas where unilateral action generates benefits that are larger when undertaken jointly. Unlike the negative cross-border effects discussed above – where policies impose costs on trading partners – the mechanism here involves foregone gains: without coordination, economies do not fully capture the benefits of policy alignment and credibility. In this sense, through cooperation, trade agreements help governments to capture the benefits of policy alignment and internalize, or take into account, positive cross-border spillovers.

This logic is particularly relevant where policy convergence reduces trade costs and improves the functioning of integrated markets. Many NTMs pursue legitimate objectives such as health, safety, environmental protection or cybersecurity, yet differences in regulatory approaches may fragment markets and create unnecessary frictions that arise not from strategic price manipulation but from uncoordinated standards, procedures and administrative requirements. These coordination challenges have both spatial and temporal dimensions. The spatial dimension – reflecting differences across economies at a given point in time – is well recognized. However, in a fast-evolving world, the temporal dimension is increasingly important: even where regulatory approaches are initially aligned or harmonized at one point in time, divergence may quickly re-emerge, requiring continuous updating rather than one-off agreement. In such cases, cooperation allows governments to capture positive spillovers from greater regulatory compatibility, regulatory transparency and more efficient border procedures.

These coordination challenges are particularly significant in services trade, where barriers often arise from domestic regulatory measures rather than border measures. Because services suppliers frequently rely on commercial presence, licensing, data flows or professional recognition across jurisdictions, regulatory divergence can create substantial trade costs and uncertainty for them. In these areas, trade agreements contribute not only to market-opening, but also to the governance of deep economic interdependence by promoting transparency, regulatory cooperation and more predictable conditions for cross-border economic activity.

The WTO Agreements on Technical Barriers to Trade (TBT) and on the Application of Sanitary and Phytosanitary Measures (SPS) further exemplify these coordination functions. These agreements recognize the right of governments to pursue legitimate regulatory objectives while encouraging members to minimize unnecessary trade frictions through transparency, harmonization, equivalence, mutual recognition and the use of international standards where appropriate. While these agreements help to preserve negotiated market access concessions (see Section B.2(c)(i)), their role also extends to including these coordination gains. By promoting regulatory cooperation and improving the compatibility of domestic regulatory systems, they reduce transaction costs associated with regulatory diversity and help integrated markets to function more effectively, while preserving regulatory space for legitimate policy objectives. The agreements also contain mechanisms that facilitate the adaptation of regulations and standards over time as technologies, scientific knowledge and policy circumstances evolve.

The WTO Trade Facilitation Agreement (TFA) further illustrates this coordination logic regarding the administration of border procedures. Its primary objective is not tariff reduction, but the modernization, simplification and alignment of domestic border procedures affecting international trade (Hoekman, 2014). By promoting transparency, streamlining documentation requirements, improving customs cooperation and reducing administrative delays, the TFA lowers wasteful trade costs and strengthens supply chain efficiency. Because these gains are greatest when many economies implement reforms simultaneously, the TFA helps to solve a coordination problem inherent to an interdependent trading system. In this respect, the TFA differs from and extends beyond the older GATT model centred mainly on reciprocal tariff concessions: it represents a shift from border liberalization to broader forms of coordination over domestic trade-related regulations and procedures.

It is worth noting that these coordination gains need not always be viewed as analytically separate from the terms-of-trade framework. Regulatory divergence, inefficient border procedures and inconsistent standards can themselves generate negative cross-border effects and undermine the value of negotiated market access commitments. From this perspective, agreements such as the TBT and SPS agreements and the TFA can also be interpreted as

mechanisms for reducing policy-induced trade cost externalities and securing the conditions under which reciprocal tariff liberalization remains meaningful. The coordination and terms-of-trade perspectives are therefore better understood as complementary rather than as competing explanations (e.g., see Staiger (2019) for a terms-of-trade perspective on the TFA).

(b) GATT and WTO principles created an effective bargaining forum for market access

The market-opening achievements of the GATT and of the WTO were not accidental. While open trade can generate substantial welfare gains, unilateral liberalization is often difficult to sustain politically and strategically. The system can be understood as an institutional architecture designed to help governments, through cooperation, to lower trade barriers more than they could do on their own. But what is keeping governments from unilaterally lowering their trade barriers? The British economist and Nobel laureate James Meade – often credited with writing the first draft of the GATT – answered that question this way when, looking back on his experience leading up to the creation of the GATT in 1947, as a response to the unilateral tariff choices of the previous decades, he wrote:

“One cannot hope to see the abandonment of protective devices except in the framework of all-round international agreement, since unilateral action is quite likely to cause the free-trade country to lose more from a deterioration in its terms of trade than it gains from the expansion of trade. ...” (Meade, 1955).

Put differently, as Meade saw it, the central problem that the system addresses is that when a government sets trade policies unilaterally, it often imposes costs on its trading partners that it does not fully take into account. The result is a world with too much trade protection, because governments are not accounting for the full costs of their policies. The multilateral system provides a forum in which members can address these cross-border terms-of-trade externalities by negotiating reciprocal market access commitments, securing those commitments in law, and enforcing them through common rules. By reducing trade barriers and expanding market access, the global pie could be made larger, making it possible for everyone to have a bigger slice.

This focus on market access is also central to the objectives expressed in the Marrakesh Agreement Establishing the World Trade Organization. The Preamble to the Marrakesh Agreement emphasizes the importance of “reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade”, framing trade cooperation as a process of expanding and securing trading opportunities. While economists often describe the rationale for trade agreements with reference to terms-of-trade externalities, the institutional language of the GATT and the WTO is one of market access. These perspectives are complementary: as noted above, expanded market access is the practical manifestation of the economic objective of addressing the cross-border terms-of-trade effects arising from unilateral trade policies.

(i) The GATT and the WTO provided the table and currency for market access negotiations

The multilateral trading system can be understood as an institutional response to the cross-border effects generated by unilateral trade policy choices. The system embodied in the GATT and the WTO organizes cooperation in ways that are feasible to negotiate, resistant to deviations and durable over time. Rather than simply encouraging unilateral liberalization, it provides a multilateral forum in which governments can negotiate reciprocal constraints on trade policy and embed them in agreed rules. Moreover, the principles of the GATT and the WTO – particularly tariffication, transparency, non-discrimination (i.e., MFN and national treatment), bindings and reciprocity – shape and support market access negotiations and help to maintain market access commitments.¹¹

The GATT and the WTO achieved this via negotiated exchanges of market access. Governments commit to reducing or binding tariffs and other border measures in return for equivalent concessions from their trading partners. Market access thus becomes the currency of cooperation: each government offers improved access to its own market in exchange for improved access abroad. This focus is not incidental, as the market captures the main channel through which unilateral trade policies generate cross-border effects. Organizing cooperation around market access therefore directly targets the terms-of-trade externalities identified in

the previous section. When structured as a reciprocal exchange, such commitments take into account, or internalize, these effects, weakening incentives to manipulate world prices and redirecting policy interaction toward mutually beneficial outcomes.

The principle of tariffication provides the appropriate “currency” for this exchange of market access. In order for the bargaining to function effectively, the object of negotiation must be sufficiently transparent, comparable and enforceable. Tariffication – the conversion of non-tariff barriers and quantitative restrictions into tariffs or tariff equivalents – serves this function by providing a common metric through which market access commitments can be measured, exchanged and bound internationally. By translating diverse forms of protection into a more transparent and negotiable instrument, it facilitates reciprocal bargaining and clarifies the commitments that governments can exchange. In the language of the Coase Theorem (see Box B.3), tariffication helps to define the rights being exchanged, a precondition for cooperation to deliver efficient outcomes. This is also why extending tariffication to new sectors and instruments has remained a recurring objective across successive GATT and WTO rounds.

Transparency obligations complement tariffication by reducing informational frictions and making bargaining more feasible. Reciprocal bargaining requires governments to identify the trade measures applied by their partners, assess their effects on market access, and evaluate whether negotiated concessions are being respected over time. Transparency obligations – including tariff schedules, notification requirements, publication rules and trade policy surveillance – help to lower these information costs and reduce uncertainty about the policy commitments being exchanged. Particularly important in this regard are members’ schedules of concessions and schedules of specific commitments under the GATT and the GATS, respectively, which codify in detail the tariff bindings, market access commitments and permitted limitations applicable to each member. Although not always explicitly identified as transparency mechanisms, these schedules perform an important transparency function by making trade obligations and access conditions publicly identifiable, comparable and internationally enforceable. In doing so, they reduce informational asymmetries between parties and lower the transaction costs that – as the Coase Theorem suggests – might otherwise prevent

mutually beneficial bargains from being reached or sustained. Transparency is therefore not only a secondary administrative function of the system, but a precondition for the bargaining logic of the multilateral trading system to operate effectively, thereby making cooperation more feasible and durable.

Jackson draws a distinction between “power-based” and “rules-based” approaches to trade bargaining (Jackson, 1989). In a purely power-based bargaining setting, bargaining outcomes would reflect relative economic size and negotiating leverage unconstrained by any pre-agreed limits: stronger economies would be free to extract concessions at the expense of weaker ones, potentially generating unstable or even discriminatory arrangements. By contrast, a rule-based framework – grounded in non-discrimination, reciprocity and binding commitments – structures negotiations within a framework that limits opportunism and the use of market power, reduces the scope for discriminatory side-deals, and creates more predictable and durable outcomes (Bagwell and Staiger, 1999). The GATT and the WTO institutionalized this latter approach, embedding bargaining within agreed principles that have stabilized expectations and that protect negotiated outcomes.

The logic connecting this institutional design to the economic rationales from the terms-of-trade theory is direct. Bagwell and Staiger (1999, 2002b) show formally that reciprocal, non-discriminatory bargaining over market access can neutralize the harmful terms-of-trade effects associated with unilateral tariff-setting (see Box B.1). By negotiating jointly, governments take into account the cross-border price effects of their policies. The outcome is not simply lower tariffs, but a shift from strategic manipulation of world prices toward mutually welfare-enhancing trade liberalization. Under these conditions, each participating member can be made better off relative to the non-cooperative equilibrium. Empirical evidence supports the central predictions of the terms-of-trade framework (see Box B.2).

An unintended consequence of the terms-of-trade framework is that the apparently mercantilist language of trade negotiations can be given a coherent economic logic. Governments send their negotiators to the bargaining table seeking better access for their exporters – not because imports lack value, but because exporters bear the brunt of the cross-border effects

Box B.3: The Coase Theorem

The Coase Theorem provides a simple but powerful way to understand how cooperative bargaining can improve outcomes when actions in one party affect others. Named after British economist and Nobel Prize laureate Ronald Coase, it starts from a basic insight: when economic decisions create externalities – costs or benefits for others – uncoordinated choices can lead to inefficient outcomes.

The theorem shows that, under certain conditions, negotiation can solve this problem. If the parties involved can clearly identify what is being negotiated (i.e., if rights and obligations are well defined), and if it is not too costly for them to communicate and bargain (i.e., if transaction costs are low), they can reach mutually beneficial agreements on their own. In such cases, cooperation can lead to efficient outcomes, even when initial interests differ.

A simple way to understand this logic is that when trade policies create spillovers, negotiation can lead to better outcomes for all parties. For example, a tariff imposed to protect domestic producers may benefit the imposing economy but reduces sales and prices for exporters elsewhere. If the affected trading partners can negotiate, they might agree on reciprocal adjustments that improve outcomes for everyone, because negotiation allows each party to account for the effects of its actions on others. This reasoning underlies a core purpose of international trade agreements: they provide a framework for structured negotiation and coordination. In practice, however, the conditions for effective bargaining are not automatic – differences in size and market influence, incomplete information and the complexity of negotiations can all make reaching mutually beneficial agreements challenging.

The multilateral trading system can be understood as an institutional framework designed to address these challenges and facilitate cooperation. By establishing clear and enforceable commitments – such as tariff bindings – the multilateral trading system defines the “rights” that economies exchange. By promoting transparency and information-sharing, it reduces uncertainty and bargaining frictions. Principles such as non-discrimination and reciprocity further support stable and predictable negotiations. The multilateral forum lowers transaction costs relative to unilateral approaches. In this sense, the WTO helps to approximate the conditions under which cooperation can deliver mutually beneficial outcomes. Rather than eliminating differences in national interests, it provides a structured environment in which economies can negotiate and manage them more effectively.

of protection abroad and can therefore guide negotiators to the most significant claims of policy spillover. The WTO's value lies in turning those claims into mutually beneficial market access bargains rather than unilateral retaliation. From this point of view, the focus on market access is not “mercantilist” in any pejorative sense. Rather, it reflects a practical way of addressing the cross-border effects created by unilateral trade policies, and represents an application of Coase's theory in real life (for more details about the Coase Theorem, see Box B.3).

(ii) MFN treatment, binding commitments and reciprocity made cooperation more inclusive and durable

For market access bargaining to function on a multilateral basis, governments must also ensure that negotiated concessions remain credible, non-

discriminatory and politically sustainable over time. This is the role played by MFN treatment, binding commitments and reciprocity.

Non-discrimination is a central organizing principle of the multilateral trading system, embodied primarily in the MFN and national treatment principles. While national treatment governs how imported products are treated once they enter a market, MFN treatment ensures that any tariff advantage granted to one trading partner is extended to all other members. Together, these principles limit discriminatory policy instruments and provide a common framework within which market access commitments are negotiated and applied. From an economic perspective, MFN treatment plays a particularly important role in shaping the incentives and feasibility of cooperation in trade policy. For ease of discussion, most of the reasoning here focuses

on tariffs, but the same logic applies to other trade instruments covered under non-discrimination and binding commitments.

MFN treatment and binding commitments make market access negotiations both feasible and credible. Together, they help to define and protect the “property rights” over market access that are exchanged in trade negotiations, reduce bargaining frictions, and prevent the erosion of commitments through discriminatory policies. Building on the terms-of-trade logic discussed above, MFN treatment contributes to cooperation in three main ways: it simplifies negotiations, helps preserve the value of concessions, and shapes the distribution of gains.

A first key function of MFN treatment is to simplify the tariff bargaining process. By requiring that any tariff concession granted to one trading partner be extended to all, MFN treatment transforms what would otherwise be a highly complex set of bilateral negotiations into a more manageable multilateral process. In the absence of MFN treatment, an economy could apply different tariffs to different partners for the same product, implying that each tariff change would generate distinct effects for each trading partner. Negotiations would then need to be conducted separately across partners and products, greatly increasing the dimensionality and transaction costs of bargaining. MFN treatment collapses this complexity by ensuring that a given tariff applies uniformly across suppliers, thereby making the externality associated with trade policy one-dimensional at the product level. This simplification reflects the fact that the spillover operates through international prices, making it common across suppliers. This significantly reduces bargaining frictions and facilitates the organization of negotiations around reciprocal exchanges of market access.

The scale of this simplification is substantial. With 166 WTO members, a world without MFN treatment would require economies to negotiate and maintain a very large number of distinct bilateral tariff relationships across products and partners. Even treating the European Union as a single customs territory, such a system could involve as many as 19,460 separate bilateral negotiating relationships for each product. MFN treatment multilateralizes these bargains: a concession negotiated once is automatically extended to all members. This dramatically reduces the complexity and transaction

costs of cooperation and helps make large-scale multilateral bargaining feasible.

In practice, this simplification is reinforced by the use of the “principal supplier” rule in tariff negotiations. According to this rule, negotiations over a particular tariff line are conducted primarily between the main exporting economy and the importing economy maintaining the tariff, as it is the principal supplier that is most affected by the importer’s trade restrictions. Once non-discrimination ensures that the externality is common across exporters, negotiations can focus on the main suppliers of a given product, rather than requiring parallel discussions with all trading partners. This was particularly the case for earlier rounds of negotiations based on the request-and-offer method. This further reduces transaction costs and helps operationalize reciprocal bargaining within a multilateral framework.

A second key function of MFN treatment is to preserve the value of negotiated concessions by preventing their erosion through subsequent discriminatory agreements. Trade agreements rest on reciprocal exchanges, and these are meaningful only if participants can rely on their durability. MFN treatment ensures that concessions cannot be undermined by subsequently offering more favourable terms to selected partners (Schwartz and Sykes, 1997; Bagwell and Staiger, 2005). In practice, it limits the scope of discriminatory treatment among trading partners: subject to recognized exceptions such as RTAs and preferential arrangements, concessions granted to one member must be extended to all members. In combination with binding commitments, it helps to ensure that market access, once negotiated, is both secure and non-discriminatory.

Binding commitments reinforce this role by defining the limits of permissible policy intervention, and by making tariff concessions legally enforceable and predictable. By establishing legally enforceable ceilings on the level of protection that can be applied, bindings define the scope of policy discretion and provide assurances that market access will not be withdrawn unexpectedly. In economic terms, they help define and secure the “property rights” over market access that are exchanged through negotiation. In this sense, bindings and MFN treatment help to jointly create a system of secure and non-discriminatory rights over market access, which is essential for

sustaining cooperation in an environment of repeated negotiation, where market access commitments are the focus.

A third function of MFN treatment, less frequently discussed but of considerable practical importance, is that it shapes the distribution of gains from tariff bargaining and supports the broad participation on which the system depends. By requiring that concessions be extended to all members on a non-discriminatory basis, MFN treatment constrains the ability of large and powerful economies to extract disproportionate gains from their bargaining partners: any advantage a large economy secures from a bilateral negotiation is automatically multilateralized, dissipating its bargaining power through positive spillovers to third parties. Conversely, in the absence of MFN treatment, discriminatory bargaining would amplify power asymmetries, as large economies could enjoy the fruits of their bargaining power without sharing them with others. This function is particularly important given the differences in economic size and bargaining power across WTO members, as it limits the extent to which these asymmetries can translate into discriminatory market access outcomes. The empirical evidence confirms that smaller and developing economies would have fared significantly worse under discriminatory bargaining than they did under MFN. These distributional implications of MFN treatment are taken up further below.

The distributional dimension of MFN treatment also has an important systemic implication. By constraining the bargaining power of larger economies, MFN treatment provides assurances to smaller members that the system will treat them fairly; without those assurances, a range of economies might find participation unattractive, and this could ultimately undermine the breadth and effectiveness of the multilateral trading system as a whole.

Overall, MFN treatment and binding commitments are not only legal principles but also economic instruments that sustain cooperation. By simplifying negotiations, reducing transaction costs and securing the value of concessions, MFN treatment and binding commitments enable the multilateral trading system to function as a stable framework for reciprocal market access bargaining. While important exceptions to MFN treatment exist – notably for preferential trade

agreements and customs unions under GATT Article XXIV (“Territorial Application – Frontier Traffic – Customs Unions and Free-trade Areas”) – these are subject to agreed disciplines and have remained bound within the system. As discussed below, such exceptions introduce additional complexity, but do not alter the central role of non-discrimination in supporting stable and predictable market access negotiations.

MFN treatment and bindings define and protect the rights exchanged in market access negotiations; reciprocity governs the terms on which those exchanges take place. Unlike MFN treatment or binding commitments, reciprocity is not formally defined in WTO rules, even though it is invoked throughout them – in the GATT preamble, in the provisions governing tariff negotiations under Article XXVIII *bis*, in the modification of schedules under Article XXVIII, and in the Enabling Clause applicable to developing economies (i.e., Differential and More Favourable Treatment Reciprocity and Fuller Participation of Developing Countries),¹² among others. Its content has instead emerged through negotiating practice, where members have traditionally evaluated concessions in terms of an approximate balance of the changes in market access opportunities and obligations brought about by negotiated policy changes.¹³

In practice, reciprocity in GATT negotiations was not treated as a strict mathematical equality of concessions. Negotiators instead relied on a broader assessment of the balance of concessions exchanged, taking into account factors such as tariff reductions, trade coverage, principal supplier interests and expected commercial opportunities. In the early rounds, this often involved product-by-product comparisons of concessions granted and received; as negotiations expanded and became more complex, members increasingly relied on trade-weighted tariff averages and estimates of sectoral trade effects to evaluate whether the overall exchange remained broadly equivalent. For example, Preeg (1970) observes that during the Kennedy Round, negotiators sought to achieve a balance in value between the forecasted increases in the volume of imports and the estimated increase in the volume of exports that would accompany a proposed set of tariff concessions.¹⁴ Historical accounts suggest that members routinely assessed negotiated outcomes in these terms, even if no single quantitative methodology governed the process.

The economic interpretation of reciprocity developed in the literature can be understood as a formalization of this longstanding negotiating logic rather than as a purely abstract theoretical construct. In particular, the analytical approach developed in the economic literature interprets reciprocity as negotiated changes in trade policies that induce roughly offsetting changes in import and export volumes, thereby neutralizing incentives to manipulate the terms of trade (Bagwell and Staiger, 1999, 2011). This interpretation is adopted here for analytical clarity and should not be understood as a legal definition of reciprocity within the WTO framework. Instead, it provides a formal economic interpretation of a longstanding negotiating approach embedded in GATT and WTO practices. With this formal interpretation, this approach can be seen to shape the structure and incentives of bargaining in fundamental ways and performs two related functions in the multilateral trading system.

First, reciprocity aligns negotiating incentives by ensuring that each party has a direct stake in the concessions exchanged. By conditioning market access offers on the receipt of reciprocal concessions, reciprocity transforms what might otherwise be a unilateral and politically costly act of liberalization into a balanced exchange with identifiable benefits on the export side as well. This helps governments to manage the domestic political economy of trade reform: the prospect of improved market access abroad can generate export-sector support that counterbalances the resistance of import-competing industries. In this sense, reciprocity makes trade liberalization politically feasible in contexts where unilateral opening would not be.

Second, reciprocity limits purely terms-of-trade-motivated bargaining. Without reciprocity as a bargaining norm, large economies would have incentives to push for bargaining outcomes that shift the terms of trade in their favour, with negative consequences for trading partners and, potentially, for global welfare. Reciprocal bargaining neutralizes these incentives by ensuring that tariff reductions are exchanged on a broadly balanced basis. As a result, the gains from tariff bargaining in the multilateral trading system accrue primarily to each economy through the reduction of its own domestic distortions, and not through terms-of-trade movements, making the system more conducive to efficient and welfare-

enhancing bargaining outcomes for all participants. In this way, reciprocity provides the neutralization of terms-of-trade considerations when a government contemplates negotiated tariff liberalization, the very consideration that Meade (1955) argued would prevent governments from liberalizing on their own.

A further implication of this logic concerns the nature of the gains from participation in multilateral trade bargaining. When an economy negotiates a reciprocal tariff reduction, the primary benefit it captures is the improvement in domestic economic efficiency that flows from its own openness to its trade partners – the same reform that, in the absence of a reciprocal framework, would have been both politically and economically difficult to achieve. The direct gains from tariff concessions negotiated by others and extended through MFN – in economic terms, the spillover benefits of multilateral trade bargaining – are typically secondary.

In this sense, in GATT and WTO tariff bargaining, “what you get is what you give”. The gains from participation stem largely from what an economy itself agrees to do, rather than from what it receives from others beyond the neutralization of the terms-of-trade effects of its own liberalization. Empirical support for this insight comes from research on WTO accessions, which finds that economies that implemented deeper reforms and undertook more extensive commitments during their accession negotiations subsequently grew faster than those that did not, consistent with the view that the primary gains from engagement in the multilateral system flow from an economy’s own reforms (Brotto et al., 2024) (see Box B.4).¹⁵ More generally, the practical significance of this insight is supported by a wide body of empirical studies that confirm the key mechanism: an economy’s own tariff cuts stimulate its exports, allowing it to capture more of the additional market access offered by its trading partners when it reciprocates their tariff concessions with tariff concessions of its own (Bagwell and Staiger, 2014).¹⁶

Reciprocity also underpins the procedures for renegotiating or modifying market access commitments. Under GATT Article XXVIII (“Modification of Schedules”), members seeking to modify a bound tariff are required to negotiate compensatory adjustments with affected trading partners, preserving the overall balance of concessions. In practice, this means that a member wishing to raise a bound tariff must offer offsetting

Box B.4: “What you get is what you give” – the logic of reciprocal gains in GATT and WTO tariff bargaining

A central insight of the terms-of-trade framework is that the gains from participation in GATT and WTO tariff bargaining stem primarily from an economy’s own reciprocal trade liberalization, rather than from the spillover benefits generated by the concessions of others – “what you get is what you give”. This may seem surprising, given that MFN treatment ensures that any tariff concession is extended to all members, but as a simple example illustrates, the multilateralization of concessions does not translate into equivalent spillover gains.

Consider an economy willing to reduce its MFN tariffs on a product. To do so, suppose economy A imports good x from economies B and C, and exports good y to both. If A offers to reduce its MFN tariff on good x, exporters from both B and C will enjoy greater access to A’s market. In GATT/WTO bargaining, however, A will not do this unilaterally: it will seek a reciprocal tariff cut on good y from whichever economy is the principal supplier of x into its market. Suppose that economy is B, and that B agrees to cut its tariff on y in exchange for A’s concession on x.

Consider what this bargain implies for economy C, which has not participated in the negotiation. C’s exporters of x benefit from A’s tariff cut and gain further access into A’s market. At the same time, B’s own tariff cut on y stimulates its economy and strengthens its competitive position as an exporter of x into A’s market. When the bargain between A and B is broadly balanced according to the GATT and WTO reciprocity principle, from the perspective of C’s exporters these two effects tend to offset each other, leaving C’s export volume into A’s market roughly unchanged.

The implication is direct: B, which negotiated and made concessions, captures the gains; C, which did not engage, does not. The primary benefits of the exchange flow not from the tariff cuts received, but from the domestic efficiency improvements triggered by the tariff cuts each economy itself undertakes. An important caveat, as noted by Ossa (2014), is that this result need not hold as starkly as it is described here when products are highly differentiated, and that the magnitude of these spillovers depends on the degree of product differentiation. Nevertheless, because WTO tariff commitments are generally negotiated at relatively detailed product classifications, the standard intuition remains useful.

Historical evidence from the GATT rounds is consistent with this logic. In a preliminary assessment of the Torquay Round (1950–51), the US State Department estimated the indirect benefits accruing to the United States from concessions exchanged among other participants – that is, the pure spillover gains – at approximately 10 per cent of the direct export benefits secured through its own negotiations. This is illustrative of the fact that bargaining spillovers exist, but they are secondary. More recent evidence from WTO accession is also constituent with this logic: economies undertaking deeper accession commitments subsequently experienced faster economic growth (Brotto et al., 2024). These results suggest that the primary gains from GATT and WTO tariff bargaining are those that each economy generates through its own engagement in the system.

More generally, the practical significance of this insight is supported by a wide body of empirical studies that confirm the key mechanism: an economy’s own tariff cuts stimulate its exports. A review of the evidence on this point can be found in Bagwell and Staiger (2014). It is this mechanism that allows an economy to capture more of the additional market access offered by its trading partners when it reciprocates their tariff concessions with tariff concessions of its own.

This insight has a practical implication that is easy to overlook. One might ask why an economy would not simply liberalize unilaterally if the gains ultimately flow from its own tariff cuts. The answer, as James Meade (1955) observed, is that unilateral liberalization exposes the reforming economy to a deterioration in its terms of trade that may offset the efficiency gains it captures. Reciprocal bargaining within the multilateral trading framework provides the conditions under which trade liberalization becomes both politically feasible and economically advantageous, which is precisely what the system was designed to deliver.

reductions elsewhere in its schedule, or accept the possibility that affected partners may withdraw equivalent concessions, a possibility that reflects the role of reciprocity in Article XXVIII renegotiations. By embedding the reciprocity norm into the process of commitment adjustment, Article XXVIII ensures that renegotiation does not become a mechanism for the unilateral erosion of agreed market access levels.

Empirical and historical evidence from GATT tariff bargaining rounds provides broad support for the economic logic underpinning MFN treatment and reciprocity and illustrates how these principles shaped negotiation behaviour in practice. Three strands of evidence are particularly instructive: evidence on how market power influences unilateral tariff-setting outside the GATT and the WTO; evidence on how GATT rules altered bargaining behaviour within the system; and evidence on the aggregate and distributional consequences of MFN relative to a counterfactual world of discriminatory bargaining.

The first strand of evidence concerns the relationship between market power and tariff-setting outside the GATT and the WTO (see also Box B.2). An important implication of the terms-of-trade framework is that economies with greater market power over their foreign suppliers have stronger incentives to set higher tariffs unilaterally, in order to shift the terms of trade in their favour. Evidence from Broda, Limão and Weinstein (2008), examining the unilateral tariff choices of 15 economies that were not WTO members at the time, confirms this prediction: most economies, including seemingly small ones, possessed significant market power in at least some industries, and their unilateral tariff choices systematically reflected this power, with higher market power associated with higher tariffs. Complementing this finding, Bagwell and Staiger (2011) examine the tariff concessions agreed to by 16 economies during their WTO accession negotiations, and find that these economies made larger tariff cuts precisely on products where their market power was greatest – consistent with the view that joining the GATT or the WTO removes or substantially diminishes the imprint of market power on tariff levels, to the benefit of trading partners. Employing a completely different methodology to analyse the tariff bargaining in the Uruguay Round, Ludema and Mayda (2013) arrive at a similar conclusion.

The second strand of evidence concerns how GATT rules shaped bargaining behaviour in

practice. Analysis of the bargaining records from the Torquay Round (1950–51) reveals a striking contrast between economies that had prior experience negotiating under GATT rules and those that were new to the system (Bagwell, Staiger and Yurukoglu, 2020). Governments that had participated in earlier GATT rounds arrived at Torquay tabling initial tariff offers very close to the final concessions they ultimately agreed – consistent with non-strategic behaviour, in which the reciprocity norm effectively pre-determined the terms of exchange, turning the negotiations into what one contemporary observer described as a transparent search for willing partners rather than a process of strategic haggling. By contrast, governments acceding to GATT for the first time at Torquay and unfamiliar with the negotiating norms that had developed under GATT rules behaved more strategically, opening with lower offers and progressively revealing their true positions during the negotiations – a pattern consistent with the kind of bargaining behaviour that, as Ronald Coase has argued, can lead to excessive delay or breakdown. This contrast suggests that GATT rules did meaningfully alter bargaining behaviour, reducing strategic friction among experienced participants and contributing to more efficient and predictable negotiating outcomes.

The third strand of evidence examines the consequences of MFN for the distribution of tariff bargaining gains and for world welfare. Bagwell, Staiger and Yurukoglu (2021) use a quantitative trade model to ask how the Uruguay Round might have turned out if economies had been permitted to negotiate discriminatory rather than MFN tariff cuts. Their results show that under MFN bargaining, world real income rose by 0.06 per cent, capturing roughly one-third of the potential worldwide benefits from tariff bargaining according to their model as a result of free-rider issues associated with MFN bargaining. But under discriminatory bargaining, their results indicate that trade-diversion effects would replace free-rider issues and make the bargaining outcomes worse from a worldwide perspective, with world real income actually falling by between 0.02 and 0.07 per cent. The distributional consequences are equally revealing: while a small number of large economies with high estimated bargaining power might have gained more under discriminatory bargaining, the majority of economies – and in particular smaller and developing economies – would have been significantly worse off. WTO economists used the same quantitative trade model as in Bagwell, Staiger and Yurukoglu (2021) to

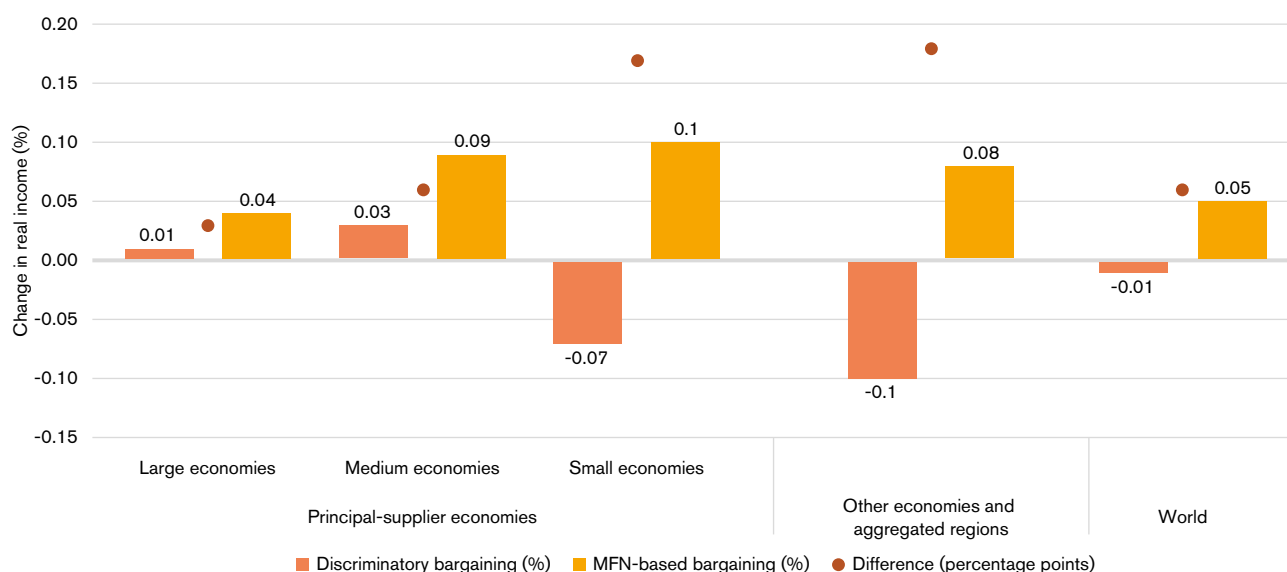
compare the outcomes of a hypothetical new round of negotiations under MFN bargaining and discriminatory bargaining over tariff changes, but starting from current tariff levels and calibrated to 2018 trade, production and productivity data (based on the OECD Trade in Value-Added (TiVA) database). Under MFN bargaining, world real income would rise by about 0.05 per cent, whereas discriminatory bargaining would lead to a 0.01 per cent reduction (see Figure B.6). While these magnitudes may appear small, as in Bagwell, Staiger and Yurukoglu (2021) they are meant to quantify only one facet of the abandonment of MFN, and only for one round; see the scenario analysis in Section B.4 for a more complete view of a world without MFN and other foundational WTO rules.

The distributional consequences of losses under discriminatory bargaining are particularly revealing. As Figure B.6 shows, whereas large principal supplier economies would incur on average a small increase in welfare (0.01 per cent), smaller ones would register losses (-0.07 per cent). Other economies that are not principal suppliers and aggregate regions stand to lose the most, as they do not actively participate in tariff bargaining. Conversely, under MFN-based bargaining, all groups gain on average. These results provide quantitative support for the view that MFN treatment not only

improves aggregate outcomes but does so in a way that protects smaller and less powerful members from negative terms of trade effects, reinforcing the participation logic discussed above. Importantly, the aggregate result also serves as a reminder that in a world of discriminatory bargaining, the system as a whole performs worse, and individual large economies that might appear to gain bilaterally from their superior bargaining power would ultimately find themselves operating in a less stable, less inclusive and less productive trading environment. It is also important to keep in mind that these results abstract from the bargaining frictions and the cost of possible outright bargaining failures (see Box B.3) that abandonment of MFN treatment might imply.¹⁷

Further analysis shows that abandoning the simplified framework for tariff negotiations, facilitated by clear rules, “principal supplier” bargaining and MFN treatment, would produce large welfare losses. Without MFN treatment and clear bargaining rules, tariffs could deviate to the non-cooperative level, because, as noted just above, frictions arising under discriminatory tariffs could be large enough to prevent successful negotiations altogether. In a hypothetical scenario in which the current tariff level would rise to the non-cooperative Nash equilibrium level (equal to an

Figure B.6: MFN bargaining improves aggregate outcomes and protects smaller economies more



Source: WTO Secretariat estimates.

Note: This figure compares the outcomes for real income of two distinct trade liberalization pathways: a multilateral MFN tariff reduction (“MFN bargaining”) versus a discriminatory, non-MFN round (“Discriminatory bargaining”). The dots denote the percentage point difference between the two regimes. In this chart small, medium and large economies are defined as principal-supplier economies at the bottom, middle and top thirds of the real GDP distribution, respectively. Other economies and aggregated regions are assumed not to participate in tariff bargaining, as they are represented as aggregates of individual economies in this simulation.

economy unilateral optimal tariff) – as calculated by WTO economists and in line with the levels in Ossa (2014) and Bagwell, Staiger and Yurukoglu (2021) – global tariffs could increase sharply, rising from a global average of about 5 per cent to about 30 per cent. Simulations show that this would generate global welfare losses of approximately 1.65 per cent of world real income (see Figure B.7). Moreover, these losses would be unevenly distributed, with smaller principal supplier economies facing a greater reduction than large ones, at respectively 2.94 per cent versus 1.23 per cent. A similar pattern is seen across income levels. This result indicates that the absence of multilateral tariff bargaining – facilitated by the MFN rule – would produce substantial welfare losses, affecting small and lower-income economies the most (see the opinion piece by Aaditya Mattoo). In Section B.4, further scenarios on trade policy cooperation, considering both tariffs and NTMs, are explored.

(iii) The outcomes of negotiations reflect the logic of reciprocal multilateral cooperation

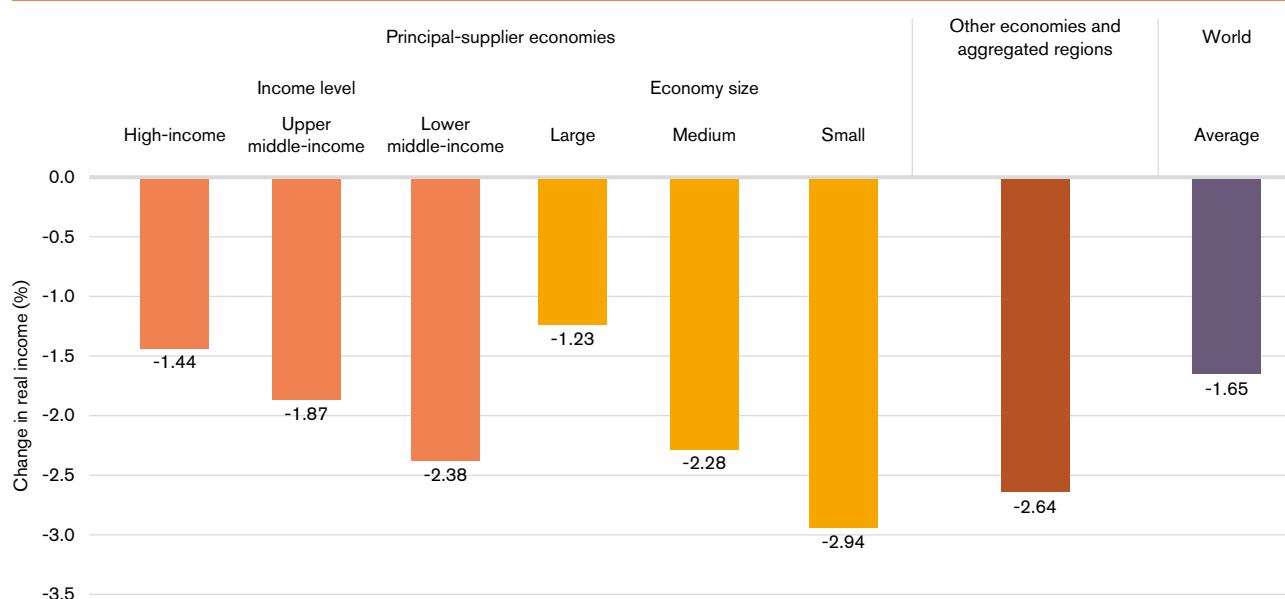
The historical record confirms that successive multilateral negotiating rounds delivered substantial tariff reductions. Early post-World

War II tariff averages for industrial economies are estimated to have been relatively high, in the range of 20 to 40 per cent (WTO, 2007). While early rounds yielded relatively modest reductions, the Kennedy, Tokyo and Uruguay Rounds delivered substantial cuts, averaging between 33 and 38 per cent for major industrial economies. These reductions were negotiated on a reciprocal basis and embedded in binding commitments, illustrating the centrality of market access exchange in the multilateral system.

To understand how these outcomes were achieved, it is useful to examine the negotiation methods used across GATT rounds. Each GATT round employed a distinct negotiation approach, ranging from reciprocal “request-and-offer” bilateral talks to formula-based tariff-cutting approaches designed to apply common reduction rules across products. Table B.1 summarizes the main negotiation methods used in each multilateral round, showing how the system structured cooperation and reciprocal commitments to deliver freer trade over time.

Although negotiations formally took place within a multilateral framework, early bargaining was often organized around the “principal supplier” rule. As mentioned earlier, under this approach,

Figure B.7: The cost of non-cooperative tariffs is unevenly distributed, affecting lower-income and smaller economies most



Source: WTO Secretariat estimates.

Notes: This figure illustrates the GDP-weighted percentage change in welfare when shifting from the baseline scenario to a non-cooperative Nash equilibrium. By breaking down the regions by income group and economy size, it quantifies the systemic economic cost of abandoning MFN principles and reverting to uncoordinated tariffs. In this chart small, medium and large economies are defined as those principal-supplier economies at the bottom, middle and top thirds of the real GDP distribution, respectively. Economies in all groups set tariffs non-cooperatively in this simulation.

MFN, reciprocity and developing economies

by Aaditya Mattoo

Director of the Development Research Group, World Bank

The line from the song by the music group U2 – “I can’t live with or without you” – may well describe the relationship of developing economies with the most-favoured-nation (MFN) principle. MFN treatment has been a mixed blessing for them, both when honoured and when set aside.

When taken seriously, MFN has ensured that trade liberalization was non-discriminatory and economically efficient, allowing imports to flow from the most competitive suppliers. It has also constrained the ability of powerful economies to demand asymmetric concessions, shifting trade negotiations away from bilateral power plays toward more balanced multilateral exchange.

Yet MFN had a weakness: because all economies benefit from any concession, it encouraged “free-riding” – where economies not making trade concessions took advantage of those made by other economies – and limited developing-economy engagement in reciprocal negotiations under the General Agreement on Tariffs and Trade (GATT). By not opening their markets much during negotiations, developing economies forewent gains that could have resulted from their own openness. And as they offered little, they received little in return, as developed economies engaged in selective MFN liberalization excluding key sectors of export interest for developing economies – notably agriculture and textiles – from the scope of the negotiations.

The Uruguay Round (1986-94) sought to correct these asymmetries by bringing both developing economies and their priorities into the system. In practice, however, the outcome was more formal than substantive. Many developing economies bound a greater share of their tariffs, but at levels well above those they actually applied. Proportional reciprocal cuts in bound rates (what Jagdish Bhagwati has called “first-difference reciprocity”) seldom translated into reductions in applied rates. Even where reforms enhanced transparency – such as converting textile quotas into tariffs or integrating agriculture into WTO rules – protection often remained high.

The stalled Doha Round, which had been launched in 2001, revealed another dimension: diluting MFN

can undermine multilateral trade-opening. Since the 1970s, advanced economies have offered selective unilateral tariff preferences to imports from developing economies through the Generalized System of Preferences, which were later extended by initiatives such as the US’s African Growth and Opportunity Act (AGOA) and the EU’s Everything but Arms. While these initiatives delivered some tangible benefits, they further weakened incentives for domestic reform, did not deliver economic transformation, and dampened support for multilateral liberalization among beneficiaries, who feared preference erosion.

The link between MFN and reciprocity has become sharper as the global economy has changed. Tariff asymmetries persist across economies and sectors, but economy size has become more balanced: developing economies’ share of world trade has risen from about one-fifth to roughly one-half over the past five decades. While the tariffs imposed by these economies when they were small had limited global effects, protection in the now large developing economies affects international prices and terms of trade.

In this changed context, some developed economy WTO members have questioned the validity of MFN and traditional reciprocity norms. Instead, reciprocity has been interpreted as parity of bilateral tariff levels rather than negotiated proportional reductions, and some bilateral negotiations have resulted in one-sided market-opening arrangements. Developing economies face a difficult choice regarding how and to what extent they can continue to adhere to MFN under these arrangements and maintain the associated efficiency benefits. In some cases, they have chosen to grant preferential market access. In other cases, selective MFN trade-opening has re-emerged, but with a twist, this time with developing economies choosing to liberalize trade only in products in which these developed economy members have a comparative advantage. In such sectors, even selective opening may be beneficial – but the gains in other sectors are likely to be greater under broad-based trade liberalization.

In the end, MFN has been both the glue and the solvent of the trading system for developing economies – binding them into a rules-based order

even as it weakened their incentives to bargain and reform. The current drift toward selective reciprocity risks further eroding the scope of MFN. The choice is stark: accept a fragmented system of preferences and deals, or adhere to a simple principle – what is offered to one is offered to all. Developing economies may not have fully embraced either MFN or reciprocal liberalization, but they would be better off with both.

Disclaimer

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negotiations over a particular tariff line were conducted primarily between the main exporting economy (or economies) and the importing economy maintaining the tariff. The rationale was practical and economic: the principal supplier was typically the economy most affected by the importing member's trade restrictions and therefore had the strongest incentive to negotiate reciprocal concessions. Bargaining could thus focus on the trading relationships where the relevant market access spillovers of a particular tariff were greatest. The multilateral character of the system derived from the interaction between this bargaining structure, the MFN principle and the fact that all bargains were happening simultaneously. Once negotiated, tariff concessions were extended to all members on a non-discriminatory basis.

The principal supplier rule had significant implications for who was effectively at the

bargaining table. In the early GATT rounds, the largest trading economies were principal suppliers across the widest range of products and therefore drove the content of most negotiations. Smaller economies were often not principal suppliers in the products of greatest interest to them, and consequently benefitted from tariff cuts as passive MFN recipients rather than active negotiating parties. Nevertheless, the system limited the “free-rider” problem (i.e., when a member that does not make trade concessions nevertheless profits from tariff cuts and concessions made by other members in negotiations under the MFN principle) to some degree. Because concessions were negotiated with the economies that had the greatest export interest in each product, the members most likely to benefit from a tariff cut were also those most directly involved in producing it. As discussed above, the interaction of MFN with reciprocity further constrained free-riding,

Table B.1: Negotiation methods used in successive GATT negotiating rounds

Year	Place / name	Methodology	Participants
1947	Geneva Tariff Conference	Reciprocal “request-and-offer” bilateral talks. Product-by-product and based on principal supplier rule	23
1949	Annecy Tariff Conference		13
1950-51	Torquay Tariff Conference		38
1956	Geneva Tariff Conference		26
1960–61	Geneva Dillon Round	Primarily “request-and-offer” negotiations, with limited use of linear tariff cut proposals	26
1964–67	Geneva Kennedy Round	Linear Formula with exceptions	62
1973–79	Tokyo Round	Swiss Formula with exceptions	102
1986–94	Uruguay Round	Mixed approach: formula(e) and “request-and-offer”	123

Note: Across rounds, the evolution of negotiation methods reflected efforts to preserve reciprocity while adapting bargaining to a growing and more diverse membership. The exceptions to the formulas used in the Geneva Kennedy Round and the Tokyo Round were typically determined by bilateral reciprocal bargaining (Baldwin and Clarke, 1987).

limiting the benefits any member could accumulate without offering concessions of its own.

As participation in the multilateral trading system expanded, some limitations of early negotiation methods became apparent. Initial rounds relied heavily on the “request-and-offer” approach, under which members requested and offered tariff concessions bilaterally and product by product, often conducted on the basis of the principal supplier rule. While effective in a small-group setting, this method proved cumbersome as the number of participants grew and tended to deliver relatively modest tariff reductions (Baldwin, 2009; Hoda, 2018). Beginning with the Kennedy Round, formula-based approaches were introduced to achieve broader and more systematic cuts. Rather than negotiating each tariff line individually, members agreed on a mathematical formula that automatically reduced tariffs across large groups of products. The Kennedy Round used a linear formula, applying approximately the same proportional tariff cut across products, while the Tokyo Round introduced the Swiss formula, which cuts higher tariffs proportionally more than lower tariffs, thereby reducing tariff peaks and promoting greater tariff harmonization. Although formula-based approaches substantially improved the efficiency of negotiations, bilateral bargaining did not disappear. Instead, it increasingly focused on determining exceptions and sensitive products, where negotiations reverted to more traditional item-by-item reciprocal bargaining (Baldwin and Clarke, 1987). The evolution of negotiation methods thus reflects an ongoing effort to adapt the structure of bargaining to an increasingly complex and multipolar trading system.

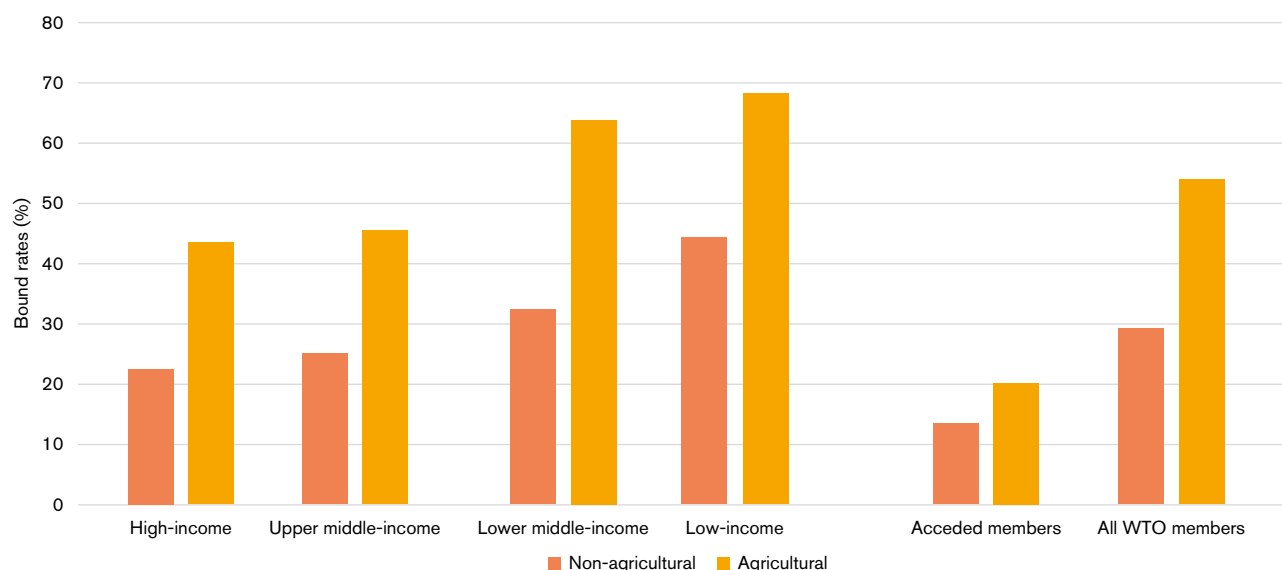
Trade liberalization was accompanied by a marked expansion in the scope of binding commitments, especially with the Uruguay Round. Prior to the Uruguay Round, many developing economies had bound only a limited share of their tariff lines. Post-Uruguay Round commitments substantially increased binding coverage across both agricultural and non-agricultural products, enhancing predictability and reducing policy uncertainty. For a sample of developing economies for which data are available (the economies covered then by the GATT Integrated Database), binding coverage for non-agricultural (industrial) products rose from 21 per cent to 73 per cent, while for developed economies it increased from 78 per cent to 99 per cent. In agriculture, the Uruguay Round resulted in 100 per cent binding coverage for all members, reflecting the

Round's tariffication process, which converted most non-tariff barriers into bound tariffs. As a result, for developing economies in the same sample, agricultural binding coverage increased from 17 per cent to 100 per cent, while for developed economies it rose from 58 per cent to 100 per cent (GATT, 1994; WTO, 2007).

Despite substantial liberalization over successive negotiating rounds, bound rates remained systematically higher among lower-income economies. This reflects, in part, structural asymmetries in the negotiation process and the historical sequencing of trade liberalization. High-income economies participated in multiple rounds of reciprocal bargaining conducted largely among principal suppliers and progressively reduced and consolidated tariffs over time. Many lower-income economies, by contrast, participated more as passive MFN beneficiaries than as active bargaining parties and retained greater policy space through higher bindings (see Figure B.8).

Members that acceded after the creation of the WTO generally undertook more extensive and deeper binding commitments as part of their accession negotiations. The tariff commitments of these acceded members – which apply on an MFN basis to all WTO members – are on average substantially lower than the average across all WTO members (see Figure B.8). This partly reflects the increasing value of WTO membership over time: acceding economies joining the WTO were effectively buying into a substantially more valuable system of concessions than that which original GATT members had faced. From a terms-of-trade perspective, stronger commitments could therefore be understood as part of the reciprocal exchange through which economies gained access to the benefits of membership (Bagwell and Staiger, 2011). But other motives might also be important. Binding commitments served as an anchor for domestic reforms and provided assurance to trading partners and investors. At the same time, accessions negotiations often extended beyond tariff bindings into deeper commitments in services, IP, investment-related measures and regulatory disciplines, raising questions about bargaining asymmetries between incumbent and acceding members. These asymmetries may arise not only from differences in economic size and negotiating leverage, but also from the structure of the accession process itself, in which major trading economies participate systematically and exercise influence in the accession

Figure B.8: Bound rates are higher among lower-income economies



Source: WTO Secretariat calculations.

Note: Income groups follows the latest World Bank classification, based on gross national income (GNI) per capita thresholds: low-income economies (US\$ 1,135 or less); lower middle-income economies (between US\$ 1,136 and US\$ 4,495); upper middle-income economies (between US\$ 4,496 and US\$ 13,935); and high-income economies (more than US\$ 13,935).

protocols. In practice, accessions outcomes likely reflect a combination of reciprocal market access logic, domestic commitment and credibility motives, and bargaining power considerations. As a result, the bindings undertaken by acceded members are deeper than those undertaken by “original” WTO members at comparable levels of development.

Bound rates are also systematically higher in agriculture than in non-agricultural sectors across all income groups (see Figure B.8). While agricultural products had long been part of GATT negotiations, the Uruguay Round brought them fully into a tariff-based bargaining framework. The tariffication exercise, which converted quantitative restrictions and variable levies into bound tariff equivalents, was a necessary first step – together with new disciplines on domestic support and export subsidies – for making agricultural protection legible and negotiable. The process succeeded in establishing a common currency for agricultural bargaining, but many bindings were set at relatively high ceiling levels that preserved substantial policy space and left applied protection largely unchanged in many economies. Those high ceilings were not accidental: they reflected the political sensitivities of agricultural negotiations, which encompass not only market access but also domestic support, environmental objectives and concerns over rural

livelihoods, making trade liberalization particularly difficult. Subsequent negotiations, including the Doha Round, were designed to reduce those ceilings but could not complete the task, illustrating the extent to which agricultural liberalization remains unfinished business within the multilateral trading system.

The Uruguay Round also extended the multilateral market access architecture beyond goods. For the first time, a multilateral framework established a horizontal MFN obligation in services and enabled members to undertake market access and national treatment commitments on a sector- and mode-specific basis. Both market access and national treatment apply only to the sectors and modes inscribed in a member’s schedule of specific commitments, which sets legally enforceable ceilings on the restrictiveness of market access and national treatment limitations (WTO, 2019). Although many bindings exceed applied restrictiveness levels, they enhance predictability and safeguard the value of negotiated concessions, thereby supporting the long-term expansion of services trade (Ciuriak, Dadkhah and Lysenko, 2020; Lamprecht and Miroudot, 2020).

Service negotiations and commitments are more complex than tariff liberalization. The breadth and depth of GATS commitments vary across members. As shown in Figure B.9, the share of service sectors

with GATS commitments varies by income group and by whether economies were original WTO members or joined the organization through subsequent accessions. On average, high-income and upper middle-income economies exhibit higher coverage, and acceded members tend to bind more sectors than original WTO members. Unlike in goods, where the TBT and SPS Agreements give international standards a recognized benchmark function, a comparable horizontal framework for services regulation does not exist under the GATS. Barriers to services trade are also less easily quantifiable than tariffs, as they take the form of regulations rather than border instruments. In many sectors, trade in services largely takes place through commercial presence (mode 3 according to the GATS),¹⁸ thus intersecting with foreign investment policies. Digitalization is also expanding the importance of cross-border supply (mode 1) by enabling more services to be delivered without physical establishment or face-to-face interaction, thereby creating new opportunities for participation in global markets, including for developing economies (WTO, 2019).

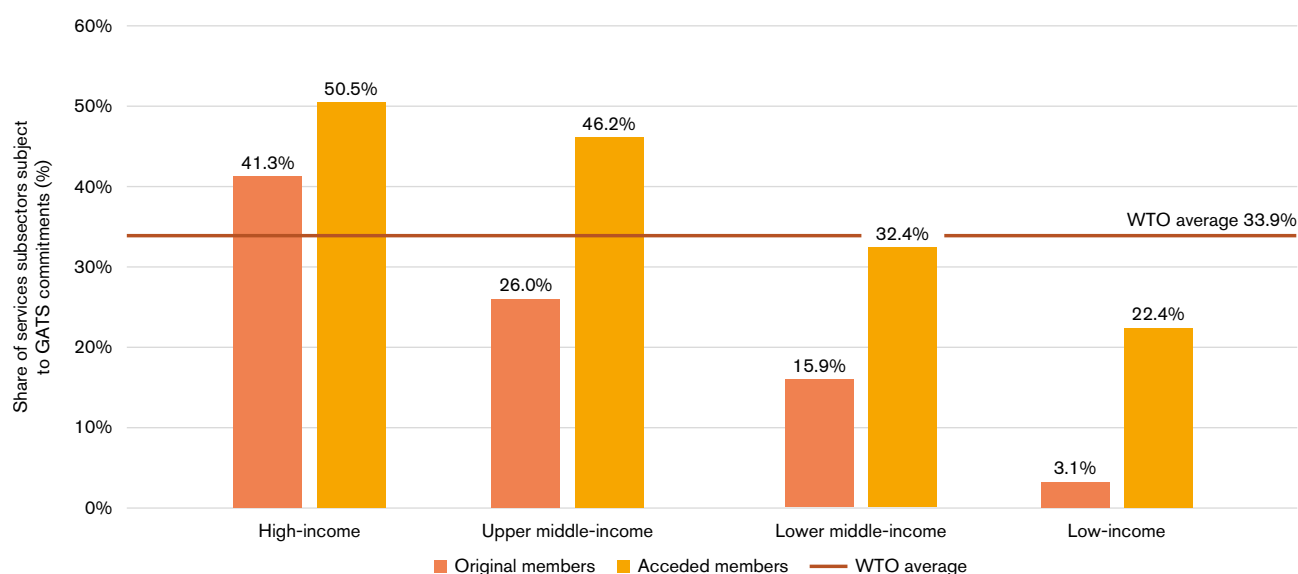
The Doha Development Agenda, launched in 2001, represented the most ambitious attempt to extend reciprocal market access bargaining into areas where liberalization had

remained incomplete. As discussed in Chapter A, the negotiations exposed the increasing difficulty of reaching new bargains in a more multipolar and heterogeneous global economy. Diverging interests across economies complicated the balance of rights and obligations, especially in politically sensitive areas such as agricultural support, industrial tariffs and policy space for development. For some members, the limited progress in advancing these negotiating mandates has contributed to what they perceive as a trust deficit in the negotiating process.

(c) GATT and WTO disciplines preserved negotiated commitments and extended cooperation

The focus of the multilateral trading system is not limited to tariff-based market access bargaining. As tariffs fell through successive rounds of GATT negotiations, governments increasingly recognized that negotiated market access could be undermined by policies operating behind borders or through instruments not directly disciplined by tariff commitments and by the basic protections for trading opportunities provided in the original GATT articles, such as the national treatment provision and the prohibition of quantitative measures. The multilateral trading system therefore evolved beyond tariff

Figure B.9: The share of services sectors with GATS commitments is larger in high-income economies and driven by later accessions



Source: WTO Secretariat calculations from I-TIP Services – GATS commitments (<https://itip-services-worldbank.wto.org/default.aspx>).

Note: Income groups follow the latest World Bank classification, based on gross national income (GNI) per capita thresholds: low-income economies (US\$ 1,135 or less); lower middle-income economies (between US\$ 1,136 and US\$ 4,495); upper middle-income economies (between US\$ 4,496 and US\$ 13,935); and high-income economies (more than US\$ 13,935). Historical GATS commitments for the European Union (EU-25) were used.

bargaining to include a broader set of rules governing domestic regulation, trade-related investment measures, subsidies, IP and trade in services. These disciplines helped preserve the value of negotiated market access commitments while also expanding the scope of cooperation.

This issue had already been anticipated by James Meade in the 1950s. He observed that successful trade liberalization required not only agreements to reduce tariffs, but also disciplines capable of preventing governments from replacing tariffs with alternative forms of protection, while preserving sufficient policy space to pursue legitimate domestic objectives.¹⁹ Meade also emphasized the institutional trade-off between highly detailed multilateral rules and greater reliance on dispute settlement to address unforeseen forms of circumvention (Meade, 1942). The evolution of GATT and WTO disciplines beyond tariffs can be understood against this background, as an effort to balance predictability, flexibility and enforceability.

GATT and WTO rules help to preserve governments' right to pursue legitimate policy objectives while seeking to minimize unnecessary impacts on international trade. These rules perform two related but analytically distinct functions. First, many disciplines help secure the market access commitments exchanged through reciprocal bargaining by limiting the ability of governments to circumvent tariff concessions through alternative policy instruments. This function follows directly from the terms-of-trade logic and protects the market access commitments at the core of the multilateral trading system. Second, a number of these agreements also serve broader cooperative purposes that go beyond preserving tariff concessions alone. They help governments to manage regulatory diversity, reduce transaction costs, coordinate policies in integrated markets, or provide predictability for firms and investors. The same disciplines therefore often combine a market access preservation function with wider roles linked to economic integration and international cooperation.

(i) GATT and WTO disciplines help to preserve the value of negotiated market access

Once market access commitments are negotiated, a central challenge is preventing members from shifting protection to alternative policy instruments. While tariffs have traditionally

been the main instruments for trade protection, constraints on their use may lead members to rely on alternative domestic measures with similar effects (Bagwell and Staiger, 2001). Therefore, tariff concessions remain meaningful only if economies cannot erode market access commitments through behind-the-border measures and regulations. To that end, trade-opening under the multilateral trading system could be undermined if members substitute tariffs with domestic regulations or NTMs.

National treatment and NTMs disciplines collectively preserve and extend market access commitments. National treatment, codified in GATT Article III (“National Treatment on Internal Taxation and Regulation”), has a clear anti-circumvention function: it requires that imported products, once admitted into the domestic market, receive treatment no less favourable than that granted to “like” domestic products. By restricting discriminatory internal taxation, regulation or other policies, national treatment ensures that tariff concessions are meaningful in practice, while also applying more broadly to all products, including those not subject to tariff bindings (consistent with the tariffication of protective devices that GATT rules encourage). Combined with the MFN obligation, national treatment reinforces predictability and fairness, ensuring that the anti-circumvention function of these disciplines applies consistently across trading partners. Prohibitions on quotas and other quantitative restrictions complement tariff bindings by preventing members from achieving protection indirectly. Unlike tariffs, which generate transparent price signals, quotas or variable levies can produce trade rents, reduce market efficiency and obscure the degree of protection. GATT Article XI (“General Elimination of Quantitative Restrictions”) constrains these instruments, protecting the balance of concessions negotiated in trade rounds and preserving the integrity of market access commitments.²⁰

WTO rules further address domestic regulatory measures in the goods area that could distort market access. With the creation of the WTO, the system went beyond traditional “shallow” integration – focused on border tariffs negotiated at the product level – into somewhat “deeper” forms of integration restricting domestic policy space (Staiger and Sykes, 2011). Regulatory requirements may impose costs that disproportionately affect foreign producers or limit their access to the domestic market, thereby replicating some of the protective

effect of tariffs. The TBT and SPS Agreements aim to preserve members' regulatory autonomy while limiting unnecessary obstacles to trade. By requiring that measures be non-discriminatory and no more trade-restrictive than necessary, and grounded in scientific evidence or internationally recognized standards, these agreements limit the scope for regulatory capture of trade policy, while preserving genuine policy space. This role is further enhanced by the inclusion of transparency obligations, such as notifications, enquiry points and advance publication of regulations.

Investment-related measures can similarly replicate the protective effects of tariffs.

Local content requirements, for example, oblige firms to source a share of inputs domestically, effectively discriminating against foreign suppliers in a manner that mirrors an import restriction. These instruments allow members to influence trade outcomes indirectly, by shaping firms' production and sourcing decisions. The Agreement on Trade-Related Investment Measures (TRIMs Agreement) reflects this logic by extending GATT disciplines concerning national treatment and quantitative restrictions to investment-related policies, thereby limiting the scope for protection. However, to date its scope remains relatively narrow, applying GATT disciplines to a limited set of measures.

Services liberalization can also be understood under a similar anti-circumvention logic, adapted to a setting where border instruments such as tariffs are unavailable.

In this context, governments can replicate restrictive outcomes through limitations on market access or discriminatory regulatory treatment. But in contrast to trade in goods, where anti-circumvention limits members' ability to offset negotiated commitments through alternative policy instruments, protection in trade in services is inherently regulatory, and the relevant margin for circumvention lies within domestic policy itself. The GATS addresses this through market access and national treatment commitments undertaken in scheduled sectors. In a broad sense, GATS schedules function as the services equivalent of tariff bindings: they define the ceiling of permissible restriction and prevent the progressive reintroduction of protection through regulatory substitution.

Subsidies represent a further channel through which governments could erode tariff concessions, and one where the WTO's

disciplines are more layered. By lowering production costs or supporting domestic producers, subsidies can replicate some of the protective effects of tariffs while operating through domestic instruments rather than border measures. The Agreement on Subsidies and Countervailing Measures (SCM Agreement) establishes a general framework that separates acceptable subsidies from unacceptable ones: it prohibits export subsidies and subsidies contingent on domestic content use; subjects other subsidies to a test of serious prejudice to trading partners' interests; and authorizes remedial countervailing duties to be applied when unfairly subsidized imports injure, or threaten to injure, domestic industries. Together, these provisions are meant to ensure that the competitive conditions implicit in tariff concessions cannot be systematically offset by distortionary domestic support.

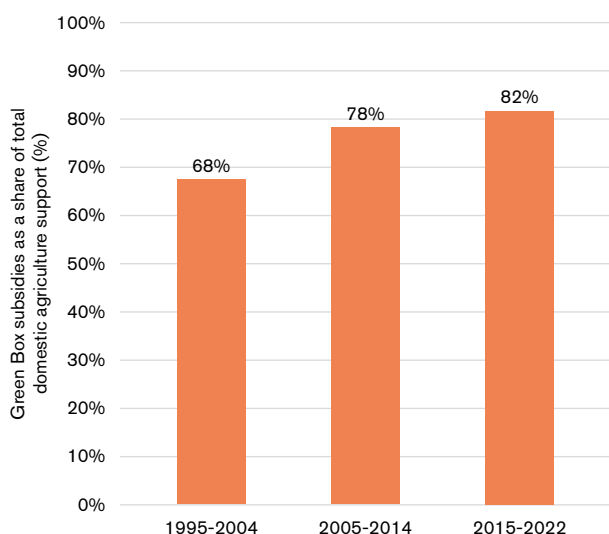
In agriculture, these disciplines are structured under the Agreement on Agriculture, which encourages a shift toward less trade-distorting measures of support.

Under the WTO framework, domestic support is categorized into figurative "boxes" according to its legal status and its potential to distort production and trade.²¹ For example, the Green Box covers measures deemed to have, at most, minimal trade-distorting effects; provided they meet specific criteria, these measures are permitted without limit. Introduced in 1995, this classification established a standardized framework for monitoring and disciplining agricultural subsidies, requiring WTO members to notify the domestic support provided.

Evidence suggests that these disciplines contributed to a gradual shift in the composition of support.

The proportion of subsidies allocated in the Green Box have increased since the creation of the WTO (see Figure B.10). This shift indicates that members have adjusted policies in response to multilateral rules by increasing the share of support through channels such as domestic food aid (consumer support), decoupled income support, infrastructural services or environmental programmes. In addition, among all members that currently notify domestic support, around 90 per cent notify the use of Green Box support, making it now the most widely used category across both developing and developed members. In this way, subsidy disciplines complement other anti-circumvention rules by limiting the scope for governments to offset tariff concessions through domestic support policies.

Figure B.10: The share of Green Box subsidies has increased since 1995



Source: WTO Secretariat calculations.

Note: Argentina and Mexico were removed from the sample due to inconsistency in exchange rates.

(ii) GATT and WTO disciplines have extended cooperation beyond market access

WTO disciplines on non-tariff and behind-the-border measures perform functions that extend well beyond preserving negotiated market access commitments. Domestic regulatory measures often pursue legitimate public policy objectives – such as health, safety, financial stability, environmental protection or innovation – while at the same time affecting trade conditions across borders. The coexistence of multiple rationales can make it difficult to distinguish legitimate regulation from disguised protection (WTO, 2012). Moreover, uncoordinated domestic policies can increase transaction costs, generate regulatory fragmentation and create uncertainty that discourages the investment and specialization on which the gains from trade depend. WTO agreements have also evolved to address these challenges, providing frameworks for managing regulatory interdependence, facilitating coordination and the stabilization of policy expectations, and reducing uncertainty. These broader functions have become increasingly important as production fragmented internationally and trade integration extended beyond border barriers into regulation, services and knowledge-based activities. For many members, these coordination and credibility functions represent

an important source of value from WTO disciplines, alongside their market access role.

The impact of regulatory measures on trade is complex and context-dependent, as such measures can both facilitate and hinder trade depending on their design and the capacities of firms and economies to comply with them.

Compliance with standards often entails fixed costs that are independent of the volume of trade, placing a disproportionate burden on smaller firms and exporters from developing and small economies. This can be particularly pronounced in sectors such as agriculture and food products, where regulatory requirements are more common and are often associated with trade-restrictive effects. However, standards may also facilitate trade by improving information about product quality and safety, thus increasing consumer confidence, especially in more technologically advanced sectors. These mixed effects highlight both the efficiency gains and the distributional challenges associated with regulatory measures in the multilateral trading system (WTO, 2012).

The TBT and SPS Agreements illustrate this broader coordination function. Beyond their anti-circumvention role, they also provide frameworks for managing regulatory interdependence in an integrated global economy, reducing unnecessary divergence and helping to prevent a race to the bottom. By encouraging regulatory convergence around common international standards – such as those developed under the Codex Alimentarius for food safety or the ISO framework for technical standards – these agreements help reduce fragmentation across regulatory systems. Evidence suggests that this convergence toward international standards generally facilitates trade across both developed and developing economies by lowering compliance costs and improving regulatory compatibility (Schmidt and Steingress, 2022; Cadot et al., 2014; World Bank, 2025). By encouraging equivalence, harmonization and forms of mutual recognition, these agreements help solve coordination problems that would persist even in the absence of tariff commitments. Moreover, by improving the quality and availability of information and encouraging interoperability across regulatory systems, these agreements reduce uncertainty, support integrated markets and limit unnecessary diversity in national requirements in ways that go beyond any specific tariff concession. Similarly, the WTO Trade Facilitation Agreement (TFA), by helping coordination over domestic trade-related regulations

and procedures, lowers wasteful trade costs and strengthens supply chain efficiency.

Services trade agreements are particularly important from the perspective of predictability and policy credibility. Unlike tariffs on goods, barriers to services trade generally take the form of domestic regulatory measures affecting the conditions under which services firms operate across borders. Because services suppliers frequently incur substantial sunk costs – especially under commercial presence (mode 3 according to the GATS)²² – stable and predictable policy conditions become especially important. In this context, the role of the GATS is not limited to constraining discriminatory or trade-restrictive measures; it also provides a framework for progressively opening markets, locking in reforms, and creating credible expectations about future policy conditions. By binding market access and national treatment commitments in scheduled sectors, the GATS reduces uncertainty faced by foreign suppliers and supports investment, cross-border activity and deeper economic integration.

Subsidy disciplines similarly extend cooperation beyond the preservation of negotiated market access commitments into the broader management of policy spillovers and their effects in third markets. While subsidies can undermine tariff concessions by indirectly protecting domestic producers, their effects often extend well beyond bilateral market access conditions. Subsidies may alter competitive conditions in world markets, affect third-country exporters, and influence investment and production-location decisions across integrated supply chains. The SCM Agreement expanded beyond earlier GATT subsidy disciplines by establishing multilateral rules on prohibited and actionable subsidies, the use of countervailing measures, and notification and transparency obligations that improve information about domestic support policies.

Importantly, WTO subsidy disciplines extend beyond the importing member's own market. Through the concept of serious prejudice, members may challenge subsidy-induced distortions, such as displacement, price suppression or lost sales in third-country markets, spillovers that countervailing measures alone cannot address. Export subsidies illustrate clearly why this third-market focus might matter. In fact, while an import tariff affects a trading partner directly, an export subsidy lowers prices for

importing economies, while much of its competitive impact falls upon exporters in third markets. The SCM Agreement's broader coverage enhances the role of the WTO in addressing the international implications of state intervention, while also reflecting the political and institutional difficulty of constraining domestic fiscal policy through purely multilateral rules. The SCM Agreement also originally contemplated a third non-actionable category, shielded from both multilateral challenge and countervailing action, covering certain R&D assistance, support for disadvantaged regions and aid to adapt existing facilities to new environmental requirements. These provisions applied only provisionally and expired at the end of 1999 when members did not agree to extend them.

The Agreement on Trade-Related Intellectual Property Rights (TRIPS Agreement) arguably differs from most WTO agreements in that its central rationale departs from a market access logic. It specifically addresses a coordination problem related to the protection of IP and the risk of insufficient incentives to innovate. In this sense, the TRIPS Agreement also addresses cross-border spillovers, but related to knowledge creation in this case, as some economies may benefit from innovation generated abroad without fully contributing to its costs (Saggi, 2016). Weak or absent protection of IP can lead to underinvestment in R&D, as firms cannot fully appropriate the returns from innovation. At the same time, stronger protection may limit access to technology and increase prices in the short run (Curtis, 2012). In the long run, however, IP protection stimulates dynamic competition through innovation and technological progress, ultimately giving protected knowledge public good characteristics (WTO, 2007). The TRIPS Agreement reflects this trade-off by establishing harmonized minimum standards of protection and enforcement measures (Maskus, 2002).

These trade-offs may affect economies differently depending on their level of development and technological capacity. During the Uruguay Round, concerns arose about developing economies' capacity to align domestic regulations with the TRIPS Agreement, which reflected standards prevalent in advanced economies that hosted the largest number of patent-holders.²³ As many developing economies are net importers of protected goods, stronger protection was expected to generate short-term costs, including higher prices and financial outflows through royalties and licensing payments,

while the overall effects of this stronger protection remain highly context-dependent (WTO, 2007). At the same time, IP protection can support innovation, attract FDI and facilitate participation in GVCs (Saggi, 2016). However, its effectiveness in this regard depends on country-specific factors, such as market openness, R&D capacity, institutional quality and enforcement ability (Curtis, 2012). For example, recent evidence indicates that some lower-income economies, particularly in South and East Asia, have been able to partially close technological gaps, reflecting the presence of gradual capacity-building in these regions rather than the uniform across-economies effects of IPR protection (Khouilla and Bastidon, 2024).

Taken together, the disciplines examined in this section reflect the dual character of the GATT/WTO system beyond tariff bargaining.

Some disciplines were designed primarily to preserve the market access commitments negotiated in successive rounds, by preventing their erosion through regulatory substitution or domestic support. Others address coordination problems and broader cross-border effects that arise independently of any tariff concessions, providing frameworks for regulatory cooperation, policy credibility and the management of knowledge spillovers that are increasingly important in an integrated global economy. These roles are further supported by the WTO's institutional infrastructure – including committees, notification requirements and the Trade Policy Review Mechanism (TPRM) – which facilitate transparency, dialogue and monitoring across a wide range of behind-the-border policies. Most WTO disciplines perform both functions simultaneously, and the continued relevance of the system depends in part on its ability to sustain both.

(d) Flexibilities and exceptions to accommodate members' needs also created trade-offs

Flexibilities were designed to help preserve market access commitments as well as to provide stability and predictability in the multilateral trading system. They allow governments to remedy unfair trade while also providing members with mechanisms to adapt commitments to account for shocks, differences between economies and political constraints without unravelling the system. Certain flexibilities, such as contingency measures and preferential agreements, are available to all WTO members, while others are

intended to take into account the specific needs of low-income economies. This subsection discusses why WTO members have agreed to these flexibilities, to what extent these flexibilities are used and what is known of their impact.

(i) “Flexibilities” available to all members

Flexibilities within the WTO framework are meant to serve as commitment-preserving tools to maintain trade openness. Although one of the WTO's core objective is to ensure that tariffs and barriers to trade are reduced, in light of the binding market access commitments negotiated by its members, the system also explicitly recognizes that rigid rules cannot guarantee stable cooperation for all situations, so that members may, in certain circumstances, apply additional duties beyond those that were negotiated without violating or nullifying the agreement (Kucik and Reinhardt, 2008; WTO, 2009). Types of explicitly permitted “flexibilities” include trade remedies, renegotiation mechanisms and tariff bindings with “water”, i.e., differences between applied regimes and bound commitments. The WTO TRIPS Agreement also has flexibilities such as transition periods for least-developed members and compulsory licences in situations of extreme urgency. Far from undermining the system, these flexibilities can support it by providing members with an agreed means to offset unfair and injurious trade, to reconcile changing national circumstances, and to address economic shocks and evolving priorities within the rules-based trade system. The opinion piece by Professor Alan Sykes further explores the importance of flexibilities in trade agreements, and the difficult trade-offs they pose.

The WTO explicitly permits three types of trade remedies, namely anti-dumping measures, countervailing measures and safeguards. WTO rules allow members, provided they meet the requisite conditions, to apply anti-dumping and countervailing duties to counter unfair trade practices such as injurious dumping and subsidization. Members may impose these duties in addition to other customs duties, and in doing so, they are not prevented from exceeding their bound tariffs. Safeguard measures afford members similar flexibility, albeit with certain notable differences. A member may impose a safeguard measure to prevent or remedy serious injury to its domestic producers of a particular product caused by a surge in imports of that product. The rules do not require that the surge in imports or resulting serious injury necessarily be

Flexibility in trade agreements

by Alan Sykes

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Although the nominal parties to trade agreements are countries, the real parties are the political leaders of those countries who decide whether to accede to, and subsequently whether to respect, the negotiated rules. Most political leaders, especially in the democracies, wish to maintain political support for themselves or their parties over time. Against this backdrop, commitments under trade agreements are often made under conditions of political uncertainty. For a variety of reasons, a commitment to open a market to foreign competition may lead to an unexpectedly large increase in competition that significantly weakens political support for the leaders who signed it. This loss of support may exceed the gain in support to the same officials from a reciprocal market opening commitment by a counterparty. Accordingly, a commitment that seems politically sensible before it is made may prove quite unfortunate after the fact. This observation suggests a role for a flexibility mechanism that allows unfortunate commitments to be withdrawn or modified – negotiators will be more willing to make commitments in the first instance, other things being equal, if their political “mistakes” can be corrected.

Yet the story is not quite so simple. If commitments can be withdrawn, they are less valuable to counterparties. Accordingly, mechanisms that facilitate withdrawal of commitments reduce what counterparties will offer in exchange for them. The net effect of such mechanisms on the willingness of parties to offer commitments thus seems, at first blush, to be unclear or even nil – the political benefits of an ability to withdraw an unfortunate commitment might simply be offset by the political costs to the beneficiaries of losing the commitment.

But what if a mechanism can be designed in such a way that commitments may be withdrawn only when the political benefits of withdrawal are high and the political costs to counterparties are relatively low? Such a mechanism, employed reciprocally under the appropriate circumstances, could adjust the bargain after the fact in a manner that enhances the political benefits of commitments for all parties relative to an agreement in which all commitments are “irrevocable.”

And because commitments become more valuable, more of them are likely to be made.

Renegotiation is one option, and of course tariff commitments under the GATT have always been subject to renegotiation under GATT Article XXVIII. But a better option for addressing time-limited and exigent political problems is a safeguard measure pursuant to GATT Article XIX and the Agreement on Safeguards. The legal prerequisites for a safeguard measure fit the above account of a useful mechanism nicely. A significant import surge is required. The import surge must result from GATT commitments and be “unforeseen.” A domestic import-competing industry must suffer “serious injury” or a threat thereof because of the import surge. Thus, the typical case for a safeguard measure will involve a beleaguered domestic industry facing competition from growing and prosperous foreign competitors – it is well known that the political pressures for protection against foreign competition tend to be the most intense from troubled and declining industries.

Unfortunately, a series of questionable decisions by the WTO Appellate Body in early safeguard disputes, along with some economically confused language in the text of GATT and the Safeguards Agreement, have greatly curtailed the ability of WTO members to employ safeguard measures that can withstand legal challenge (see Sykes, 2023). These constraints on safeguard measures undermine a valuable source of flexibility that can do more to promote the opening of markets during trade negotiations than it does to close markets after the fact.

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caused by unfair trade practices. These remedies are governed by GATT Articles VI (“Anti-dumping and Countervailing Duties”) and XIX (“Emergency Action on Imports of Particular Products”), the Anti-Dumping Agreement, the Agreement on Subsidies and Countervailing Measures and the Agreement on Safeguards.

Of these tools, anti-dumping has been the most frequently used trade remedy under both the GATT and the WTO. It has allowed members to impose duties on injurious imports, subject to a finding of dumping. Initiation of cases and use of these measures tends to surge during periods of economic downturn or uncertainty (Bown and Crowley, 2013; 2014; Kucik and Reinhardt, 2008). Data confirm these patterns, showing pronounced increases in the initiation of new anti-dumping, countervailing duty and safeguard investigations during major recessions and crises, such as the Asian financial crisis of the late 1990s, post-9/11 disruptions, the 2008–09 global financial crisis and the COVID-19 pandemic. More recent data confirm that these cyclical patterns continued with renewed spikes amid economic uncertainties in the mid-2020s (see Figure B.11).

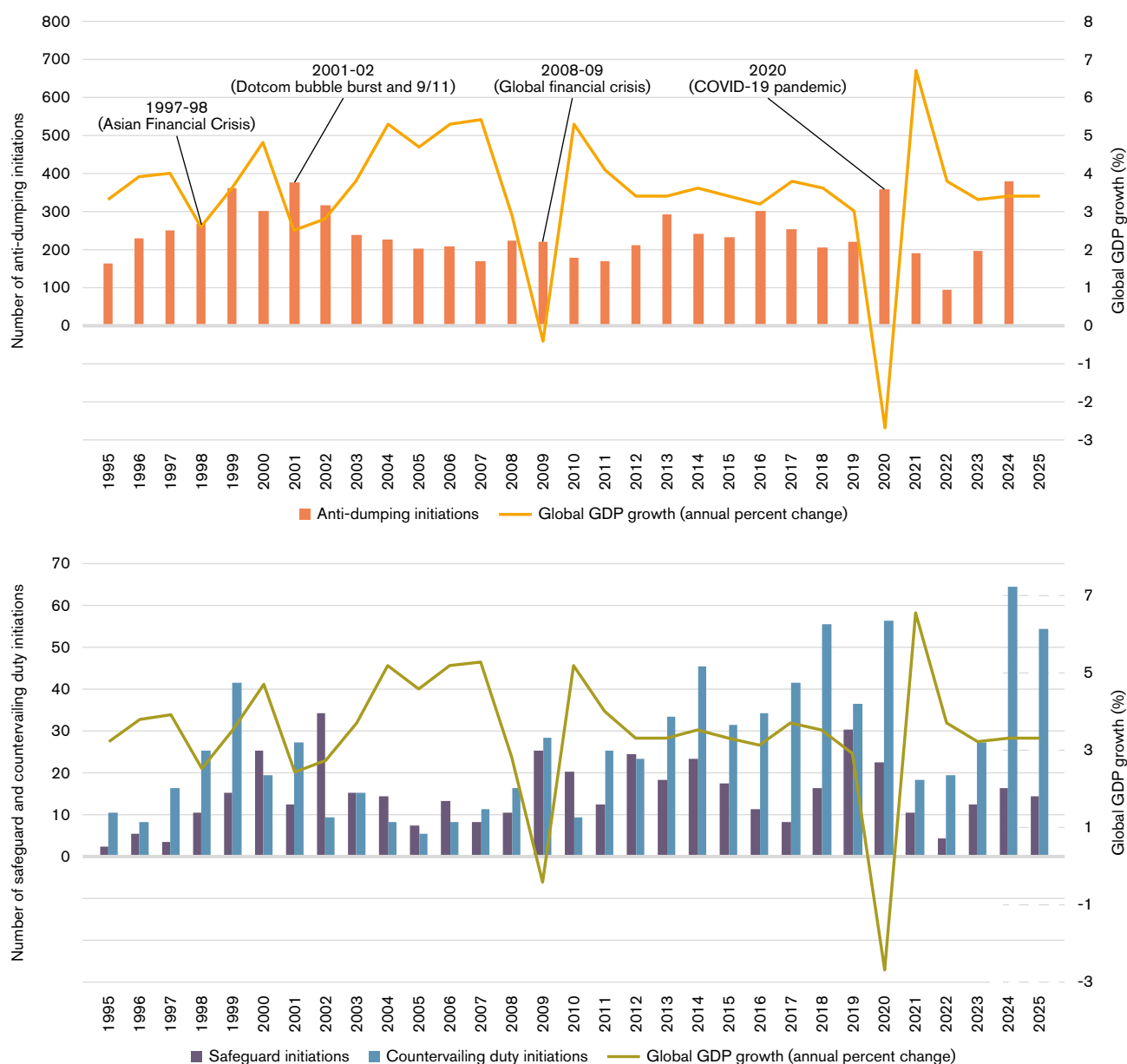
The WTO also provides formal renegotiation provisions for goods and services, allowing members to withdraw or modify commitments permanently through compensatory bargaining. Renegotiations through “modification of schedules” are permitted under Article XXVIII of the GATT and Article XXI of the GATS, facilitating adjustments in tariff and non-tariff concessions, including bound tariff rates, or services sector commitments in exchange for compensatory concessions to affected members, thereby preserving the overall balance of reciprocal and mutually advantageous concessions that underpins the system’s credibility. Importantly, because the modification of goods and services schedules explicitly calls for negotiation with “primarily concerned” members (for goods) or “affected members” (in services), and compensation to keep the overall level of concessions not less favourable to trade than before the renegotiation, it entails relatively low reputational costs compared with unilateral measures, making it an attractive instrument for members seeking to adapt commitments without damaging trading relationships. Just as importantly in terms of the flexibility that Article XXVIII provides, renegotiations may not necessarily require the initiating member to satisfy affected parties with its offer of

compensation: if no agreement can be reached, the initiating member is free to proceed with the planned modification or withdrawal of its concession, at which point the primarily concerned members are then authorized to respond reciprocally and are free to withdraw substantially equivalent concessions of their own. In contrast, GATS Article XXI foresees that, in case of disagreement over compensatory adjustments, the affected members may defer the issue to arbitration, with the arbitrators’ findings being final; this mechanism has been used once thus far.

GATT Secretariat records indicate that at least 42 contracting parties initiated roughly 300 Article XXVIII renegotiations between 1951 and 1994, some of which were conducted in the context of multilateral negotiating rounds.²⁴ As of July 2026, 36 WTO members had initiated or concluded 59 GATT Article XXVIII renegotiations since the Marrakesh Agreement entered into force, some of which had been ongoing for a number of years and were continuations of GATT processes. Of these, 26 renegotiations have been concluded and certified under the 1980 Procedures for modification and rectification of schedules, five have been concluded but not certified, while 18 remain ongoing.²⁵ However, the possibility of using Article XXVIII as a tool for broader renegotiations remains open to questions (see Chapter C).

Insofar as a safeguard measure amounts to the imposing member withdrawing or modifying concessions, it mirrors the flexibility afforded to members by GATT Article XXVIII. The important difference is that while a withdrawal or modification of concessions pursuant to a safeguard measure is time-bound, similar steps taken under GATT Article XXVIII are not. Both flexibilities, however, can lead to a rebalancing of concessions between the member modifying or withdrawing concessions and those affected by such modification or withdrawal.²⁶

A distinctive form of flexibility arises through the concept of “water” in the tariff, which denotes the difference between bound and applied tariff rates for goods. The imagery of water in this term is meant to evoke space for manoeuvring and security, like the water between a dock and tethered ship. WTO members negotiate bound tariffs as ceilings rather than specific applied rates, thereby creating “binding overhang” that provides policy space for tariff increases without formal renegotiations when a member’s applied rate is lower than its bound

Figure B.11: Initiations of trade remedy investigations tend to be negatively correlated with global business cycles (1995-2025)

Source: WTO Secretariat calculations based on WTO data and International Monetary Fund (IMF) World Economic Outlook database (<https://data.imf.org/en/datasets/IMF.RES:WEO>).

rate (Pelc, 2013). While bindings create certainty by imposing a ceiling on tariffs, as discussed in Section B.1, “water”, or the difference between a bound and applied tariff, can provide flexibility by allowing members to raise tariffs within their bindings without breaching commitments. For example, during the COVID-19 pandemic there were concerns that the large gap between bound and applied tariffs on medical goods, found to be roughly 17 percentage points across categories, could prompt members

to raise tariffs on medicines or personal protective equipment; however, members ultimately refrained from doing so (WTO, 2020, 2022a). Although this flexibility was not used for medical equipment during the pandemic, tariff overhang (“water” in the tariff) increases both the likelihood of MFN tariff hikes and their counter-cyclical use, suggesting that such flexibility is potentially deployed to smooth economic fluctuations (Groppo and Piermartini, 2014). A recent study by Jakubik and Piermartini (2023) suggests

that WTO commitments reduce the use of tariff water in response to import shocks, making members more likely to rely on contingent measures such as anti-dumping, which are subject to checks and are thus more predictable. Moreover, there is evidence of a positive association between the amount of tariff water and the likelihood that members use it.

Importantly, the extent of tariff water varies with development status: high-income economies have an average MFN tariff water of only 19.69 percentage points, while low-income economies have an average of 45.53 percentage points (see Figure B.12). However, research has indicated that for low-income economies some of their larger water is unusable due to tariff bounds being either above levels that prohibit trade entirely or bounds that are unusable due to lower tariff binding commitments under other RTAs (Foletti et al., 2009). It is therefore important to consider the “effective water” (Jakubik and Piermartini, 2023).

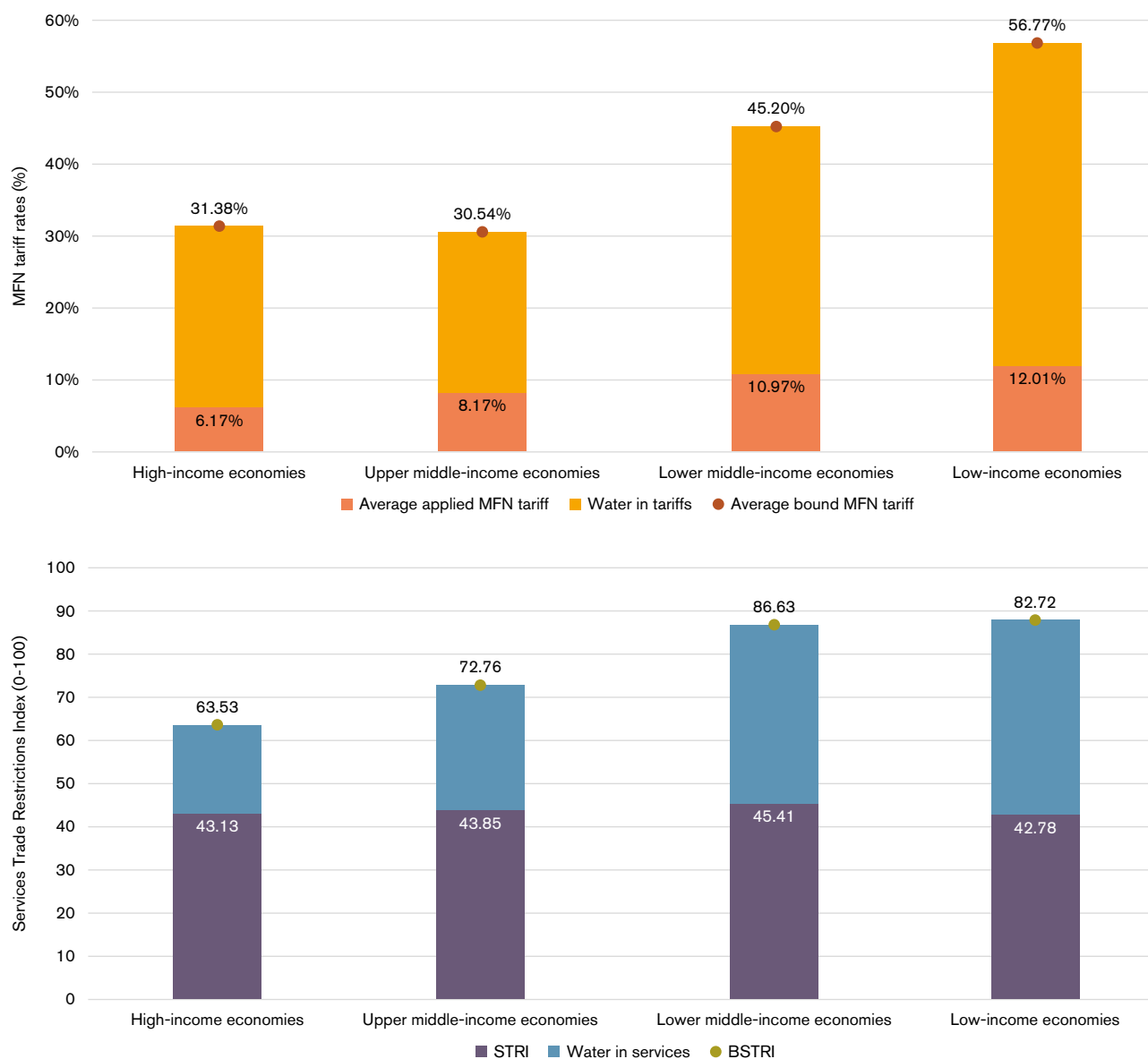
An analogous phenomenon occurs in services commitments under the GATS, where the gap between bound market access commitments and applied regulations offers similar policy flexibility to balance commitments with adaptability (Miroudot and Pertel, 2015). Cross-country indicators, such as the WTO-World Bank Services Trade Restrictions Index (STRI)²⁷ and the Bound Services Trade Restrictions Index (BSTRI),²⁸ illustrate the existing binding overhang. The BSTRI reflects the policy ceiling for services trade restrictiveness implied by bound commitments under the GATS, while the STRI measures the restrictiveness of applied regimes. However, as discussed in Section B.1, a wider gap is accompanied by higher trade policy uncertainty, which might have a negative effect on services exports (Ahmad et al., 2023). Figure B.12 provides a comparative view of policy space measured as the gap between bound and applied regimes (“water”) in goods and services across income groups, with the top segment of the columns in each chart representing the “water”. In the upper chart, the top segment represents the binding overhang between MFN bound and applied rates, while in the lower chart it represents the gap between the STRI and the BSTRI. The figure shows that “water” is larger for economies in lower-income levels in both goods and services given these economies’ relatively lower level of bound commitments, although applied policies show smaller differences across income groups for goods and do not differ systematically for services.

Beyond the provisions for formal trade remedies and renegotiations, the WTO’s dispute settlement system includes provisions for non-violation and situation complaints.

These provisions safeguard members’ reasonable expectations of traded benefits without requiring explicit violations of rules. Under GATT Articles XXIII:1(b) and XXIII:1(c) (“Nullification or Impairment”), members may challenge actions that undermine expected trade benefits or alter situations on which concessions were made. These clauses have rarely been used, unlike standard violation complaints made when respondents fail to carry out explicit obligations covered in agreements, due in part to members’ reliance on facts and the complicated nature of non-violation complaints. Non-violation claims under GATT Article XXIII:1(b) have been considered in 15 disputes at the WTO, with no findings of non-violation in the reports, whether because of judicial economy²⁹ or dismissal of the claims.³⁰ Similarly, situation complaints were raised in just a few cases, none of which resulted in a panel ruling. Nevertheless, the number of observed complaints is not always a reliable indicator of the impact of the option to bring a complaint, and some economic research supports the claim that the ability to bring non-violation complaints may play an important “behind the scenes” role in the WTO (Staiger and Sykes, 2017).

Finally, WTO provisions allow members to negotiate contingencies that provide critical safety valves to preserve systemic stability amid extraordinary conditions. Contingencies can temporarily excuse members from specific obligations, subject to conditions and periodic approvals, while contingencies also enable differentiated treatment, for example under balance-of-payments safeguards (WTO, 2009). A prominent recent example of this use was the negotiation of the Ministerial Decision on the TRIPS Agreement and COVID-19 Vaccines,³¹ which clarified that WTO members have a wide range of existing options to address the exclusive effects of patents and further facilitating the export of COVID-19 vaccines for a period of at least five years. These instruments underscore the WTO’s recognition that preserving long-term cooperative gains sometimes requires short-term adjustments tailored to exceptional circumstances.

Trade remedy flexibilities can provide members with a legitimate means of responding to injurious imports, and can serve as a useful safety valve to help sustain cooperation in difficult times. However, there is also evidence that

Figure B.12: Binding overhang is more pronounced in lower-income economies

Source: WTO Secretariat calculations based on World Bank-WTO STRI and BSTRI (see <https://itip-services-worldbank.wto.org/>).

Note: Tariff data are based on MFN applied and bound tariff rates at the Harmonized System (HS) subheading level; *ad valorem* equivalents are included where available. Tariff rates are calculated for 137 WTO members, with the European Union treated as a single reporting entity and reflect the most recent available data (up to 2025). Services data are based on the STRIs (reflecting the most recent available data, 2020-24) and BSTRIs for 130 WTO members, with EU members treated as independent entities.

trade remedies, especially anti-dumping, are often used in a retaliatory manner, with notable differences in utilization patterns across income groups, and mixed evidence of deterrence. Respondents previously targeted by anti-dumping are more likely to initiate cases themselves, and a substantial share of filings is directed at former complainants that had targeted the initiator³² (Kucik and Reinhardt, 2008; Prusa and Skeath, 2002; Vandenbussche and Zanardi, 2007). This indicates that even within

WTO commitments, terms-of-trade motives can be reintroduced, raising a possible risk of increasing protectionism (Bown and Reynolds, 2017). Patterns of use also vary by income level, with high-income economies tending to rely on anti-dumping in response to macroeconomic shocks, while lower-income economies often use anti-dumping as a substitute for tariffs during liberalization, contributing to a shift in protectionism to intra-lower-income economy trade (Aggarwal, 2004, 2010; Bown, 2011;

Bown and Tovar, 2016). Evidence on the deterrence effect of anti-dumping is mixed. While some studies indicate that retaliation threats may have constrained anti-dumping use in some periods, broader cross-country evidence finds no consistent deterrent effect, and the deterrence effect appears weaker during crises such as the COVID-19 pandemic (Blonigen and Bown, 2001; Bown, 2023; Evenett et al., 2022; Feinberg and Reynolds, 2004).

Some may see these flexibilities as ways to deviate from open trade by raising trade barriers above bound rates. However, in some form these flexibilities are essential to the multilateral trade system, as members would be unwilling to expand market access without tools to counter unfair trade or manage sudden import surges. As such, safeguards and anti-dumping instruments can be viewed as foundational tools that provide governments with a means to promote fair competition, manage economic and political challenges and help defuse pressures from affected industries or constituencies without resorting to outright withdrawal from agreement commitments (Finger, 2012; Dam, 1970). Yet the effects of the availability of these tools can be subtle. For example, evidence suggests that the mere fact that an anti-dumping case can be initiated can encourage exporters to take steps to reduce their margins of dumping, and that the mere initiation of an investigation can reduce imports and increase domestic production (Staiger and Wolak, 1992; 1994). In addition, members that have adopted anti-dumping laws tend to maintain significantly lower applied tariffs overall, indicating that these tools do allow leeway for deeper and sustained commitments (Finger, 2012). In this light, flexibilities need not serve as loopholes, but instead as mechanisms that may promote the rules-based trading system by helping to sustain cooperative trade relations. The opinion piece by Professor Meredith A. Crowley explores how flexibilities have supported the rules-based system and where updates could be considered.

Empirical evidence on the effects of these flexibilities is mixed. It shows that these flexibilities can support a liberalized trade system by offering relief, while at the same time incurring broader economic costs through higher prices, trade diversion and weaker resource reallocation. Empirical research by Kucik and Reinhardt (2008) demonstrates that flexibilities increase the likelihood that states will enter into trade agreements and undertake deeper liberalization commitments when the option to address

economic impacts is available, since it reduces fears of being locked into inflexible rules. Parts of the literature also indicate that countervailing duties can offset distortions caused by government subsidies, although models and evidence are mixed (Lee, 2016).

Yet these measures may have only limited impacts, as demonstrated by Aggarwal (2010) in the context of anti-dumping measures and import volumes, and often have unintended effects.

Anti-dumping duties can divert trade toward third countries, and while they may raise prices and support some productivity gains domestically, these gains are typically too small to offset the costs and may even reduce productivity among more efficient firms (Konings and Vandenbussche, 2008; Krupp and Pollard, 1996). Evidence also suggests that anti-dumping can prop up low-productivity firms and slow resource reallocation, while safeguards appear to play a limited role in industry recovery relative to broader macroeconomic forces (Liebman, 2006; Pierce, 2011). Trade remedies like anti-dumping measures have also been shown to impact trade decisions as some exporters exit the market (Besedeš and Prusa, 2017). Large domestic producers are also the major beneficiary of anti-dumping mechanisms, and may seek remedial trade action against import competition at the expense of consumers and downstream industries (Aggarwal, 2010). Similarly, the evidence on safeguards suggests that while they reduce imports and raise domestic prices for the economy that implements them, their net effect can worsen welfare as it increases prices and price volatility, impacting employment, sales and material costs for downstream users (Grijalva, Uribe-Terán, and Gachet, 2024; Read, 2005; Sezgin, 2022; Hertel, Martin, and Leister, 2010).

Overall, the evidence suggests that, while contingency measures can provide some relief to domestic industries, they may also involve trade-offs across the broader economy, including for consumers. These outcomes reflect inherent trade-offs: Article VI of the GATT (“Anti-dumping and Countervailing Duties”) provides that “dumping ... is to be condemned if it causes or threatens material injury to an established industry in the territory of a contracting party or materially retards the establishment of a domestic industry”,³³ underscoring the importance members attach to the anti-dumping instrument and trade remedies to counter the effects of unfair trade practices on domestic industries, even as they must weigh the broader economic costs when deciding whether to impose duties.

The WTO as a balancing act: predictability, flexibility and the limits of rules-based trade

by Meredith A. Crowley

Professor of Economics, University of Cambridge

Global trade is built upon firms that design, produce and sell in markets around the world. Exporting can offer greater profits for many firms, yet export activity is relatively rare because it is fraught with risk. International trade incurs substantial costs – logistics, legal compliance, exchange rate management, customs administration – that deter entry into foreign markets. Since 1995 the WTO has played an important role in helping firms mitigate commercial policy risk. The WTO coordinates a rules-based system of trade cooperation that has delivered predictability, transparency and certainty over the tariffs, taxes and regulations governing international commerce. Multilateral tariff commitments have formed a central pillar of this system, enforced by reciprocal good will and backstopped by formal dispute resolution.

Striking evidence from the years immediately following China's WTO accession attributes 30 per cent of its export growth and 40 per cent of entry by Chinese firms into the United States to reduced tariff uncertainty (Handley and Limão, 2017; Hillman and Crowley, 2018). Conversely, uncertainty over future tariff rates suppresses market entry – this can be seen in Portugal's accession to the European Economic Community in 1986 and with Britain's referendum vote in 2016 to exit from the European Union (Handley and Limão, 2015; Crowley, Exton and Han, 2020). Predictable policy stimulates firm entry into markets, enhancing competitive pressure on prices and increasing product variety.

But predictable policy is not the same as rigid policy. Shocks that disrupt market activity may require policy recalibration – adjustments to tariffs or renegotiation of trade rules that impinge on domestic markets. Orderly, transparent processes allow businesses, consumers and workers to plan for disruptions; arbitrary unilateral changes do not. The multilateral system struck a grand bargain in which high-income economies maintained remarkably low tariffs for virtually all goods in exchange for a relatively free hand to temporarily limit some imports when the domestic economy was hurting (Bown and Crowley, 2016).

In the past two decades, however, Appellate Body rulings increasingly constrained discretion over import protection (Hillman and Crowley, 2018). Some members grew frustrated with rulings they perceived as encroaching on legitimate domestic policy choices. This poses a structural challenge: if dispute settlement curtails a member's use of the flexibility instruments built into the original bargain, it corrodes the political foundations on which that member's participation rests. An agreement that offers too little flexibility does not enhance predictability; it stimulates non-compliance and, in the worst case, exit.

The consequences to date have been severe. Countries have breached their WTO commitments with discriminatory tariff hikes. A lack of support for the reappointment of Appellate Body judges has left the body without the quorum needed to formally resolve disputes. The predictable and transparent trading environment that encouraged millions of firms to enter foreign markets in the first decade of this century is being lost.

If the WTO is to recover its role as guarantor of a predictable trading environment, three things are needed. First, dispute settlement must be restored – but reformed so that it adjudicates within the original grand bargain. Second, the criteria for contingent protection must be re-worked, giving members transparent, rules-governed pathways to respond to genuine shocks without resorting to unilateral action. Third, this re-working must engage with the new landscape of industrial, environmental and security policies behind recent trade conflicts. Without fundamental change, the WTO will deliver neither the predictability that firms need to trade and invest, nor the flexibility that governments need to sustain political support for an open multilateral system.

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These flexibilities can help to preserve market access commitments by allowing members the policy space to adapt to shocks, political economy constraints and development needs without resorting to unilateral and even more disruptive actions. By embedding options for adjustment and compensation, the WTO reduces incentives for members to renege outright on commitments and to offset the distortions caused by unfair business or government conduct, thus sustaining the system's credibility and stability. However, this accommodation of flexibility bears a cost, since the core economic gains of the multilateral trading system come from binding commitments that reduce uncertainty and secure market access. The evidence further suggests that these instruments are often used in response to political pressures and strategic initiatives (Prusa and Skeath, 2002) rather than for purely remedial needs, although it bears noting that measures taken that do not satisfy the relevant WTO rules can be challenged at the WTO Dispute Settlement Body. Finally, while contingency measures can provide relief to domestic industries, their economic effects may be costly for consumers, downstream industries and long-term efficiency. While flexibilities are a necessary and foundational part of the trading system, some tension is present between flexibility and commitment and can be a source of strain within the WTO system, a theme that is discussed further in Chapter C.

(ii) Regional trade agreements as an exception to the MFN principle

WTO rules allow all members to give preferential treatment to selected partners, thereby deviating from the MFN principle. Although MFN is a general obligation in the GATT and the GATS, Article XXIV of the GATT ("Territorial Application – Frontier Traffic – Customs Unions and Free-trade Areas") and Article V of the GATS ("Economic Integration") foresee the formation of reciprocal preferential trade agreements among pairs or groups of members. Exceptions to MFN principles also occur through the so-called Enabling Clause (i.e., Differential and More Favourable Treatment Reciprocity and Fuller Participation of Developing Countries),³⁴ which allows developing economies to sign preferential agreements among themselves without the strict requirements of Article XXIV. In addition, the Enabling Clause is also the legal basis for the Generalized System of Preferences, through which developed members can offer non-

reciprocal preferences to products from developing economies, and for other special waivers. As these last two exceptions pertain specifically to economies characterized by developing economy status, they will be discussed in the next subsection.

Historically, the inclusion of GATT Article XXIV provides an illustrative example of a pragmatic approach to accommodate members' different needs. The founders of the GATT recognized that RTAs had existed long before the GATT, and the establishment of the multilateral trading system would not eliminate the attractiveness of RTAs to foster market-opening. They recognized that their stated objective of "the elimination of discriminatory treatment in international commerce" would have to be achieved through a process of ongoing negotiations rather than as a declaration from the start, if key governments were going to be brought along with the creation of the GATT, especially in a post-war Europe where European countries sought peace through interdependence.

RTAs among WTO members have proliferated since the 1990s, and more than 380 RTAs notified to the WTO are currently in force, up from 22 in 1990. Currently, 16 per cent of global merchandise trade occurs at a preferential rate lower than the MFN applied rate, resulting in an average trade-weighted effectively applied rate that is 1.8 percentage points lower than the MFN applied rate. Despite the large number of RTAs, the fact that not all preferences are utilized and that many tariff lines are already bound on an MFN basis at zero explains the relatively low figure for preferential trade.

In comparison to goods, services negotiations in RTAs have focused more on lowering uncertainty for service suppliers rather than gradually removing barriers to access. While levels of GATS plus commitments (that is commitments that are deeper than under GATS) vary across different services RTAs, such agreements generally bind the existing levels of market access and national treatment to a greater extent than under the GATS, thereby consolidating greater liberalization (World Bank and WTO, 2023; WTO, 2011; 2019).³⁵ A majority of services RTAs now adopt a negative-list approach, which provides that market-opening obligations apply in full unless specific reservations are listed, either for existing (or applied) non-conforming measures or for areas where the right to adopt more restrictive policies in the future is

retained. In addition, such negative-list agreements typically include a ratchet mechanism, which automatically binds future liberalization of existing non-conforming measures, thereby ensuring that bindings reflect to a greater extent existing openness over time (WTO, 2019).

There are several reasons why WTO members seek to enter into different types of reciprocal preferential trade agreements. Membership in the multilateral trade system of the WTO reduces incentives for economies to sign an RTA in order to limit cross-border negative spillovers from trade policy. But several other reasons can explain why a WTO member might want to sign an RTA. These may range from political and economic needs to creating deeper ties among like-minded economies, or increasing the predictability and credibility of their trade policy in order to signal stability to investors and attract FDI.

RTAs can provide a stronger and more reliable external discipline than multilateral WTO commitments alone. Governments recognize that entering into an agreement strengthens the credibility of their policy commitments in ways that would be difficult to achieve unilaterally. An economy may choose to enter into an RTA even if it is already a WTO member because WTO enforcement incentives can be weak when the economy is small in global markets. If its trade volumes are limited, other WTO members may have little economic motivation to challenge its potential violations. By contrast, a partner in a preferential trade agreement (PTA) – benefitting from preferential access to that member's market – has a direct and concentrated interest in ensuring that the agreed preferences are preserved.

WTO members may also have an incentive to sign RTAs to gain economies of scale. By joining a larger integrated market, firms in partner economies can benefit from economies of scale and obtain a competitive edge over firms in non-member economies. Preferential access to a broader market can also make a country more attractive to FDI. These incentives are especially strong for small economies.

Finally, WTO members may want to sign RTAs to pursue deeper integration (Limão, 2016). Deep agreements extend cooperation beyond conventional border measures such as tariffs to behind-the-border measures (Lawrence, Eichenbaum and Evans, 1996). “Shallow” agreements set rules for border measures (e.g., set commitments on the level of tariffs), but except for requiring national treatment or

requiring that a measure be not less restrictive than necessary, “shallow” agreements do not intervene on domestic policies. In contrast, “deep” agreements shape domestic policy, by requiring, for example, harmonization with a certain standard to facilitate closer economic integration. Achieving deep integration often entails institutional arrangements and degrees of policy coordination that may be more feasible to establish at the regional level than within a broader multilateral framework.

Economic theory points to the potential negative effects that RTAs may have on third parties through trade diversion. The argument is that, following the formation of an RTA, consumers in the home economy may end up buying from the less efficient firm in the partner economy rather than the more efficient firm in the third economy, at a price higher than the one that would prevail by lowering tariffs on an MFN basis. This creates an overall economic inefficiency known as “trade diversion”, which negatively affects third parties.

However, empirical studies find limited evidence of trade diversion. Looking at the overall effect of 121 RTAs, Dutt (2020) and Egger et al. (2011) show that, on average, trade among RTA members increases, while the impact on non-members is relatively small. One reason is that RTAs are mainly signed among “natural trading partners” – that is, economies that already trade a lot with each other – which minimizes the risk of trade diversion (Egger et al., 2011 and Orefice and Rocha, 2014). For services, the scope for discriminatory treatment is more limited, as many domestic services regulations generally apply on a non-discriminatory basis (Mattoo, Rocha and Ruta, 2020; Mattoo, Mulabdic and Ruta, 2022).

This result is not entirely unexpected: the conditions under which deviating from MFN treatment is allowed in the WTO agreements minimize the risk of trade diversion. In the case of goods, Article XXIV of the GATT (“Territorial Application – Frontier Traffic – Customs Unions and Free-trade Areas”) permits preferential agreements if trade restrictions are eliminated on “substantially all trade” between the parties within a reasonable time and if external trade barriers are not raised against non-members. These rules increase the likelihood that economies that will sign an RTA are “natural partners”, because their strong trading relationship makes it easier (including from a political perspective) to remove tariffs on almost all trade. The requirement

not to increase barriers to trade against third parties (a requirement contained in both GATT Article XXIV and the Enabling Clause) further reduces the risk of trade diversion. In services, Article V of the GATS (“Economic Integration”) requires, among other things, that economic integration agreements have “substantial sectoral coverage”, do not in principle exclude any mode of supply, and provide for the absence or elimination of substantially all discrimination in the sense of GATS Article XVII (“National Treatment”).

Simulation results show that, in a world without GATT Article XXIV, global welfare would be lower, and small economies would stand to lose the most. Employing the same model as in Bagwell, Staiger and Yurukoglu (2021), WTO economists find that if existing RTA partners were allowed to set their preferential tariffs toward each other without the need to reduce these tariffs to zero on substantially all trade, the resulting freedom to pursue trade-diverting preferential tariff cuts would generate a global welfare loss of approximately 0.05 per cent. Moreover, because the relative size and bargaining power of RTA partners would then determine the preferential tariffs that they agreed to, small-economy RTA partners would experience a welfare decline of 0.21 per cent, whereas large economies would record a gain of 0.02 per cent.³⁶

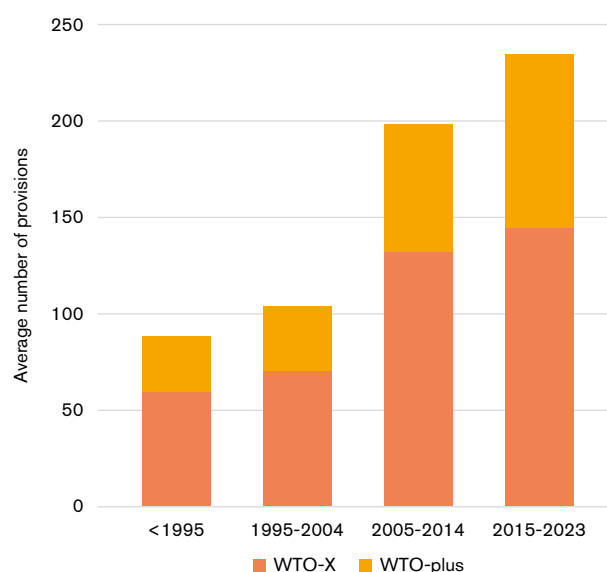
RTAs are becoming increasingly “deep”, extending well beyond tariff reductions. They now cover a wide range of behind-the-border measures, including services regulation, investment, IP, labour, digital, environmental and competition policy. This evolution is captured by measures of the “depth” of trade agreements, which track the number and scope of provisions included in PTAs (Mattoo et al., 2020). Figure B.13 shows a clear increase over time in the depth of these agreements. Notably, while the depth of traditional trade policies has expanded ((WTO-plus provisions such as larger tariff reductions), most of the increase in depth is driven by trade provisions covering policy areas outside the current WTO mandate (i.e., WTO-X), such as competition policy, investment and environmental laws, reflecting a shift from shallow tariff preferences toward more comprehensive economic integration.

From an economic perspective, the coherence between RTAs and the multilateral rules is less clear when RTAs move beyond tariffs and become deeper. Theory and evidence support both building-block and stumbling-block

mechanisms – that is, RTAs can either hinder broader multilateral trade liberalization or support and pave the way for it. Evidence focusing on tariffs support the argument that regional tariff reduction is complementary to multilateral trade liberalization, but more research is needed to assess the effects on the multilateral trading system of the proliferation of RTAs that cover aspects beyond tariffs (Estevadeordal, Freund and Ornelas, 2008; Limão, 2006, 2007, 2016; Freund and Ornelas, 2010). Deep integration is in general non-discriminatory in nature. However, the economics literature has also highlighted the potential discriminatory effects of deeper RTAs contingency rules, or the potential systemic effects of the locking-in effect of regulatory harmonization (see WTO, 2011). Some of these deep provisions can generate discriminatory effects against non-members. For instance, Prusa and Teh (2010) show that RTAs containing anti-dumping provisions tend to reduce filings among members, while simultaneously increasing actions against non-members, thereby reinforcing discriminatory trade patterns.

Beyond RTAs, targeted trade deals add an additional dimension to the issue of complementarity with the system. By the end of 2024, over 185 targeted trade deals had been concluded in the areas of digital trade and critical minerals alone, according to the *Global Value Chain Development Report 2025* (UIBE et al., 2025), with a

Figure B.13: RTAs are increasingly deep



Source: WTO Secretariat calculations based on World Bank Data.

large share of those deals signed between 2019 and 2024. These arrangements (also referred to as “mini deals”) are typically limited in scope, often sector-specific, and focus primarily on reducing non-tariff barriers through non-binding or soft-law approaches. Trade targeted deals provide governments with a practical way to respond to emerging challenges and can act as stepping stones toward broader multilateral agreements. However, they also raise some concerns. One relates to transparency. Of the 185 agreements identified, only 55 have publicly accessible official texts. More generally, the proliferation of overlapping and uncoordinated rules risks contributing to fragmentation in the global trading system. More research is needed to clarify these issues.

(iii) Special and differential treatment for developing economies

The special concerns of developing economies have gradually been integrated into the GATT and the WTO system. GATT began including development considerations in 1958 by allowing developing economies’ support for domestic industries (revised Article XVIII³⁷ “Governmental Assistance to Economic Development”), and in 1964 with Part IV on “Trade and Development”, establishing the principle of non-reciprocity in making tariff and trade concessions to developing members. In the 1970s, preferential treatment was institutionalized through the Generalized System of Preferences and the Enabling Clause, enabling non-reciprocal benefits for developing economies and LDCs. The Uruguay Round expanded the coverage of disciplines under the multilateral trading system. It also saw a large number of developing economies joining the Round with different levels of development. And as a result of the negotiations, special and differential treatment (S&DT) – i.e., special treatment given to developing economies, including LDCs, in WTO agreements, such as longer transitional periods to implement obligations and the assumption of lesser obligations – was mainstreamed into WTO agreements.

There are over 150 S&DT provisions across WTO agreements, including a number specifically designed to take into account the specific needs of LDCs. The WTO has traditionally categorized S&DT in six areas: (i) provisions aimed at increasing trade opportunities through market access, (ii) provisions requiring WTO members to safeguard the interests of developing members, (iii) provisions allowing flexibility of commitments, of

action, and use of policy instruments by developing members, (iv) provisions allowing longer transition periods for developing members, (v) provisions for technical assistance, and (vi) provisions relating to LDC members.

One economic argument for providing S&DT, at least for small developing economies, is that trade policy choices of small economies are unlikely to create important cross-border spillovers. As discussed in Section B.2(b), under terms-of-trade theories of trade agreements, large economies negotiating reciprocal market access would be expected to extend market access concessions on an MFN basis to all partners, including small economies. This ensures that MFN concessions are not eroded through subsequent negotiations among bargaining partners. By contrast, small economies lacking market power, and thus the ability to shift costs onto others through terms-of-trade movements, would not be required to reciprocate according to the terms-of-trade theory, which can provide an economic justification for S&DT provisions that introduce the principle of non-reciprocity in tariff negotiations. This same economic argument would, however, also indicate that, for a developing economy that is not small and that is a principal supplier of certain products in the markets of some of its trading partners, exercising its right of non-reciprocity in tariff bargaining with these partners on these products may not be its best option (see Box B.4).

In addition, political economy and contract theory can rationalize certain aspects of S&DT provisions because these provisions make cooperation more valuable and sustainable. Political economy models emphasize commitment problems: governments, particularly in smaller developing economies, may use trade agreements to lock in domestic reforms and resist pressure from domestic protectionist interests. S&DT provisions allowing longer transition periods for developing members can facilitate this process by allowing a gradual transition to mutually beneficial low tariffs, making cooperation attractive to both large developed and small developing partners (Conconi and Perroni, 2004). Contract theory, in turn, highlights differences in economies’ capacity and need for flexibility, which can rationalize S&DT provisions for technical assistance. Finally, because smaller developing economies typically have less market power and fewer effective policy instruments to manipulate terms of trade, rigid and fully reciprocal obligations

may be less appropriate. This can justify granting them greater discretion, especially regarding internal measures such as subsidies, while maintaining stricter disciplines on core border measures like tariffs (Horn, Maggi, and Staiger, 2010).

Economic arguments justifying developing economies' need for S&DT include their less advanced levels of technology, the prominence of market failures, and financial and capacity constraints specific to them. First, for example, lower-income economies rely more than technologically advanced economies on external sources of growth, such as trade, FDI and technology transfer, than on innovation and R&D. Hence, provisions that enhance trade opportunities (such as the Generalized System of Preferences or the Enabling Clause) help them integrate into and benefit from global markets. Second, lower-income economies typically present a less diversified economy structure than high-income economies, making them more vulnerable to external shocks. Market failures are generally more widespread and severe in developing economies. These include issues such as imperfect information, weak competition, under-developed financial systems and large informal labour markets, all of which justify a stronger role for government intervention. Flexibility in commitments (such as Article 27.2 of the SCM Agreement that exempt LDCs from the prohibition to use export subsidies) allows developing economies to adopt policies that support diversification and structural transformation. Finally, firms in developing economies often face difficulties complying with trade-related regulations, as these involve high fixed costs and require technical expertise. Flexibilities such as longer transition periods (e.g., those under the TFA or under Article 66.1 of the TRIPS Agreement – “Least-Developed Country Members”), or provisions aiming at safeguarding their trade interest (e.g., Article 10.1 of the SPS Agreement – “Special and Differential Treatment”) as well as technical assistance (e.g., Article 9 of the SPS Agreement – “Technical Assistance”) can help them meet standards and remain competitive in global markets.³⁸

While S&DT flexibilities are important to address some specific needs and may be appropriate from the perspectives discussed above, they can also reduce the predictability of trading conditions (Keck and Low, 2004). As discussed in Section B1, a predictable trading environment is a key factor in attracting investment. Evidence shows that economies that have taken

up more commitments have fared better in terms of economic growth (see Section B1). Flexibilities (like those in the form of carve-outs from commitments) can instead create uncertainty about the actual conditions of trade. In addition, the extent of a member's commitments can affect its influence in shaping future rules – illustrating one of several trade-offs that members must weigh when deciding how to sequence commitments and use available flexibilities. Therefore, finding the appropriate balance between commitments and flexibility is a key challenge for each member. Chapter C will further discuss systemic challenges related to S&DT provisions.

An assessment of the effectiveness of S&DT provisions is complicated due to the limited information about their use. Several factors may explain the lack of information on the use of S&DT, ranging from a lack of notifications to the demanding procedural obligations to access certain S&DT provisions and the necessary technical work that may put a strain on administrative or institutional capacity for developing members to make use of certain S&DT provisions. Interestingly, no LDC has reported recourse to agricultural export subsidies and only one LDC has submitted a notification on the use of export prohibition or restrictions since 1995. Table B.2 summarizes the extent of use across a range of S&DT provisions. While transition periods of the Customs Valuation Agreement, Article 6.2 of the Agreement on Agriculture (“Domestic Support Commitments”) and the Generalized System of Preferences appear to be used, information is scant on the use of other measures like export subsidies under the Agreement on Subsidies and Countervailing Measures or balance-of-payments measures under GATT Article XVIII Section B.

Some evidence exists on the effectiveness of preferential schemes in increasing exports, but a lack of data prevents a comprehensive assessment of the effectiveness of these measures for LDCs. Tariff preferences have contributed to increased exports from developing economies and LDCs, despite the administrative costs involved (Bekkers and Cariola, 2024; Cernat et al., 2003). Moreover, such schemes generate spillover benefits, as firms gain experience through exporting, which in turn helps them expand trade with third-party markets (Cherkashin et al., 2015). Evidence on the effectiveness of exemptions under the services waver is scantier. The 2011 LDC services waiver (extended to 2030) enables preferential treatment

Table B.2: S&DT provisions and their use

S&DT Provision	Usage
Customs Valuation Agreement: Transition period and retention of established minimum values on a limited and transitional basis	55 developing members, including 18 LDCs, invoked the initial five-year transition period; several obtained additional extensions, the last expiring in 2003. 40 developing members (13 LDCs) made use of the minimum value method for determining customs duties before its expiry.
Agreement on Agriculture: Article 6.2, flexibility in the calculation of domestic support reduction commitments	57 developing members, including LDCs and net food-importing developing countries (NFIDCs), notified investment and input subsidies since 1995.
TRIMs: Transition period to phase out non-conforming TRIMs	The TRIMs Agreement allowed developing members an initial transition period of five years to eliminate non-conforming TRIMs (expired in 2000) and a longer transition period of seven years for LDCs (expired in 2002, later extended until 2020 through Annex F of the Hong Kong Ministerial Declaration). Since 1995, 28 developing members have notified trade-related investment measures (TRIMS), which involved sectors such as motor vehicles, gas and oil, consumer goods, etc. As far as LDCs are concerned, only one of them has notified TRIMs measures since 1995.
Agreement on Safeguards: Non-application of safeguard measure, under certain thresholds, against a developing member	A product from a developing member is exempt from safeguard measures if two conditions are met: (i) that members' share of imports of the product concerned does not exceed 3 per cent; and (ii) developing members with less than a 3 per cent import share collectively do not account for more than 9 per cent of total imports of the product concerned. In all notification so far of the application of final safeguard measures, the applying member has confirmed that developing members falling under the above provisions have been exempted from the measure.
GATT Article XVIII Section B: Balance-of-Payments Measures	Invoked by 15 developing economies between 1995 and 2017; no member has used it since then.

Source: WTO official document JOB/COMTD/22, available at <https://docs.wto.org/>.

for services and service suppliers from LDCs.³⁹ Currently 25 notifications of preferences in favour of LDC services and service suppliers have been made, covering various sectors, including business services, transport, tourism and travel. However, the lack of data on services trade for LDCs prevents a comprehensive assessment of whether these measures have resulted in economic opportunities for LDCs. Increased efforts are needed to track LDC services export data and to support LDCs in building capacity in services trade.

Evidence of the effectiveness of special policy flexibilities available to LDCs to implement WTO rules in generating tangible development benefits for these economies is limited. As WTO

members recognize LDC's capacity constraints, for example, LDCs have been granted extended transition periods to implement TRIPS obligations. A general transition period currently runs until 1 July 2034 or until a particular member ceases to be in the LDC category. For pharmaceuticals, the TRIPS Council had previously taken a decision to extend this transition period to 1 January 2033. Empirical evidence of the positive effects of patent reforms (such as increased inward technology transfer, high-technology imports or export growth) mainly concerns larger or middle-income economies (Branstetter, Fisman and Foley, 2006; Delgado and Kyle, 2022). Evidence of similar gains for the poorest and smallest developing economies is limited because low-income

economies often lack the absorptive capacity, technological base and complementary infrastructure necessary to benefit from stronger IP regimes. However, there so far appears to be no evidence of a weaker IP regime boosting innovation.

The discussion on improving the application of S&DT continues in relevant WTO bodies. An evidence-based approach could be one way in which to identify what measures could be taken or what support could be provided to developing economies to expand their trade through appropriate policy flexibility or through implementation of rules.

Evidence shows that technical assistance and Aid for Trade projects help developing economies to access global markets. Aid for Trade disbursement flows in 2024 were US\$ 51.6 billion, representing a 2 per cent increase from the US\$ 50.6 billion disbursement flows in 2023. Aid for Trade initiatives that support the design of trade policies, the negotiation and implementation of trade agreements and the strengthening of productive capacities have been shown to boost exports and improve exporters' ability to comply with trade partners' requirements (Lee and Oh, 2022; Yang, Wang and Whang, 2023). Aid for Trade initiatives enhance trade among existing trading partners, particularly between beneficiary economies and donors, as well as creating new trade relationships (Aboushady, Harb and Zaki, 2024; Cadot et al., 2014; Hoekman and Shingal, 2024; Nathoo et al., 2021).

3. The WTO sustains day-to-day cooperation, but more can be done

The value of good domestic institutions is well documented in the academic literature. By providing information and a forum for consultations and managing conflicts, they help to maintain trust and sustain higher levels of income. A prime example of this is in public governance. Because governments cannot predict every future scenario, both domestic governance frameworks and international agreements are naturally left with unresolved contingencies. They are inherently “incomplete”, as no agreement can define the precise rights, obligations, and remedies of parties in every possible state of the world (Horn, Maggi and Staiger, 2010). To prevent these unresolved contingencies from leading to a breakdown in trust between parties to agreements,

strong institutions are essential; they transform incomplete contracts into stable and enforceable frameworks for cooperation (North and Weingast, 1989). According to Rodrik and Subramanian (2003), well-functioning institutions perform several key functions to this end: they regulate markets by addressing spillovers and information asymmetries; stabilize markets by reducing uncertainty; and legitimize markets through mechanisms of conflict management. Hence, by providing procedural norms and forums to enable repeated interaction between parties, institutions help actors to overcome the unresolved contingencies inherent in long-term agreements, transforming one-off bargaining into a continuous, inclusive processes of dialogue. In addition, empirical evidence confirms that economies with higher quality institutions sustain higher levels of economic growth and trade flows (De Groot et al., 2004; Rodrik, Subramanian and Trebbi, 2004).

Because trade agreements are inherently incomplete contracts, they require institutional support to sustain cooperation through consultations, monitoring and enforcement. By providing a permanent infrastructure for consultation, institutions minimize coordination failures and transform trade into a repeated pattern of interactions in which the anticipation of future interaction incentivizes current adherence (Axelrod, 1984; Keohane, 1984). Furthermore, centralizing policy data and tracking member conduct reduces information asymmetries and lowers the risk premiums – the extra costs added to offset uncertainty – that otherwise restrict international commerce; this predictability is particularly vital for firms investing in specialized, offshore production networks (Anderson and Marcouiller, 2002; Antràs, 2005). Finally, centralized institutions sustain systemic legitimacy by managing disagreements through rules-based frameworks, often resolving potential conflicts via technical consultations before they escalate into formal litigation (Maggi, 1999; Baccini, 2014).

This subsection discusses how the WTO as an institution creates value through negotiations, implementation and the enforcement of trade agreements. The Marrakesh Agreement established the WTO as an international organization and defines its core functions: providing a forum where members negotiate trade rules and commitments, facilitating the implementation and administration of the WTO agreements, and offering a structured dispute settlement system to resolve trade disputes between

members in a predictable and rules-based manner. Participation in these processes varies considerably across members, although this generally reflects resource constraints rather than disinterest. For example, while active engagement of low-income economies in these WTO functions has increased over time, it remains more limited than that of higher-income members (see WTO (2024b), for a more comprehensive treatment).

(a) The WTO as a forum to negotiate and discuss multilateral trade issues

One of the WTO's core functions, outlined in Article III of the Marrakesh Agreement, is to serve as a forum for negotiations amongst its members concerning their multilateral trade relations. This chapter has already discussed how a sequence of negotiating rounds led to progressive trade openness through gradual tariff reduction, the introduction of rules and commitments in services and IP, and disciplines addressing regulatory matters and NTMs. Negotiations to further these and other objectives are pursued continuously within a technical committee structure overseen by the General Council; key outcomes are brought before the General Council, and Ministerial Conferences are held approximately every two years.

Within this architecture, the General Council serves as the highest decision-making body, and it meets regularly throughout the year, exercising the authority of the Ministerial Conference when the latter is not in session. Both bodies share exclusive institutional authority to approve accession terms, adopt authoritative interpretations, grant waivers of obligations and submit agreement amendments. Consequently, the General Council acts as the central operational hub to carry out the functions of the WTO, overseeing reporting councils and committees and providing the institutional continuity necessary to refine negotiating positions, manage administrative affairs, and, together with the bodies it oversees, serve as the primary mechanism for the continuous management of incomplete agreements.

Despite growing challenges in advancing comprehensive negotiations and the failure to conclude the Doha Round, members have continued to use the WTO as a forum to advance discussions on trade-related issues. Although the Doha Round was not concluded as a single package, members have been able to advance and deliver negotiated outcomes on some of its

elements where convergence could be achieved, contributing to incremental progress in multilateral trade cooperation. For example, the adoption of the Trade Facilitation Agreement (TFA) that was concluded at the 2013 Ministerial Conference in Bali has boosted global exports by an estimated US\$ 231 billion, while reducing agricultural trade costs by 4.9 per cent for committing partners (Beverelli et al., 2023). A decision to eliminate all forms of agricultural export subsidies by 2030 adopted at the 2015 Ministerial Conference in Nairobi, allowed members to deliver the first major reform in agriculture trade since the WTO was established. Moreover, the Agreement on Fisheries Subsidies, concluded at the Twelfth Ministerial Conference in June 2022, makes an important contribution to addressing ocean sustainability. The Agreement entered into force in September 2025, and negotiations are ongoing to further enhance its disciplines.

Members have also explored alternative ways of advancing discussions and negotiations on issues of interest. For example, they have engaged in plurilateral initiatives that have allowed groups of members to explore specific trade-related issues and, in some cases, achieve additional trade disciplines and openness. The 1996 Information Technology Agreement (ITA) is one of these early examples. Initially concluded amongst 29 participants, it currently counts 84 participants representing 97 per cent of world trade in IT products. Because it was negotiated on an MFN basis, all WTO members benefit from duty-free access to participating markets regardless of whether they are participants in this agreement. The subsequent expansion of the ITA in 2015, concluded amongst around 50 members, led to the elimination of tariffs on an additional 201 high-tech products, covering US\$ 1.3 trillion in annual trade. Beyond tariff elimination, the ITA and its expansion provide a “commitment effect” that increases policy certainty and incentivizes investment and sourcing decisions in favour of signatories (Henn and Gnutzmann-Mkrtchyan, 2018). This has been particularly beneficial for passive signatories – members that signed onto the agreement as part of a broader policy objective (such as WTO accession) rather than an explicit national IT strategy– by facilitating their deeper integration into GVCs. This approach builds on a broader tradition of specialized plurilaterally negotiated but multilaterally applicable arrangements within the WTO framework that remain binding only on those members that

explicitly commit to them by appending them to their schedules. Example of this include the 1997 negotiations on Basic Telecommunications (which included the first reference paper on regulatory disciplines) and Financial Services, as well as the 1994 Understanding on Commitments in Financial Services, which was appended to the Final Act of the Uruguay Round and which provides an optional, alternative approach for undertaking commitments (including regulatory matters) on financial services under the GATS.

Plurilateral initiatives have also been used more recently to advance broader trade policy issues amongst a subset of members, providing pragmatic pathways for progress. The plurilateral initiatives on e-commerce, investment facilitation for development, services domestic regulation, and micro, small and medium-sized enterprises (MSMEs), launched at the 2017 Buenos Aires Ministerial Conference, have offered alternative models to advance discussions on specific issues when universal consensus is not immediately reachable. This model was later extended to other issues with the launch of the Trade and Environmental Sustainability Structured Discussions, the Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade, and the Fossil Fuel Subsidy Reform initiative. Discussions on each of these topics have evolved differently depending on their specificity and the objectives participating members set out.

Some of these initiatives have led to new disciplines. In December 2021, members participating in the Joint Initiative on Services Domestic Regulation concluded the negotiations aiming at improving regulatory practices for services trade. Although this initiative was negotiated plurilaterally and implemented by a subset of the WTO membership, the disciplines apply on an MFN basis, meaning that their benefits extend to services suppliers from all WTO members. In this respect, the initiative follows the tradition of plurilateral engagement at the WTO, where a subset of members undertakes additional commitments for the benefit of all members, as in the case of the ITA. The disciplines entered into force in February 2024 for the participating members – which account for more than 90 per cent of world services trade – through incorporation into their respective GATS schedule of specific commitments. By establishing more transparent and predictable regulatory frameworks, these disciplines aim to mitigate the unintended

trade-restrictive effects of complex authorization procedures, creating new market opportunities while reducing entry barriers for small businesses and women entrepreneurs. Their implementation is expected to lower trade costs by over US\$ 125 billion worldwide (Bekkers and So, 2024).

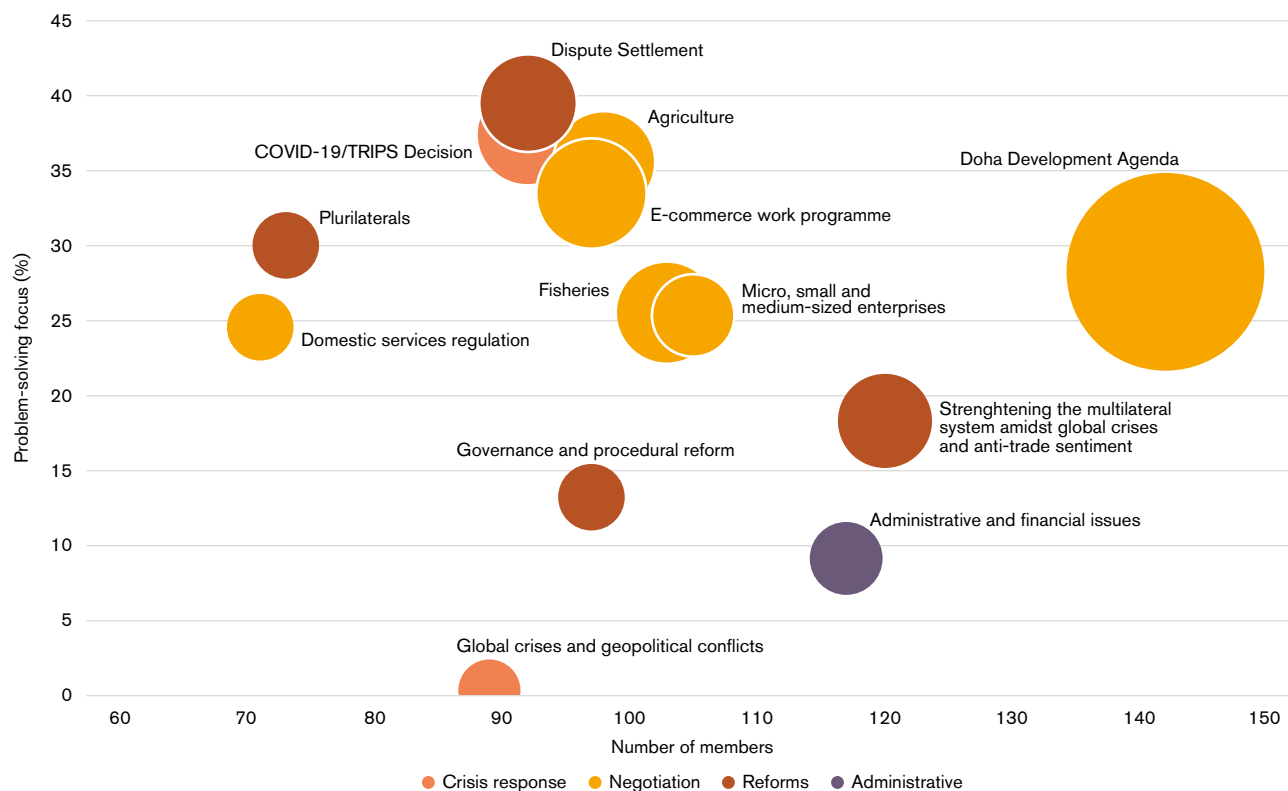
Furthermore, two new agreements were negotiated under the joint initiatives on investment facilitation for development and on electronic commerce. The Investment Facilitation for Development Agreement (IFDA), which was finalized in 2024 and currently counts 131 participants, provides global benchmarks to facilitate the flow of investments by making investment policies more transparent and their administration more streamlined and efficient, which could increase global GDP by an estimated 0.8 per cent to 1.6 per cent over the next 10 years, depending on the extent to which non-binding provisions are implemented (Bekkers et al., 2026; Balistreri and Olekseyuk, 2024). The Agreement on Electronic Commerce (ECA), concluded in 2024 and currently supported by 73 members, establishes digital trade rules aimed at facilitating cross-border digital trade, fostering an open digital environment and promoting trust in e-commerce.⁴⁰ WTO and OECD research shows that not implementing the ECA leaves around US\$ 159 billion worth of trade on the table every year (Bekkers, López-González and So, 2025). While no consensus has been reached to incorporate these two agreements into the WTO framework, these initiatives demonstrate that WTO members have found alternative ways of advancing discussions. At the 14th Ministerial Conference in Yaoundé, 67 members adopted a pathway to implement the Agreement on Electronic Commerce, while continuing to seek its incorporation into the WTO legal framework.

Beyond negotiated outcomes, members have also utilized the WTO as a forum to address global crises, highlighting its continued relevance as a platform for addressing emerging global priorities. Analysis of discussion in the General Council illustrates how the WTO's deliberative forum has been used to discuss and advance proposals on managing immediate global crises (see Appendix B.1 for a description of the analysis and of the methodology used). To map how the General Council provides this continuous operational groundwork for the landmark agreements and crisis responses highlighted above, the WTO Secretariat applied AI-driven text analysis to 10 years

of official meeting minutes, from 2016 to 2025. By using advanced AI models to convert official text into numerical patterns and group similar topics automatically, this framework isolates substantive policy debates from routine administrative text to create an empirical map of the member-driven WTO trade landscape, as visualized in Figure B.14.⁴¹ The resulting distribution demonstrates that the negotiation of major agreements, such as the Agreement on Fisheries Subsidies, is underpinned by a dynamic and highly responsive deliberative process that is capable of adapting to both long-term and emerging priorities. For instance, while the unresolved Doha Development Agenda remains the most prominent thematic area by overall volume, the data capture a parallel concentration of high deliberative intensity – measured by the share of active, action-oriented dialogue – focused on critical systemic stabilization efforts like the reform of the Dispute Settlement System and urgent crisis interventions.

While some of these discussions are still ongoing, for example on the reform of the WTO and the dispute settlement system, others have led to decisions and declarations that were subsequently adopted at WTO ministerial conferences. The outcomes reached at the 12th Ministerial Conference, held in June 2022, exemplify these efforts. Taking place against the backdrop of the global COVID-19 pandemic, the 12th Ministerial Conference adopted a package of decisions and declarations addressing the most pressing emergencies at the time. These included a landmark declaration to support more predictable access to medical supplies and a targeted waiver of a procedural provision of the TRIPS Agreement relating to the granting of special compulsory licenses for COVID-19 vaccines intended to help diversify global manufacturing capacity. WTO members also responded to requests to address food shortages and soaring food prices by exempting World Food Programme (WFP) purchases from export

Figure B.14: WTO General Council issues have varied in number and topic, 2016-2025



Source: WTO Secretariat calculations.

Note: The topics are the most prevalent issues based on an AI analysis of 10 years of General Council minutes, according to a process fully detailed in Appendix B.1. The size of the bubbles varies according to the number of text segments referring to each topic. The vertical axis, "Problem-solving focus", refers to the share of text segments on a given topic that raise a challenge alongside a proposed course of action. The horizontal axis, "Number of members", counts the number of unique members explicitly referenced in the discussion of each topic.

prohibitions and committing to facilitate more resilient agri-food trade. These emergency interventions demonstrate the WTO's capacity to pivot its deliberations toward immediate global priorities and confirm that, despite systemic constraints, members continue to turn to the WTO as a forum to discuss impeding global emergencies. Ultimately, by mapping these focal areas, the data confirm that the General Council successfully maintains this institutional equilibrium, demonstrating that the WTO's framework can advance long-term legal disciplines while actively addressing immediate systemic shocks.

Alongside discussion in the General Council, the standing committees of the WTO provide the technical expertise necessary for ongoing dialogue and rule refinement. This institutional hierarchy is organized under the Council for Trade in Goods, the Council for Trade in Services and the Council for Trade-Related Aspects of Intellectual Property Rights (TRIPS Council), each of which reports to the General Council and oversees specialized subsidiary bodies such as the Committee on Technical Barriers to Trade (TBT), the Committee on Sanitary and Phytosanitary (SPS) Measures, the Committee on Agriculture and the Committee on Trade in Financial Services. These committees provide a forum for technical discussions, based on detailed transparency procedures, regarding the practical application and evolution of trade rules.

Committees oversee the development of voluntary guidance, recommendations and best practices. These instruments do not modify treaty obligations, but clarify how existing rules are implemented in practice. Through an iterative and consensus-based process, committees progressively refine the operational content of agreements, allowing implementation to evolve over time. For instance, realizing that conformity assessment procedures – that is, procedures that are used to determine whether products comply with relevant technical regulations or standards – are increasingly important for international trade, the TBT Committee adopted guidelines to support regulators in the choice and design of appropriate and proportionate conformity assessment procedures. This soft law function can also extend beyond the multilateral system. For example, the TBT Committee's 2000 Decision on the Six Principles for the development of international standards has been incorporated into the binding language of various RTAs. In this way, committee guidance can diffuse beyond the WTO, contributing

to shaping binding rules in other trade agreements and influencing regulatory approaches more broadly.

(b) The value of transparency and its institutional infrastructure at the WTO

The economic value of transparency is well-established. By facilitating the exchange of information among market participants, transparency reduces information asymmetries and enables markets to operate more efficiently. Historical episodes involving the adoption of information technologies illustrate the value of such information sharing. The establishment of the transatlantic telegraph in 1866 reduced price differences between the United States and the United Kingdom and generated efficiency gains estimated at 8 per cent of export value (Steinwender, 2018). More recently, the use of mobile phones by fishermen in Kerala, India between 1997 and 2001 enabled them to obtain real-time price information about fish stocks, leading to near-perfect price convergence across ports and eliminating waste associated with simultaneous surpluses and shortages (Jensen, 2007). In international trade, timely and reliable information similarly provides the predictability needed to support long-term trade and investment relationships. These benefits are measurable: each additional transparency commitment in an RTA is associated with more than a 1 per cent increase in bilateral trade flows (Lejarraga and Shepherd, 2013). For micro, medium and medium-sized enterprises (MSMEs) and agricultural exporters, whose participation in trade is highly dependent on information and predictability, these gains are particularly significant (Disdier, Fontagné and Mimouni, 2008; Fontagné et al., 2015).

Transparency also reinforces institutional credibility and cooperation by lowering monitoring costs and incentivizing compliance. When measures are subject to peer scrutiny, the reputational and diplomatic costs for non-compliance rise, which fosters adherence to the rules even without formal legal enforcement (Stasavage, 2004). Furthermore, by making policy changes simultaneously observable to all members, transparency can help limit information asymmetries and reduce the scope for differences in access to information to affect negotiating outcomes. These efforts are not without their limits: their implementation must balance economic benefits against potential proprietary costs and the efficiency

of the negotiating process, as the disclosure of sensitive data can jeopardize competitive positions. In addition, confidential bargaining can sometimes produce more efficient settlements by allowing negotiators greater flexibility (Kucik and Pelc, 2016).

The WTO's transparency framework consists of three interlocking instruments: trade policy reviews, notifications and committee-level dialogue. Each of these instruments contributes a distinct function to a cumulative system of mutual scrutiny. The Trade Policy Review Mechanism (TPRM) provides a systematic, comprehensive assessment of entire trade regimes; notifications create the factual record that makes measures visible; and the committee system applies real-time, targeted scrutiny of specific measures as they emerge. All three collectively provide the informational infrastructure that makes formal dispute settlement a last resort rather than a routine necessity.

The Trade Policy Review Mechanism provides a systematic peer review of a WTO member's entire trade regime. Established under Annex 3 of the Marrakesh Agreement, the TPRM aims to provide a comprehensive assessment of a WTO member's trade policies and their impact on the multilateral trading system. Importantly, the process is designed to foster transparency and mutual understanding rather than to settle legal disputes or impose new commitments; it functions as a transparency mirror, allowing a member to see how its policies are perceived by the WTO membership, while giving trading partners a clear view of the member's domestic regulatory landscape.

Trade policy reviews are conducted in a rigorous and transparent manner, and their frequency is determined by a member's trade significance. The four largest trading entities are reviewed every three years, the next 16 every five years, and the remaining members every seven years, except for LDC members, for which a longer period may be fixed. Each review involves detailed reports from both the WTO Secretariat and the member under review, followed by written questions and oral interventions from other WTO members and concluding remarks by the chair of the Trade Policy Review Body (TPRB). All findings are made publicly available.

The TPRM ultimately fulfils three core institutional objectives beyond the individual reviews. First, it improves the quality of public and intergovernmental debate by enhancing inter-agency

coordination on trade-related policies and helping members to identify their technical assistance needs, directly mitigating information asymmetries. Second, it increases the transparency and understanding of members' trade practices through regular, independent monitoring, providing a non-adversarial peer scrutiny. Third, it enables a collective multilateral assessment of the systemic effects of these policies, reinforcing the credibility of commitments over time and highlighting overlooked WTO obligations in a constructive setting.

Notifications contribute to transparency by making trade measures visible to the full membership. They serve as the factual backbone for the WTO's monitoring activities and WTO Secretariat's public-facing databases, which provide the necessary data for both regulators and traders to navigate policy shifts. Their effectiveness, however, depends on the completeness, quality and timeliness of the information provided by members, which varies across notification requirements and members' capacity constraints. The economic benefits of such transparency are substantial: for example, evidence suggests that timely TBT notifications reduce regulatory uncertainty, generating trade effects comparable to those of a tariff reduction of up to 28 percentage points (Iodice, 2025). In the WTO, notification obligations are categorized into three functional types. Ad hoc notifications refer to situations where WTO members are only required to submit a notification when a member takes a specific action, such as introducing a new trade measure or modifying or eliminating an existing one. One-time notifications refer to situations where members are required to provide information on the status of a particular measure at the entry into force of the WTO Agreement or within a specified period calculated from that date, establishing a baseline of domestic laws and institutions. Regular or periodic notifications require submissions about specific trade policies to be made at regular intervals, which may be semi-annual, annual, biennial or triennial, providing ongoing information on measures such as subsidies and agricultural support. These notifications enable timely peer review and facilitate the identification of potential trade frictions before they escalate.

Although gaps remain, the volume of notifications to the WTO has increased substantially since 1995. WTO members have submitted over 150,000 notifications since the establishment of the WTO, reflecting both the

breadth of trade policy activity and the growing use of WTO transparency mechanisms. As Figure B.15 shows, the total number of notifications has grown markedly, driven largely by a rise in ad hoc notifications to the TBT and SPS Committees, submitted when members introduce, modify or remove specific trade measures. By contrast, one-time notifications have followed the expected pattern of declining over time as initial baseline filings were completed. Regular or periodic notifications have remained broadly stable throughout the period. The growth in ad hoc notifications reflects the increasing use of TBT and SPS measures as trade policy instruments, as well as the more active engagement of certain developing and LDC members in the notification process. For example, the annual number of TBT notifications from African economies rose from 314 in 2016 to 2,677 in 2025, with members of the East African Community (EAC)⁴² taking the lead. The rise has also been supported by more active engagement by members in the committees,⁴³ the introduction of digital notification tools that facilitate coordination and submissions, capacity-building efforts by the WTO Secretariat to strengthen members' notification capabilities, and greater demand from businesses for transparency regarding such measures, which are key determinants of market access.

Notifications play an important role in prompting early engagement among members.

In the case of SPS and TBT measures, notifications often serve as a starting point for dialogue on measures that are still at the drafting stage. Many issues are resolved before they reach the SPS or TBT Committees through direct exchanges among members during the comment period provided for in notifications.

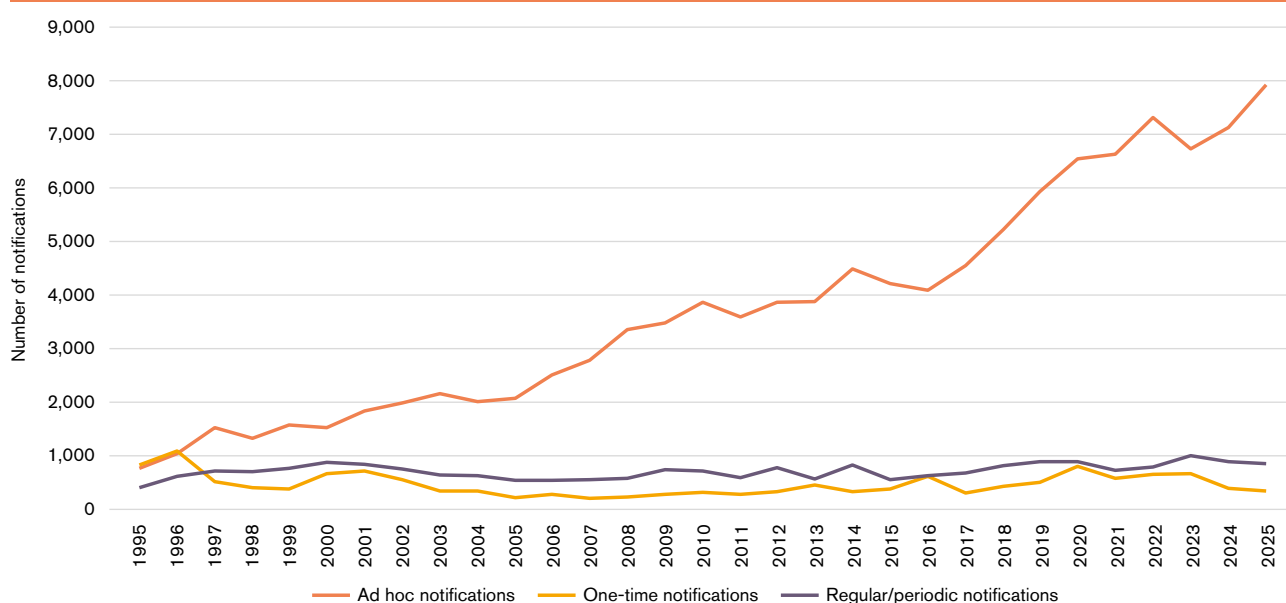
The most dynamic layer of the WTO's transparency framework operates at the level of individual measures in committee meetings.

This is most developed in the goods area, where a dense set of standing committees under the Council for Trade in Goods, particularly those administering the TBT and SPS Agreements, straddle the WTO's transparency and review functions. By providing a forum where members can raise concerns about other members' measures, including while those measures are still at the draft or proposal stage, these committees open a window for adjustment before measures are finalized. This pre-emptive function means that some of the committees do not merely monitor trade policy after the fact, they can shape measures before trade barriers solidify.

WTO committee work helps to clarify trade measures and reduce regulatory uncertainty for both members and market participants.

According to the WTO's Trade Concerns database,⁴⁴ over 1,700 trade concerns had been

Figure B.15: The total number of notifications grew markedly between 1995 and 2025



Source: WTO Secretariat calculations.

Note: Notifications are recorded in the WTO Central Registry of Notifications.

raised in the WTO's TBT and SPS Committees and the Council for Trade in Goods as of early 2026. In the Committee on Agriculture (CoA), a parallel mechanism enabling members to register questions has generated 8,893 entries since 1995 (see Box B.5). This member-driven engagement allows governments to seek additional details, identify ambiguities and address practical concerns about the implementation of trade measures. In the CoA, 33 per cent of notification questions relate specifically to transparency issues. This confirms that the committee system functions in part as a form of corrective notification, filling the information gaps of formal filing requirements.

Participation within these committees closely reflects trade interests. In the CoA there is a strong relationship between the number of questions a member receives and its share of global agricultural trade, reflected in a correlation coefficient of 0.94. Overall, these questions concerned approximately 16 per cent of agricultural trade among WTO members between 1996 and 2016 (Jackson et al., 2022). By providing a channel where trade policy and regulatory differences are examined by peers, the committee system allows for technical disagreements to be addressed before they lead to systemic ruptures.

WTO bodies provide a channel through which trade concerns are clarified, de-escalated, and, in many cases, resolved without recourse to formal dispute settlement. While systematic information on the status of trade concerns is available only for some WTO bodies, the official figures support this point. In the Council for Trade in Goods, a 2026 report indicates that members had reported 108 of the 198 trade concerns as fully or partially resolved, equivalent to 54.5 per cent of that group. In the SPS Committee, a report suggests that more than 58 per cent of specific trade concerns raised between 1995 and 2024 had been reported as resolved or partially resolved. These figures do not prove that WTO discussions alone resolved the concerns and depend on information reported by members, but they reflect the value of WTO transparency mechanisms, which make measures visible at an early stage, subject them to peer review, and provide a forum for technical dialogue before disagreements escalate. Consistent with this role, only around 6 per cent of more than 900 concerns raised in the TBT Committee have resulted in consultations in dispute settlement proceedings, and only 1 per cent have resulted in a final dispute ruling (see Figure B.17). Some analytical

estimates suggest that the broader de-escalation effect may be even higher: research focused on the TBT and SPS Committees shows that up to 89 per cent of specific trade concerns raised in those bodies were resolved or withdrawn without litigation, with 82 per cent of resolved concerns settled within one year, and also finds that concerns raised against draft measures are significantly less likely to result in disputes than those raised against final measures, reflecting the greater scope to address concerns while measures are still being designed (Possada, Ganne and Piermartini, 2022).

The transparency framework, based on notifications and discussions of trade concerns, provides market participants with timely information that reduces uncertainty and trade costs. This information is compiled and disseminated through a range of WTO transparency tools, most notably the ePing platform, which recorded over one million page visits in 2025, underscoring its value for stakeholders, including businesses of all sizes, navigating changing regulatory requirements. Notably, 41 per cent of TBT specific trade concerns involve requests for clarification that fill gaps in original notifications, improving members' understanding of proposed measures before they are implemented. The platform has also been adopted by several WTO members to facilitate coordination across domestic government agencies and disseminate regulatory updates to public and private sector stakeholders.⁴⁵

More can be done to improve the coverage, timeliness and quality of the WTO's transparency mechanisms. While the overall volume of notifications is substantial, submission rates for mandatory submissions remain uneven across agreements and levels of development. Because submission rates can be calculated only for one-time and periodic notifications, these provide the basis for assessing compliance. Across goods agreements, the combined submission rate is 78.7 per cent, but this average masks significant disparities: regular notifications under the Agreement on Agriculture approach 93 per cent, while compliance with the Decision on Quantitative Restrictions remains low at approximately 27 per cent. Disparities are also pronounced across development levels, with LDCs submitting notifications at a rate of 56.4 per cent, well below the WTO average. Improving the completeness, timeliness and quality of notifications therefore remains an important institutional priority.⁴⁶

Box B.5: Transparency issues: evidence from the Committee on Agriculture

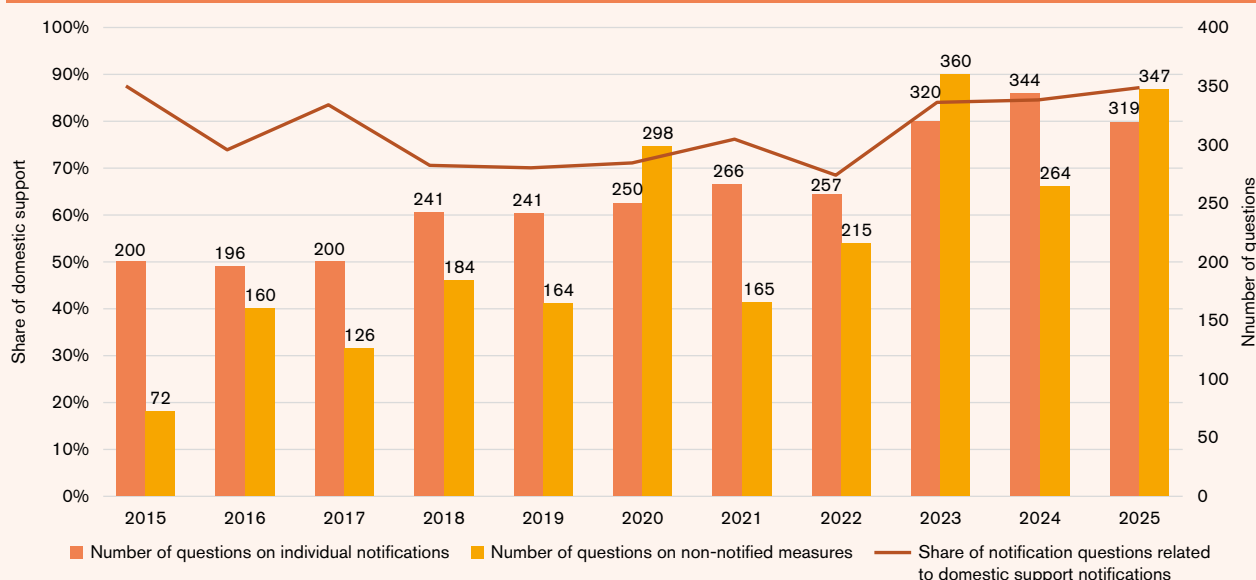
The Committee on Agriculture (CoA) oversees the implementation of the Agreement on Agriculture. The CoA includes all WTO members and usually meets three or four times a year. A large portion of the CoA agenda is devoted to a review of members' implementation of commitments made in the Uruguay Round. In this part of the agenda, members can raise questions relevant to the disciplines contained in the Agreement on Agriculture. These questions serve various purposes. Some focus on understanding in more technical detail specific notified measures, others are geared toward monitoring other members' compliance with their commitments (Jackson et al., 2022b).

Most questions in the CoA fall into one of two categories: questions on individual notifications and questions on any other matter related to agricultural policies. Questions in the first category often seek clarifications, raise issues with the calculation methodology, or indicate gaps in the notified information, and thereby help to gauge the quality of notified information. Questions in the second category typically highlight prospective or recently introduced measures and seek clarification about their modalities and, potentially, about their conformity with Agreement on Agriculture rules and commitments, highlighting the value of the peer review that improves transparency beyond notifications.

Overall, the number of questions raised in the CoA has increased substantially (see Figure B.16). The number of notification questions increased from around 200 a year a decade ago to around 300 in recent years. Questions about non-notified measures, the second category, have seen an even more marked increase, from 72 in 2015 to around 350 in 2025.

The questions database also systematically records the topic of questions on notifications. The Agreement on Agriculture classifies rules and commitments into three areas: market access, domestic support and export competition. The topics of questions raised can, as a consequence, be categorized in the same classes. Data show that the vast majority of questions are related to domestic support notifications. Moreover, in around one-third of notification questions, members raising the question indicated transparency issues.

Figure B.16: Questions raised in the Committee on Agriculture



Source: WTO Secretariat calculations based on data from the WTO's Agriculture Information Management System portal.

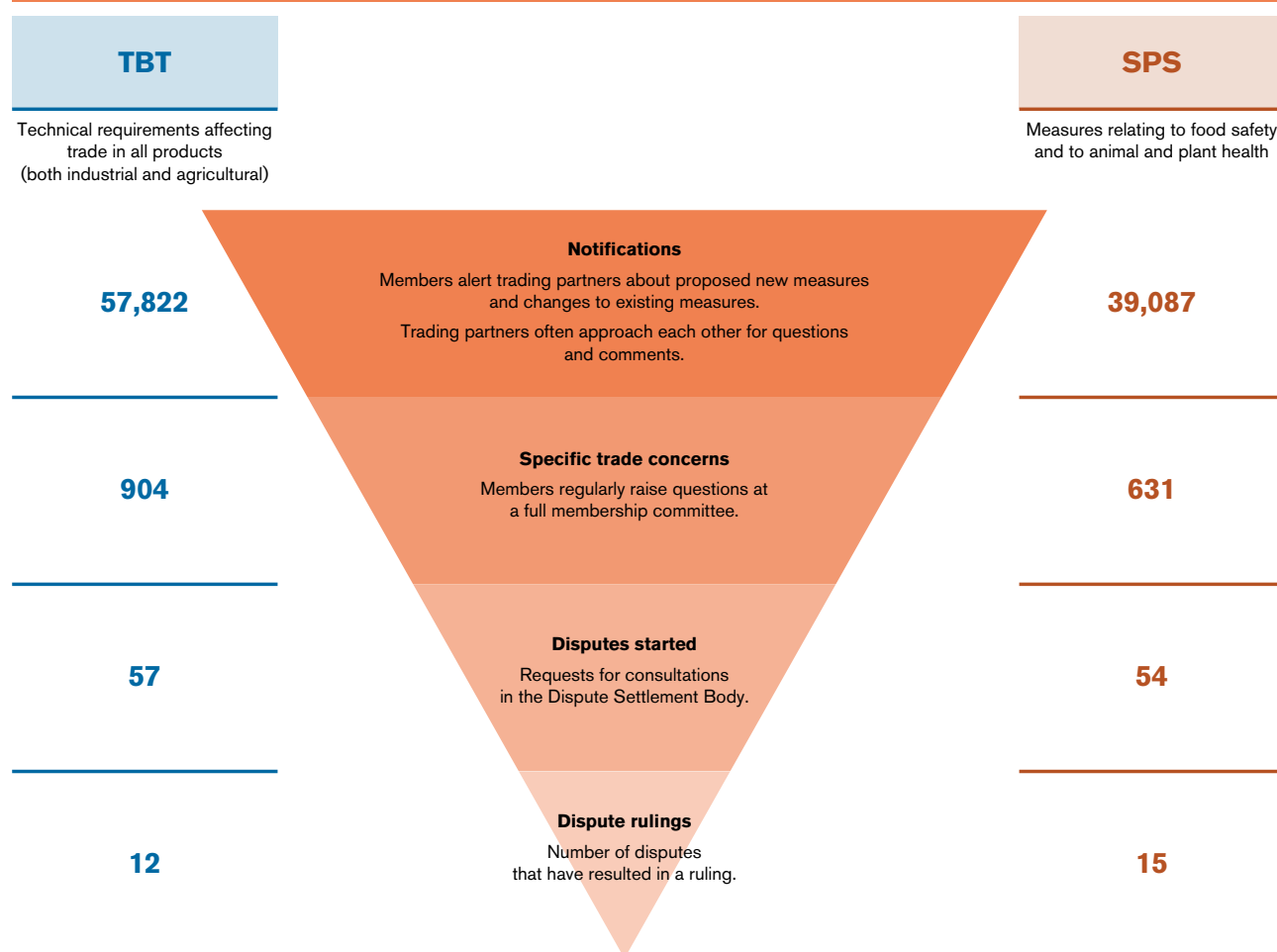
Overall, CoA peer review activity suggests increasing engagement with transparency issues in agriculture policies, and especially with regard to domestic support measures. The sustained and growing engagement of members within the committee setting also suggests that members continue to regard the CoA as a productive and trusted forum for seeking clarity on the policies of their trading partners. Rather than allowing uncertainty to accumulate unaddressed, members are actively channelling their questions through the committee – the kind of constructive, dialogue-based engagement that the transparency architecture of the WTO was designed to encourage.

Notification compliance encompasses not only whether notifications are submitted, but also whether they are submitted on time.

Preliminary analysis of a small set of notification requirements suggests that, while submission rates have remained broadly stable, delays in submissions remain significant, even where timeliness appears

to have improved over time. For the six notification requirements examined, the average delay between the due date and the submission date declined by approximately 35 per cent between the earliest and most recent periods analysed (see Table B.3). These findings should not be interpreted as representative of all WTO notification requirements. Rather, they

Figure B.17: Transparency in TBT and SPS measures reduces the likelihood of disputes



Source: WTO Secretariat.

Note: Data are from 1995 to 31 March 2026. All types of notifications are included. The same measure may be associated with more than one notification.

Table B.3: Stable submission rates and reduced notification delays have emerged across WTO agreements

Agreement	Period	Submission rate*	Proportion of total late submissions	Average delay (days)
Agreement on Import Licensing Procedures: LIC Art. 7.3	1995–2005	23%	58%	703
	2006–2014	33%	51%	232
	2015–2024	30%	58%	254
Anti-Dumping Practices: ADP GATT 1994 Art. VI + Art. 16.4	1995–2005	88%	61%	643
	2006–2014	88%	57%	549
	2015–2024	88%	53%	263
Quantitative Restrictions: QR(G/L/59 and G/L/59/Rev.1)**	1995–2005	—	—	—
	2006–2014	21%	79%	700
	2015–2024	30%	80%	421
Agreement on Subsidies and Countervailing Measures: SCM Art. 25.1 & GATT Art. XVI:1	1995–2005	58%	87%	941
	2006–2014	67%	87%	716
	2015–2024	59%	77%	401
Agreement on Subsidies and Countervailing Measures: SCM Art. 25.11	1995–2005	82%	57%	416
	2006–2014	80%	54%	463
	2015–2024	83%	49%	273
State trading enterprises: STR GATT Art. XVII:4(a)	1995–2005	50%	91%	1,787
	2006–2014	51%	81%	1,309
	2015–2024	43%	69%	574

Source: WTO Secretariat calculations.

Notes: * All submission rates were calculated as of 31 December 2025.

** Data for quantitative restrictions (G/L/59/Rev.1) only began recording in 2012; WTO official document available via <https://docs.wto.org/>.

suggest that timeliness, in addition to whether a notification is submitted at all, may merit closer attention in future work on notification compliance. Although the data do not permit causal conclusions, the observed improvements coincide with the gradual modernization of notification procedures through standardized templates, digital submission infrastructure, and enhanced WTO Secretariat support, including targeted reminders and technical assistance. Nonetheless, persistent challenges remain and vary depending on the notification requirement, including complex inter-agency coordination, uncertainty regarding the scope of overlapping obligations, and possible mismatches between notification review windows and domestic budget calendars.

Three areas may be particularly relevant for transparency. First, regular participation in transparency-related work, the exchange of experiences and good practices, and greater awareness of the value of timely and complete notifications may contribute to stronger engagement by members. Second, tools that facilitate coordination, both within and among members, may help to support transparency. These may include digital platforms that facilitate the collection, verification and submission of relevant information by national agencies. Third, technical assistance, in the form of action-oriented training, tailored coaching, progressive learning approaches and better-integrated technical assistance programmes, may support some members to overcome capacity constraints. Evidence shows

that technical assistance is particularly effective in improving notification performance. In 2025, beneficiaries of WTO technical assistance reported a 13 per cent increase in SPS notifications and a 25 per cent increase in TBT notifications compared with the previous year (WTO, 2026b).⁴⁷

(c) Enforcement through dispute settlement and its limitations

The value of dispute settlement within the WTO Agreements may be evaluated by looking at the rationale underpinning the WTO dispute settlement system. There are various theories on why governments create enforcement mechanisms for treaty obligations that they voluntarily assume (Brewster and Chilton, 2014; Chayes and Chayes, 1993; Helfer and Slaughter, 2005; Koh, 1996; Posner and Yoo, 2005). In the case of trade agreements, however, the reason is straightforward and – unsurprisingly – economic. As discussed in Section B.2(b), entering into trade agreements can neutralize the terms-of-trade spillover that underlies inefficient governmental trade policy. However, trade agreements do not necessarily extinguish the underlying incentive to withdraw concessions and raise tariffs toward the unilateral optimum, thereby shifting the costs back to other members (Bown and Reynolds, 2017). This is where enforcement mechanisms play a role (Bagwell, Mavroidis and Staiger, 2002). By establishing credible retaliatory measures against any member that deviates from an agreement, the temptation of short-term benefits through withdrawing concessions is likely to be moderated (Bagwell and Staiger, 2002a). Put another way, the credible threat of retaliation embodied in a robust enforcement mechanism can counterbalance the incentives that may otherwise spur a government toward its unilateral optimum tariff and the consequent terms-of-trade gains.

An effective enforcement mechanism could take various forms depending on the trade agreement in question. Its optimal design may vary depending on such factors as the economic profiles of the state parties to the agreement, the nature of the concessions exchanged, and the scope, ambition and precision of the agreement itself (Keck and Schropp, 2008; Maggi and Staiger, 2011, 2018; Pauwelyn, 2010).

In the context of the GATT and the WTO, there is a particular economic explanation in favour of an enforcement mechanism in which a neutral

“honest broker” is available to adjudicate cases and recommend outcomes. This is because the GATT and the WTO are premised on periodic negotiations to secure market access outcomes that are sufficient to offset the incentive to pursue unilateral optimal tariffs, together with anti-circumvention disciplines to ensure that those outcomes are durable. The outcome of these negotiations creates a system of “property rights”, in which each member has an entitlement to the value of the market access benefits that it has negotiated to secure. Members’ respective entitlements in that regard collectively represent the overall equilibrium, or balance of interests, which is then protected under the framework of the multilateral trading system (Keck and Schropp, 2008; Pauwelyn, 2008; Bagwell, Mavroidis and Staiger, 2002). See the opinion piece by Chong-En Bai, Gita Gopinath, and Hélène Rey for more on this.

For a variety of reasons, however, it will often be the case that members have imperfect information about the value of their respective entitlements and whether one member’s conduct may be interfering with the entitlement of another in a manner contrary to the agreed rules. These include, for instance, the nature of the single undertaking as a complex set of cross-sectoral trade-offs, the design of anti-circumvention disciplines as being applicable to case-specific scenarios rather than pre-defined measures, and the “vague”⁴⁸ nature of the agreed rules that may otherwise justify such interference. If members were to rely on imperfect information in this regard, it could result in retaliatory measures that could represent a subjective, or indeed unjustified, overcorrection. Moreover, retaliatory measures based on imperfect information could precipitate tit-for-tat countermeasures that could further disrupt the overall balance, thus further diminishing its restraining effect (Keck and Schropp, 2008; Maggi and Staiger, 2011; WTO, 2007).

To be effective, a GATT/WTO enforcement mechanism must be capable of generating credible and accepted information that preserves the overall balance. In doing so, it safeguards the value of each member’s entitlement and, if necessary, authorizes retaliatory measures that restore the balance (Bagwell, 2007). This is best served by a neutral “honest broker” that can collect, analyse and diffuse credible factual information that the disputing parties can trust and act upon (Keck and Schropp, 2008).

Reforming the WTO to support beneficial trade

by Chong-En Bai, Distinguished Professor of Arts, Humanities and Social Sciences,
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and Axel Weber, President of the Center for Financial Studies, Goethe University.

Balanced growth and mutually beneficial trade require a multilateral system capable of managing tensions pragmatically while preserving openness. The WTO remains central to this task, yet rising global and sectoral imbalances, alongside renewed protectionism, have exposed gaps in the WTO's effectiveness. Addressing these shortcomings calls for targeted reforms that strengthen existing instruments, improve enforcement and deepen coordination with other international institutions.

A first priority is to reaffirm and reinforce the WTO's core principles, particularly MFN treatment and negotiated reciprocity. These principles underpin a system in which market access concessions are generalized rather than confined to selective bilateral arrangements. Their durability, however, depends on the ability of the system to accommodate shocks and distributional tensions. Trade surges, perceptions of unfair competition and national security concerns generate domestic pressures that can erode political support for openness. The WTO must provide credible, rules-based mechanisms that allow economies to adjust while preserving commitments to liberalization.

Central to this adjustment capacity is the WTO's safeguards framework. Safeguards, whose uses are rooted in GATT Article XIX and the WTO Agreement on Safeguards, was designed as a temporary safety valve, allowing governments to respond to import surges that cause serious injury to domestic industries. The role of safeguards is to provide breathing space for adjustment while maintaining openness. In practice, safeguards are underutilized due to legal ambiguity, procedural complexity and narrow product-specific application. Reform should clarify evidentiary standards, streamline procedures and consider broader sectoral applicability. A more effective safeguards mechanism would reduce incentives for unilateral measures and contain trade tensions within the multilateral system.

WTO rules governing permissible deviations from MFN treatment also require refinement. Existing provisions covering regional trade agreements and trade remedies, such as anti-dumping and countervailing duties, remain essential, but must reflect current realities. National security exceptions under GATT Article XXI warrant attention, as, while legitimate, they risk arbitrary or discriminatory use that

undermines trust. A more disciplined approach would limit use of any deviations from MFN treatment to a narrow set of essential goods and require tariffs to be applied uniformly across partners, with reductions for trusted partners in a manner consistent with the spirit of regional agreements under GATT Article XXIV.

Modernizing subsidy rules is another priority. Current disciplines are too narrow to capture policy instruments that distort competition. Expanding the definition and measurement of subsidies, supported by better data and analysis, would enhance transparency and relevance. A more comprehensive framework would improve the legitimacy and effectiveness of trade remedies, while reducing disputes rooted in perceived asymmetries.

Equally critical is restoring a fully functioning dispute settlement system. The paralysis of the Appellate Body has weakened enforceability and predictability. Reviving appellate review, alongside reforms to the structure and mandate of the Appellate Body, would strengthen legal certainty, discourage unilateral actions and rebuild confidence in the multilateral system.

Finally, the WTO must operate within a broader ecosystem of international institutions to address the increasingly intertwined nature of macroeconomic, trade and financial imbalances. Assessments by the International Monetary Fund (IMF) of external imbalances can provide macroeconomic context for trade developments, while WTO analyses of trade distortions can inform that IMF surveillance. Structured information-sharing and joint analytical work would improve the ability to anticipate and manage tensions.

In sum, sustaining an open and stable trading system requires a pragmatic effort to update and strengthen WTO instruments. Improved safeguards, clearer rules on exceptions, modernized subsidy disciplines, restored dispute settlement and deeper institutional cooperation are essential to ensure the WTO remains fit for purpose.

Disclaimer

Opinion pieces are the sole responsibility of their authors. They do not necessarily reflect the opinions or views of WTO members or the WTO Secretariat.

There are various forms that the neutral “honest broker” approach to enforcement could take in the multilateral trading system, and its main elements can be found in the Dispute Settlement Understanding (DSU). Under Article 23 of the DSU, members are prohibited from deciding unilaterally that another member's conduct violates the agreed rules and nullifies or impairs their entitlements (referred to as “benefits”). This restricts a given member from relying on its own imperfect information. Instead, members are required to follow the procedures in the DSU, which establish a process for generating credible and accepted factual information over a disputed matter. In particular, neutral adjudicators are tasked with making an “objective assessment” of the law and facts at issue, thereby producing information on whether a given member's measure is impermissibly interfering with another member's entitlement. Moreover, the adjudicators are required to lay out the “basic rationale behind any findings and recommendations that [they make]”, thereby producing information on *how* the impugned measure is adversely affecting another member's entitlement. If the respondent member opts not to restore the overall balance of interests by correcting the impugned aspects of its measure, the balance can ultimately be restored by either offering compensation that is acceptable to the complainant or by requesting the adjudicators to calculate the negative impact on the affected member's entitlement. The affected member may then retaliate on terms “equivalent to the level of the nullification or impairment”. In these ways, the DSU functions as a meaningful deterrent against the temptation toward reverting to unilateral optimal tariffs (Bagwell and Staiger, 2002a; Bown and Reynolds, 2017).

This understanding of the function of dispute settlement in the GATT/WTO is not mutually exclusive with other rationales for cooperation on trade policy (see Section B2(a)). For instance, members with economies for which there is no optimal tariff incentive may desire the certainty and predictability provided by an enforcement procedure with neutral and binding adjudication. Certain design features of the DSU comport with such a desire, including the preference in Article 3.7 of the DSU for withdrawal of measures found to be inconsistent, and the exhortation in Article 3.2 that dispute settlement “is a central element in providing security and predictability to the multilateral trading

system”. Nevertheless, the possibility of mutually agreed compensation or the equivalent suspension of trade benefits, as well as the availability of avenues to restore a member's entitlement in the *absence* of violations such as through non-violation and situation complaints, underscore that maintaining the overall balance of interests forms its primary economic logic (Bagwell, 2007; Staiger and Sykes, 2013). Given that the ultimate price to be paid in the event of an unremedied violation is the withdrawal of substantially equivalent concessions by the complainant member, the DSU can facilitate so-called “efficient breaches” that effectively allow a respondent member to pay for a violation (Schwartz and Sykes, 2002). This same logic runs through the flexibilities afforded by the analogous “liability rules” in Article XXVIII of the GATT and Article XXI of the GATS.

The widespread use and participation of members in the dispute settlement system signals the value placed on enforcement in the rules-based system. In particular, since the inception of the WTO in 1995, 53 individual members have initiated disputes, and 93 have participated as third parties. This has resulted in 251 panel reports and 166 Appellate Body Reports being adopted by the Dispute Settlement Body (DSB).⁴⁹

The effectiveness of dispute settlement in deterring members from reverting to unilateral optimal tariffs depends on periodic and fruitful negotiating rounds. Negotiating rounds allow the overall balance of interests to be recalibrated as real-world conditions change (Bagwell and Staiger, 2000, 2002a). If the overall balance of interests is not responsive to real-world conditions, the deterrent effect against unilateral optimal tariffs could erode over time. Indeed, if real-world conditions change to such an extent that the benefits of unilateral optimal tariffs for a given member outweigh the costs of retaliatory measures based on outdated market access gains, the deterrent effect of dispute settlement in the multilateral trading system could dissipate for that member (Maggi and Staiger, 2018).

The value of the dispute settlement system in deterring members from reverting to unilateral optimal tariffs has also been challenged by the inability of the Appellate Body to hear cases due to the fact that it does not have any standing members. Since the end of 2019, the Appellate Body has been left without a quorum

to hear appeals. Consequently, alleged violations of WTO obligations since then have not led to definitive outcomes if a disputing party opts to appeal "into the void". The inability of the Appellate Body to hear cases has resulted in 35 appeals being unable to proceed and has coincided with members pursuing decidedly fewer panel proceedings. For instance, an average of 11 panels were composed annually over the period 2010-19, compared to an annual average of just five since 2020. At the 12th WTO Ministerial Conference in 2022, members committed to conducting discussions on dispute settlement with the view to having a fully and well-functioning system accessible to all members by 2024, but these discussions have yet to resolve the challenges associated with an inactive Appellate Body.

In the meantime, members have pursued a variety of creative approaches to navigate the Appellate Body's inactive status. Since December 2019, parties have found ways to resolve about half of their disputes through various settlements that avoided appealing into the void. These have included single-tier approaches such as pre-agreeing to accept a panel's ruling as final, agreeing to refrain from appealing after receiving a panel's ruling, and arriving at negotiated settlements to resolve the dispute (known as "mutually agreed solutions") at various stages during or after panel proceedings, as well as designing bespoke case-specific appellate mechanisms.⁵⁰ Indeed, the rate at which disputing parties have notified mutually agreed solutions after composing a panel has increased by almost three-fold since 2020 when compared to the period 2010-19. As another indicator, the four appeals "into the void" in the past two years stand in contrast to seven cases in which parties either allowed panel reports to be adopted by the DSB or resolved their disputes through other types of settlements.

Perhaps the most prominent of these innovations is the Multi-Party Interim Appeal Arbitration Arrangement (MPIA), whereby a group of members agreed to refrain from appealing into the non-functioning Appellate Body. In lieu of the Appellate Body, these members created a standing pool of 10 appellate arbitrators. Three such appellate arbitrators hear appeals in disputes between participants in the MPIA via the flexible arbitration procedure under Article 25 of the DSU, with these appellate arbitrations being conducted under working procedures and modalities

modelled largely on those of the Appellate Body. At its inception in April 2020, the MPIA had 19 participants representing approximately 21 per cent of merchandise trade (excluding intra-EU trade), which has since grown, with 34 participants by the end of June 2026, representing approximately 36 per cent of merchandise trade (see Figure B.18). No disputes between MPIA participants have been appealed into the non-functioning Appellate Body thus far, which demonstrates its effectiveness in navigating the Appellate Body's dysfunction.

The growth of participation in the MPIA reflects the value that certain members place on the continuity of dispute settlement, though the arrangement's standing as a fully credible alternative is still being established.

In particular, whereas 67 per cent of panel reports were appealed to the Appellate Body prior to 2020, the MPIA has seen an appeal rate of only 17 per cent, representing just two appellate arbitrations. While both of those appellate arbitrations were completed within the MPIA's requisite 90-day timeframe, two WTO members expressed misgivings at the DSB in relation to the ruling in the second arbitration. Some academic commentary echoed these concerns (Bonadio et al, 2025; Cantore, 2026). Meanwhile, some other members were more supportive of the DSB. The scrutiny that the MPIA has attracted in this regard may itself prove constructive, as it appears to be transitioning increasingly from a temporary innovation to a more established feature of dispute settlement among some WTO members.

The economic rationale outlined above for enforcement mechanisms in trade agreements can be similarly observed in the design and structure of dispute settlement beyond the multilateral trading system. In particular, parties to free trade agreements have tended to tailor single-tier enforcement mechanisms in a way that optimizes the overall balance of market access outcomes, while avoiding approaches that may disrupt that balance, for example:

- In the free trade agreement between the United States and Australia (2005), environmental obligations were generally exempt from binding adjudication that could lead to retaliatory trade measures, with the notable exception of the sole environmental obligation that "affect[ed] trade and investment between the parties". Retaliatory trade measures were thus available only to the extent

that environmental obligations might impact the overall balance of market access outcomes.

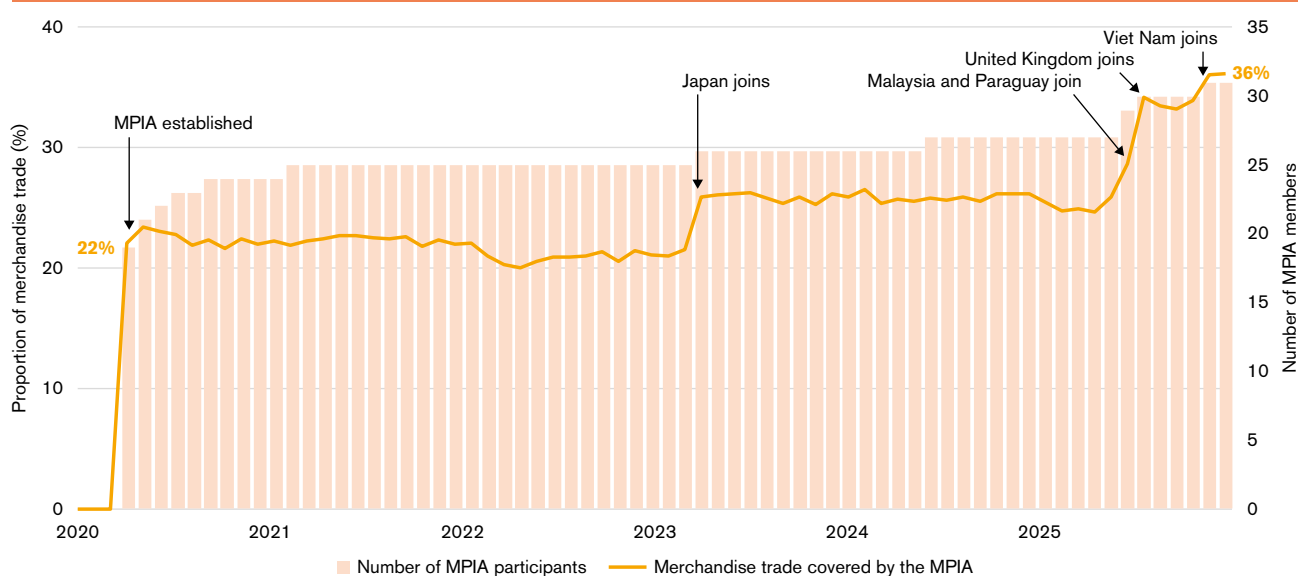
- In the free trade agreement between Peru and the United States (2009), obligations on combatting illegal logging were paired with a bespoke enforcement mechanism that would allow the United States to suspend shipments of suspected products of illegal logging after a process of consultation and information-gathering, thus allowing for meaningful enforcement without impugning the overall balance of market access outcomes.
- The free trade agreement between the European Union and Canada (2017) subjected environmental obligations to independent adjudication, but opted not to allow findings of violation to give rise to retaliatory trade measures. Rather, the adjudicators' findings were designed as an input in the parties' negotiations to resolve the dispute. Given that those obligations were not directly connected to the overall balance of market access benefits accruing to each party, it made sense not to permit retaliatory trade measures in response to violations.

Trade agreements beyond the multilateral trading system can also offer examples whereby unilateral enforcement mechanisms

have been tailored to the particular market access outcome arrived upon. For instance:

- In the recent free trade agreement between India and the European Free Trade Association (EFTA) states that came into force in 2026, one of the main trade-offs involved tariff reductions by India in exchange for flows of FDI into India from the EFTA states over fixed time-frames. Given the target-based structure of the FDI commitment, the parties chose an enforcement mechanism which would permit India to unilaterally reimpose tariffs if it determined that the targets had not been met. Significantly, this enforcement mechanism embedded an extensive consultation process designed to generate information concerning the progress toward the targets, as well as adjustments for "unforeseen circumstances" and a limitation on India's reimposition of tariffs to "temporary and proportionate" remedial measures to rebalance certain concessions given to the EFTA states. In light of the particular market access trade-off, therefore, the parties devised an efficient structure to maintain the overall balance of interests.
- The free trade agreement between the European Union and the United Kingdom that came into force in 2021 allows for unilateral rebalancing measures if one party's future policies on labour,

Figure B.18 The proportion of merchandise trade covered by MPIA parties is growing



Source: WTO Secretariat calculations.

Note: Bilateral trade among MPIA members as a share of total merchandise trade among WTO members, based on imports data from the Trade Data Monitor (January 2026). EU and its members are counted as one.

social, environmental or climate protection significantly diverges from the other party's in a way that impacts on trade or investment. Such rebalancing measures must be based on “reliable evidence” and be limited “with respect to their scope and duration to what is strictly necessary and proportionate in order to remedy the situation”. An arbitral tribunal can be convened to ascertain whether the rebalancing measures are consistent with those disciplines. If the tribunal's proceeding exceeds 30 days, each side may maintain, respectively, rebalancing measures and temporary countermeasures, until the conclusion of the proceeding.

Accordingly, there are various ways of achieving the goal of credible retaliatory measures to counterbalance underlying incentives to revert to unilateral optimal tariff rates. What matters is whether a chosen approach to enforcement is effective in moderating those incentives, rather than the precise form that the enforcement mechanism may take.

4. The costs of not having the WTO

The previous sections outlined the different functions and associated economic benefits of the WTO. This section quantifies these economic benefits, using simulation analysis and a number of stylized scenarios.

(a) Scenario analysis can show the economic costs of not having the WTO

The economic value of the WTO can be illustrated through three stylized scenarios. Two of these scenarios posit worlds in which the WTO no longer performs its current role: a “*Geo-fragmented world*”, in which trade cooperation is organized around geopolitical blocs, and an “*FTA world*”, in which multilateral cooperation is replaced by a network of free trade agreements (FTAs).⁵¹ A third scenario, the “*Enhanced cooperation world*”, considers a strengthening of multilateral cooperation relative to the status quo. Comparing these scenarios provides an indication of both the costs of losing the WTO and the potential gains from deeper cooperation.

In the *Geo-fragmented world* scenario, security considerations and geopolitical alignments play a central role in shaping trade policy, dividing the world economy into a western bloc,

an eastern bloc and a group of non-aligned economies. While trade policy cooperation persists within blocs, the collapse of multilateral disciplines and increasing trade obstacles between blocs create a more uncertain, less predictable and more costly trading environment. Trade frictions occur along the geopolitical lines theorized in the literature on geopolitical fragmentation.⁵² Meanwhile, the costs of trading with non-aligned economies with whom there is an FTA in place are assumed to remain at the same level.

In the *FTA world* scenario, global trade policy cooperation breaks down at the global level and is replaced by unstructured trade policy cooperation in FTAs (free trade areas or customs unions). Hence, trade costs rise between all trading partners, in all areas and in all sectors, except for trade within existing and new FTAs. Tariffs on non-FTA trade are set in a non-cooperative way, and the scope and size of other trade cost increases are extensive. Under this scenario, the WTO would no longer play a role in trade policymaking, and would be replaced by unstructured ad hoc cooperation.

In the *Enhanced cooperation world* scenario, the multilateral trading system centred around the WTO stays in place and members extend their cooperation in selected areas. New policies aimed at opening up global trade, enhancing predictability and strengthening institutional effectiveness are implemented. At the same time, greater flexibility can be provided for trade-restrictive measures in selected areas. Furthermore, additional economies are integrated into the WTO. This scenario portrays a trading system in which economies leverage the multilateral framework to pursue broadbased economic gains. In this sense, the opportunity costs of losing the WTO are not limited to higher trade barriers, but also include foregone opportunities for greater global integration and additional welfare gains.

(b) Simulated scenarios based on insights from economics literature

The simulations translate alternative institutional arrangements into changes in trade costs across several channels, including tariffs, NTMs, trade policy uncertainty, digital trade restrictions and selected areas of future cooperation. These trade cost changes are evaluated using the WTO Global Trade Model, a recursive dynamic computable general

equilibrium model with technology spillovers through trade. The model is calibrated to 2023 data employing the Global Trade Analysis Project (GTAP) Data Base, Version 12,⁵³ aggregated to 47 economies, 10 sectors and five production factors. Results are reported for 2050 relative to a baseline scenario incorporating external projections for population, labour force and GDP growth, and structural change through differential productivity growth across sectors. It also includes changes in trade costs associated with already signed FTAs, implemented tariff actions based on the IMF-WTO tariff tracker, and falling trade costs related to digitalization, which leads to strong growth in digitally deliverable services, implying higher welfare effects of trade cost changes, underscoring the importance of global trade policy cooperation as digitalization progresses.⁵⁴

The trade cost changes are based on insights from the economics literature. The analysis draws on recently calibrated estimates on the difference between cooperative and non-cooperative tariffs, based on the simulations presented in Figure B.7, and consistent with the broader literature (e.g., Ossa, 2014). It is also based on estimates of the trade cost effect of trade policy uncertainty (Handley and Limão, 2017; Osnago, Piermartini and Rocha, 2018), the trade effects of WTO membership for goods and services (Campos et al., 2024; Ciuriak, Dadkhah and Lysenko, 2020; Larch et al., 2025), and the trade impacts of the Agreement on Electronic Commerce and the Joint Initiative on Services Domestic Regulation (Andrenelli and López-González, 2023; World Trade Organization (WTO), 2023c; Bekkers and So, 2024; Bekkers, López-González and So, 2025).⁵⁵ Table B.4 summarizes the resulting trade cost assumptions.

In the *Geo-fragmented world* and the *FTA world* scenarios, trade costs rise between economies outside the blocs or not covered by FTAs. In the *FTA world* scenario, trade costs increase between all non-FTA partners, remain unchanged among FTA partners, and fall between economies forming new FTAs. The list of assumed new FTAs is based on two sources: FTAs currently under negotiation according to publicly available information, and FTAs among the trading partners most likely to enter an FTAs as predicted by an econometric model explaining the formation of new FTAs (Probit model). In the *Geo-fragmented world* scenario, trade costs rise between economies in different geopolitical blocs, and FTAs among them disappear, while remaining unchanged

within blocs. Trade costs between members of a bloc and non-aligned economies also rise, unless they have an FTA in place.

In both trade-restrictive scenarios, ad valorem tariffs are estimated to rise to between 25 and 30 per cent. This is based on the non-cooperative tariff simulations presented in Figure B.7 and consistent with Ossa (2014), when the same trade elasticity is employed. In services trade, costs are also estimated to increase, reflecting the fact that rising barriers to the cross-border supply of services have effects similar to those of a tariff.⁵⁶

In the *Enhanced cooperation world* scenario, tariffs are reduced in proportion to the terms-of-trade spillovers they impose on trading partners. Terms of trade spillovers of an economy on its trading partners are defined as the changes in terms of trade (price of exports relative to imports) due to actual tariff levels. This approach is based on Bekkers and Keck (2024). As such, these reductions are approximately proportional to initial tariff rates, GDP per capita, and the sensitivity of trade to tariffs (the trade elasticity). Tariffs are nevertheless allowed to increase in a limited set of security-related sectors.

Changes in trade policy uncertainty (TPU) for goods is modelled through changes in tariff “water”, defined as the gap between applied and bound tariff rates. These effects are based on recent papers studying the impact of tariff “water” – or changes in it – on trade (Osnago, Piermartini and Rocha, 2018; Bekkers and Schroeter, 2020). The assumption is that members would no longer comply with their binding commitments, thereby introducing “additional water” beyond the existing levels. In the *Geo-fragmented world* scenario, tariff water rises by up to 25 per cent between the western and eastern blocs, and by up to 10 per cent between the non-aligned group and the two blocs, unless they have an FTA in place. In the *FTA world* scenario, tariff water increases by up to 25 per cent between all economies, except when they are FTA partners. In the *Enhanced cooperation world* scenario, TPU falls because of the reduction in bound tariffs based on the terms-of-trade spillover effects (Bekkers and Keck, 2024).

Changes in trade policy uncertainty (TPU) for services are modelled through changes in the “water in the GATS”, defined as the difference between bound and applied commitments.

Table B.4: Trade costs change along various channels in different ways across the scenarios

	“Geo-fragmented world” scenario	“FTA world” scenario	“Enhanced cooperation world” scenario
Role of blocs and FTAs	Trade costs increase between economies in different blocs and between blocs and non-aligned economies, except where an FTA exists.	Trade costs increase between all economies except economies with an FTA. New FTAs are formed based on an econometric model and FTAs on which public information is available.	No change.
Trade effects of WTO membership	Increase in NTMs using estimates from Larch et al. (2025) for goods and Gnanon (2024) for services.		Drop in NTMs following the accession of current candidate members.
Tariffs	Tariff increases based on non-cooperative tariffs calculated earlier in this report (Figure B.7). For consistency, rent-type trade costs in services are also raised to their non-cooperative level.		Reduction in proportion to the terms of trade spillover effects (Bekkers and Keck, 2024). Increase of up to 25% for security-sensitive sectors.
Trade policy uncertainty	Increase in “water” of up to 25% in goods trade using estimates from Osnago et al. (2018), and by one-third in services using Ciuriak et al. (2020).		Decrease in “water” in goods trade following the change in bound tariff rates, as per Bekkers and Keck (2024), and in services as per the WB-WTO BSTRI database.
Data policies	Regions in different geopolitical blocs impose more stringent data flow regulations following OECD and WTO (2025).	Data flows are restricted globally, with exceptions only on the basis of ad hoc authorizations following OECD and WTO (2025).	No change related to the security-related sensitivity of the topic.
Trade cost reductions in digital and other services trade	No change	No change	Implementation of the Agreement on Electronic Commerce and Joint Initiative on Services Domestic Regulation, as per Bekkers et al. (2025) and Bekkers and So (2024).

Source: WTO Secretariat estimates based on the literature (references within Table B.4).

The trade cost equivalent of changes in “water in the GATS” are obtained based on gravity estimates of the trade effect of this water. (Ciuriak, Dadkhah and Lysenko, 2020). Changes in the “water in the GATS” are based on changes in values of bound trade

restrictiveness in GATS commitments coming from the Bound Services Trade Restrictions Index (BSTRI) from World Bank and World Trade Organization (2026). In particular, in the trade-restrictive scenarios increases in “water in the GATS” are calculated as

the increase in the difference between bound and applied commitments. To err on the side of caution, the increase in "water in the GATS" is assumed to be one-third of its potential with the potential equal to the difference between GATS bounds according to the BSTRI and its maximum level. In the *Enhanced cooperation world* scenario, WTO members' GATS schedules are assumed to be updated in such a way that "water in the GATS" decreases by half.

To capture dimensions of WTO value beyond market access and policy uncertainty, the simulations incorporate estimates of the trade effects of WTO membership derived from gravity models. In the simulations, rising trade costs are included in the *Geo-fragmented world* and the *FTA world* scenarios based on gravity estimates of the trade effect of WTO membership mapped into ad valorem equivalents. In the *Enhanced cooperation world* scenario, these trade costs fall for potential new acceding members. These trade cost changes capture a range of channels, including transparency, trade facilitation, regulatory convergence and institutional cooperation.

While WTO membership is an imperfect proxy for these broader functions, it provides a practical benchmark given the absence of separate empirical estimates for each channel. The trade cost reductions associated with WTO membership measured through gravity estimates may, on the one hand, understate the value of the WTO for trade relations, as they are derived from cases of new economies acceding to the WTO. In contrast, the scenarios considered involve a potential dissolution of the organization, which would likely generate broader systemic consequences and possibly larger increases in trade costs. On the other hand, it can be argued that economies joining the WTO often implement a range of additional domestic reforms alongside trade liberalization measures. This suggests that estimates based on accession episodes may overstate the trade losses associated with a WTO breakdown. Overall, relying on the most recent gravity-based estimates of WTO membership effects offers a balanced and defensible benchmark for projecting the potential consequences of WTO disappearance.

Given the growing importance of digitalization, the scenarios also incorporate changes in cross-border data policies and their impact on trade cost. The calibration is based on OECD-

WTO (2025), using gravity-model estimations of the impact of the Digital Services Trade Restrictiveness Index (DSTRI) on trade flows. In the *Geo-fragmented World* scenario, the two blocs introduce more restrictive data policies vis-à-vis each other, or toward non-aligned economies without FTAs. In the *FTA world* scenario, data policies would move toward ad hoc authorization-based data policies (with governments granting authorization for the cross-border movement of data on ad hoc basis), corresponding to the most restrictive data policies scenario in OECD and WTO (2025). In the *Enhanced cooperation world* scenario, data policies do not change, since they are treated as security-sensitive.

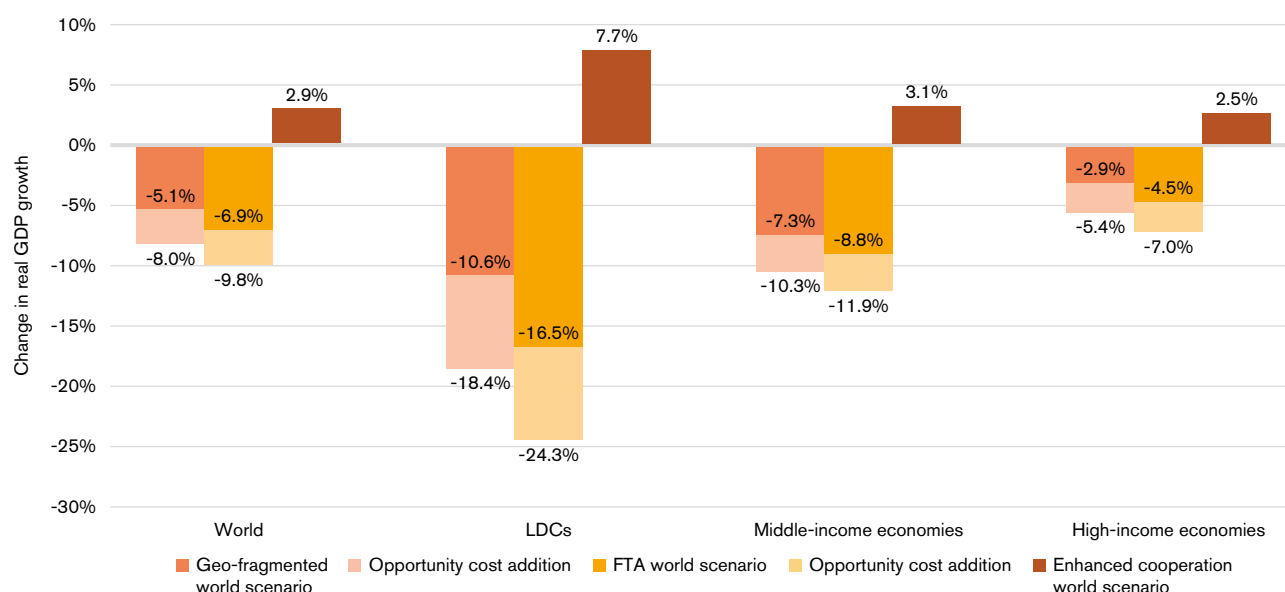
The *Enhanced cooperation world* scenario also assumes trade cost reductions in digital and other services trade. These trade cost reductions are based on Bekkers et al. (2025) and Bekkers and So (2024), where ad valorem equivalents of the implementation of the Agreement on Electronic Commerce and the Joint Initiative on Services Domestic Regulation by all WTO members by 2030 are respectively obtained using gravity estimation with the OECD index of digital trade policy provisions (OECD Index of Digital Trade Integration and Openness – INDIGO)⁵⁷ and an index of services domestic regulation provisions already implemented.

(c) The costs of not having the WTO

The scenario analysis reveals large economic costs of not having the WTO, ranging between around 5 and 10 per cent of global real GDP loss across scenarios. Under the *Geo-fragmented world* and the *FTA world* scenarios, the projected reduction in global GDP by 2050 is 5.1 per cent and 6.9 per cent, respectively, while the *Enhanced Cooperation World* scenario shows a potential increase in global GDP of 2.9 per cent (see Figure B.19). Figure B.19 also translates these projections into the opportunity costs of not having the WTO, comparing the *Geo-fragmented world* and the *FTA world* scenarios with either the status quo or the *Enhanced cooperation world* scenario. These opportunity costs range between 5.1 per cent when *Geo-fragmented world* is compared with the baseline, and 9.8 per cent if the *FTA world* is compared with the *Enhanced cooperation world*.

LDCs are projected to experience the largest real GDP losses under the *FTA world* scenario. Under this scenario, real GDP in LDCs is projected to decline by 16.5 per cent by 2050, almost twice the

Figure B.19: GDP effects (in per cent) and the implied opportunity costs of WTO erosion are substantial, especially for LDCs



Source: WTO Secretariat estimates using the WTO Global Trade Model (www.wto.org/english/res_e/reser_e/ersd201910_e.htm).

Note: The figure displays the projected percentage change in real GDP relative to baseline by 2050. The darker parts of the first two bars, representing the first two scenarios (*Geo-fragmented world* and *FTA world*), express the projected change in real GDP with respect to the baseline. The lighter part of the first two bars subtracts the projected GDP change in the third scenario, the *Enhanced cooperation world*. As a result, the complete bar demonstrates the projected change relative to the *Enhanced cooperation world* scenario.

reduction projected for middle-income economies (-8.8 per cent), and almost three times that projected for high-income economies (-4.5 per cent) (see Figure B.19). This pattern reflects the greater dependence of many low-income economies on international trade and the associated technology spillovers. High-income economies are less affected because trade within the European Economic Area is exempted from the simulated trade cost increases, and because the United States is a relatively closed economy, hence less dependent on trade, implying that the GDP impact of trade cost increases is smaller.

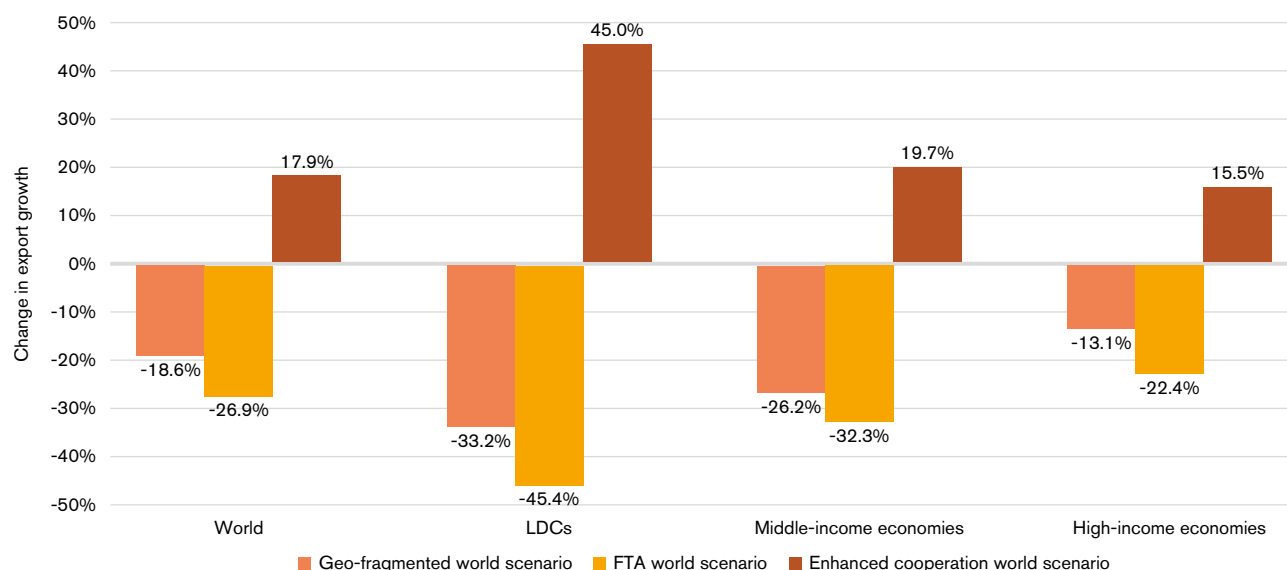
GDP losses are smaller in the *Geo-fragmented world* scenario, but are again highest among lower-income economies. Under this scenario, real GDP is projected to decline by 10.6 per cent in LDCs and 7.3 per cent in middle-income economies, compared with 2.9 per cent in high-income economies. High-income economies are less affected because much of their trade occurs within the western bloc, where trade costs remain unchanged. By contrast, many middle-income economies belong either to the eastern bloc or to the group of non-aligned economies without FTAs, and therefore face higher trade costs on a larger share of their trade. Economies in the eastern bloc are

particularly affected because they lose preferential access to the economically larger western bloc.

The *Enhanced cooperation world* scenario produces positive GDP gains across all income groups, with the largest proportional increases accruing to LDCs. Under this scenario, real GDP in LDCs is projected to increase by 7.7 per cent, compared with 3.1 per cent for middle-income economies and 2.5 per cent for high-income economies. The relatively larger gains for LDCs reflect the greater benefits they would derive from tariff and other trade cost reductions. High-income economies stand to gain substantially in absolute terms, with projected GDP gains of about US\$ 1.7 trillion in 2023 dollars, reflecting in particular the benefits of lower trade costs in services.

Viewed through the lens of opportunity costs, the results reinforce the importance of the WTO for all income groups, and particularly for lower-income economies. Figure B.19 compares the trade effects of the trade-restrictive scenarios with both the status quo and the *Enhanced cooperation world* scenario. Because LDCs experience the largest losses under the *FTA world* scenario and the largest gains under the *Enhanced cooperation world*

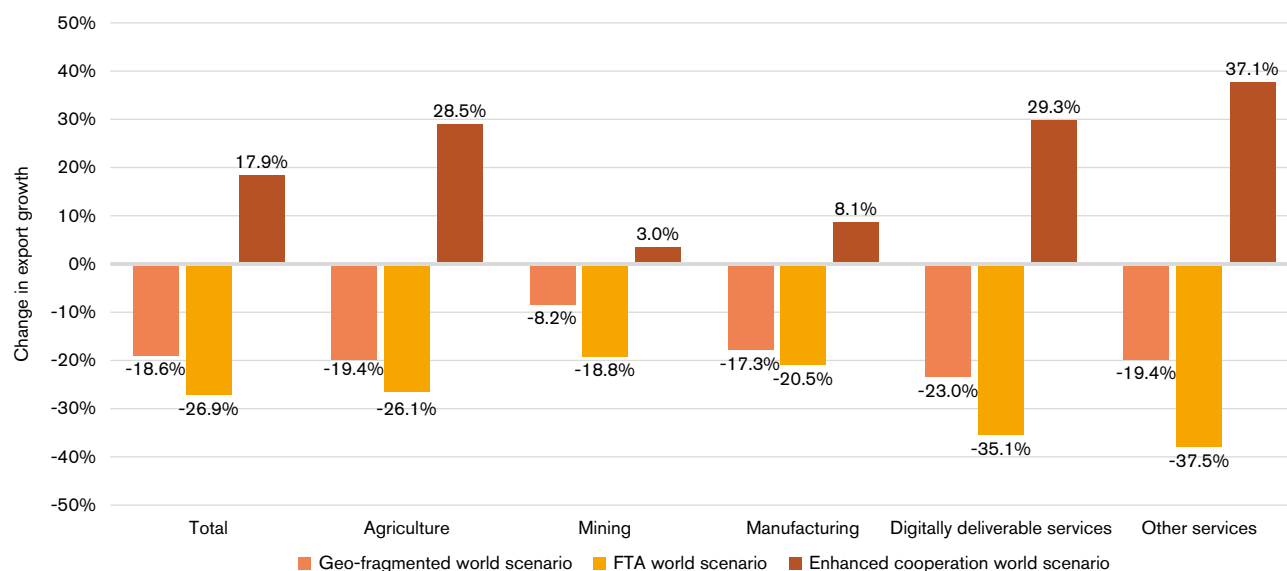
Figure B.20: LDC exports (in per cent) are those most affected by future trends in cooperation



Source: WTO Secretariat estimates using the WTO Global Trade Model.

Note: This figure displays the projected percentage change in exports relative to the baseline in 2050 among regional income groups and globally.

Figure B.21: Agriculture and services trade (in per cent) are most affected by future trends in cooperation



Source: WTO Secretariat estimates using the WTO Global Trade Model.

Note: This figure displays the projected percentage change in exports relative to the baseline in 2050 across aggregate sectors.

scenario, they also face the highest opportunity costs from a weakening of multilateral cooperation. More broadly, the results indicate that the economic costs of WTO erosion would be substantial, but larger for low-income and middle-income economies than for high-income economies.

Exports are projected to increase by between 15 and 45 per cent by 2050 under the *Enhanced cooperation world scenario*, while falling substantially in both trade-restrictive scenarios (see Figure B.20). As with GDP, the divergence across scenarios is most pronounced

for LDCs and smallest for high-income economies. LDCs experience both the largest export losses in *FTA world* and the largest gains in the *Enhanced cooperation world*. By contrast, trade outcomes vary less across scenarios for high-income economies. This reflects several factors, for example, that trade within the European Economic Area (EEA) remains unaffected and the United States is comparatively less trade-dependent. The results therefore suggest that lower-income economies have the greatest stake in strengthening multilateral cooperation, driven by significant projected reductions in trade costs associated with the implementation of JSIs, as well as major tariff reductions stemming from initially high tariff levels.

At the sectoral level, trade in services and in agriculture have most to gain from enhancing cooperation and most to lose from the erosion of the system. Services exports are projected to experience the largest declines in both trade-restrictive scenarios, but also the strongest expansion under the *Enhanced cooperation world* scenario (see Figure B.21). Exports of other services experience a larger decline relative to the baseline under the *Geo-fragmented world* and the *FTA world* scenarios. This partly reflects the fact that WTO members have generally made deeper GATS commitments in sectors such as transportation than in digitally deliverable services. If these commitments were no longer binding, the resulting increase in trade policy uncertainty would be larger, leading to a stronger contraction in trade. In addition, transportation services are also indirectly affected by the contraction of merchandise trade. Conversely, services offer disproportionate benefits under the *Enhanced cooperation world* scenario because the Joint Statement Initiatives primarily affect services trade. In goods trade, agricultural exports are projected to expand more than three times as much as manufacturing exports under the *Enhanced cooperation world* scenario. This reflects relatively high initial tariff levels in agriculture, which create greater scope for liberalization, while the scenario also allows for tariff increases in a limited set of security-sensitive manufacturing sectors.

The change in growth in manufacturing exports under the *Enhanced cooperation world* scenario is driven by middle-income economies and LDCs. For instance, simulations show that manufacturing exports are projected to increase by 3.7 per cent in high-

income economies, compared with 11.8 per cent and 39.5 per cent in middle-income economies and LDCs, respectively. For digitally deliverable services, the picture is different, with the additional trade growth in high income economies equal to 25 per cent, close to the global average of 29.3 per cent.

The results are robust to dropping trade cost changes related to changes in trade policy uncertainty and data policy restrictions.

Removing these channels reduces the estimated magnitude of the effects but does not alter the qualitative conclusions. LDCs remain the economies most affected in the trade-restrictive scenarios, while high-income economies remain the least affected, and the *Enhanced cooperation world* scenario continues to generate positive gains across all income groups. Under these more conservative assumptions, the estimated opportunity costs of WTO erosion remain substantial, ranging from 4.4 per cent to 8 per cent of global GDP.⁵⁸

5. Conclusion

This chapter has assessed what the multilateral trading system has delivered, why it was able to deliver these outcomes, and the value it continues to generate through its institutional functions. It began by documenting the system's concrete achievements: a historic reduction in trade barriers, a substantial expansion of international trade and income, and a more predictable environment for firms and governments. Empirical evidence confirms that GATT/WTO membership has significantly boosted trade among members, with the gains in trade volumes, incomes and growth most pronounced among economies that made the deepest commitments. At the same time, the benefits of greater openness have not been distributed evenly – either across economies at different levels of development or within economies – and these distributional dimensions remain central to understanding both the achievements and the limits of the multilateral trading system.

The chapter argues that these achievements reflect an economically coherent architecture for managing interdependence in trade policy.

By providing a forum for reciprocal bargaining, establishing principles such as MFN, reciprocity and binding commitments, preserving the value of negotiated concessions through additional disciplines, and supporting cooperation through

transparency, monitoring and dispute settlement, the GATT/WTO has enabled governments to secure and sustain market access commitments over time. These institutional arrangements have helped to address cross-border policy spillovers, enhance policy credibility, reduce uncertainty and generate broader coordination gains. Understanding how value has been generated, and through which mechanisms, is essential for assessing how the system evolved to its present form, and what would be at stake without it. Scenario analysis suggests that the long-term costs of not having the WTO would range between 5 and 10 per cent of global GDP, with the largest costs falling on lower-income economies – a quantitative illustration of the value the system generates and what would be at stake in its erosion.

The chapter also identifies important limitations and tensions within the system.

The gains from greater openness and predictability have coexisted with uneven distributional outcomes across economies and within societies. The same principles that made cooperation possible may at times have left potential gains unrealized, particularly where key trading partners have remained outside specific agreements or where asymmetries in negotiating capacity have shaped the distribution of concessions. The expansion of disciplines beyond tariffs, including domestic regulation and NTMs, has further increased the depth of cooperation but also the complexity of negotiations. Flexibilities and exceptions – whether through general disciplines or special and differential treatment – reflect efforts to accommodate heterogeneity among members and diverse development needs, although they may lack effectiveness and raise trade-offs. RTAs have complemented multilateral disciplines by deepening

cooperation among subsets of economies, but may compete with further multilateral cooperation. Transparency mechanisms, monitoring activities and dispute settlement have played an essential role in sustaining confidence in the system, yet persistent notification gaps, unfinished negotiating agendas, and limitations in the functioning of dispute settlement highlight areas where cooperation has not always achieved its full potential. Some of these challenges have not simply emerged recently, but have accompanied the system throughout its evolution.

The persistence of these challenges should not obscure the fact that the WTO continues to provide important benefits through its everyday functions, which help to sustain a level of trade cooperation that it took 80 years to achieve. Moreover, the value of the system is not limited to what is achieved through major negotiating rounds. Recent agreements and initiatives, including the Trade Facilitation Agreement, the Agreement on Fisheries Subsidies, and the Joint Statement Initiative on Services Domestic Regulation, illustrate that cooperation continues to take place through WTO structures, even if often in forms that differ from the traditional model of comprehensive negotiating rounds. Similarly, despite difficulties affecting the dispute settlement system, members have continued to rely on WTO procedures and alternative arrangements to manage trade disputes.

Chapter C turns to the structural transformations that have reshaped the global economy over recent decades. It examines how these developments have altered the context in which the WTO operates and raised new questions about the adequacy of the multilateral trading system designed for a different era.

Appendix B.1: Technical details for the semantic identification of themes discussed in General Council meetings through text-embedding analysis

To identify dominant themes in recent WTO public discourse, a Python-based framework was developed utilizing Google's Gemini Embedding 001 AI model. This methodology extracts the semantic meaning of text from two distinct sources: General Council meetings (representing official discourse) and news articles (representing wider public perception). By generating high-dimensional embeddings, key issues are tracked across a large corpus and supported by quantitative prevalence data, illustrating their relative significance within the global trade discourse. The process groups content into thematic clusters, first within individual documents and subsequently across the entire dataset. A generative AI model then produces a representative description for each dataset-wide "meta-cluster" to highlight the primary challenges discussed (see Appendix Table B.1).

Analytical process overview

The process to analyse the General Council meeting transcripts was conducted in the following manner.

Transcripts from 56 General Council meetings – covering all sessions between 2016 and 2025 – were ingested and segmented into manageable text chunks to facilitate processing by the Gemini Embedding 001 AI model. This model converts each chunk into a vector representation, or "embedding", which captures the semantic meaning of the text. This numerical format enables the comparison of disparate content units by calculating the cosine similarity between their respective vectors.

Initially, cosine similarity comparisons were performed on embeddings of text segments within individual documents to identify localized thematic clusters. This process utilized two unsupervised learning techniques to manage the complexity of the embedding vectors. First, UMAP (Uniform Manifold Approximation and Projection) was employed to project the high-dimensional embeddings into a two-dimensional space. This reduction is a critical prerequisite, as high-dimensional data often suffers from the "curse of dimensionality", which can obscure the density-based boundaries required for accurate grouping. Subsequently, the HDBSCAN

(Hierarchical Density-Based Spatial Clustering of Applications with Noise) algorithm was applied to these coordinates to isolate and define specific thematic clusters.

To characterize these clusters, the framework extracts the most frequent noun phrases using the TextBlob – a lightweight text-analysis programme – to automatically identify and extract key noun phrases, which are then consolidated through a custom mapping dictionary to ensure terminological consistency. Administrative "noise" – including dates, meeting identifiers, and WTO member names – is filtered using a predefined exclusion list to prevent geographic or procedural identifiers from skewing the topical focus.

Finally, the methodology identifies specific "policy challenges" by flagging text chunks where a challenge appears to be paired with a proposed solution. This is achieved by isolating segments that simultaneously contain keywords from both a "challenge" lexicon (e.g., *stagnation*, *obstacle*) and a "reform" lexicon (e.g., *modernize*, *strategy*). This dual-keyword approach effectively captures instances where members contextualize a systemic difficulty alongside a potential way forward, providing a nuanced view of the multilateral trade discourse.

Following the identification of localized clusters, a meta-clustering process was conducted to identify recurring thematic trends across the entire ten-year corpus. This second layer of analysis involved aggregating the previously defined document-specific clusters and subjecting them to a secondary round of dimensionality reduction and density-based grouping.

Following the document-level analysis, a meta-clustering phase was conducted to identify overarching thematic trends that recur across the ten-year corpus. This process involved re-applying UMAP and HDBSCAN to a synthesized dataset of "representative summary strings" – concise semantic anchors generated from the key phrases of the initial local clusters.

By clustering these refined strings rather than the raw text chunks, the framework effectively filters out document-specific noise and focuses on the high-level semantic commonalities shared across different meetings. This hierarchical approach ensures that the resulting categories are not merely artifacts of isolated discussions, but instead represent sustained,

Appendix Table B.1: Semantic identification of WTO challenges through text-embedding analysis of General Council meeting transcripts (2016–2025)

Number of text chunks	Percentage related to challenges	Unique members mentioned	Topic
2,898	39.6%	92	Dispute Settlement System reform
3,017	37.4%	92	COVID-19: overcoming equitable and timely access to essential medical products
3,154	35.6%	98	Protracted WTO agriculture negotiations dominated by the linked challenges of reducing trade-distorting domestic support and ensuring global food security
4,019	33.4%	97	Establishment of a comprehensive work programme for electronic commerce
1,081	30.0%	73	Emergence and integration of plurilateral initiatives
14,114	28.2%	142	Unresolved Doha Development Agenda
3,131	25.5%	103	Multilateral negotiations surrounding a comprehensive Fisheries Subsidies Agreement
1,871	25.3%	105	Challenges faced by MSMEs
1,018	24.5%	71	Establishing disciplines for domestic regulation in services trade
2,722	18.3%	120	Strengthening the multilateral system amidst challenging global crises and anti-trade sentiments
829	13.3%	97	Governance issues and procedural reform efforts (transparency, representation, etc.)
1,336	9.13%	117	Administrative and financial issues (annual budget, auditing, etc.)
786	0.3%	89	Global crises and geopolitical conflicts

Source: WTO Secretariat calculations.

multi-year areas of focus within the General Council. The final output provides a longitudinal view of the WTO discourse, illustrating how specific challenges evolve or persist from 2016 through 2025.

Finally, the latest Gemini flash generative AI model (version 3.0) was utilized to synthesize these meta-clusters into qualitative descriptions, highlighting the primary challenges and issues discussed in General Council meetings between 2016 and 2025. This process generates a coherent title and a summary

of the underlying issues discussed. This qualitative narrative is then matched with quantitative aggregates – such as total chunk counts, sentiment polarity and the list of unique WTO members involved – to form the final dataset. This file represents a bottom-up map of the trade negotiation landscape as it exists in the documents themselves, rather than as defined by a preset list of topics. Appendix Table B.1 presents the synthesized findings of this analysis, categorized by the most prevalent meta-themes identified within the General Council.

Endnotes

- 1 Notably, estimates on a balance-of-payments basis exclude services traded through the establishment of a commercial presence (mode 3 of the GATS – see https://www.wto.org/english/tratop_e/serv_e/gatsqa_e.htm), which is the most significant mode of supply and accounts for about half of all services trade. This suggests that a more comprehensive measure of services trade would be even larger.
- 2 See <https://itip-services-worldbank.wto.org/default.aspx>.
- 3 See IMF, World Bank and WTO (2017) for a review of the literature on trade and growth.
- 4 See <https://pip.worldbank.org/>.
- 5 See <https://www.amis-outlook.org/>.
- 6 See <http://tradecosts.wto.org/>.
- 7 See <https://data.wto.org/en/dataset/stpd>.
- 8 The present use of the term “coordination” to reflect cooperation to achieve forgone gains rather than to avoid mutual losses by internalizing negative cross-border effects is non-standard but is convenient as a pedagogical device. As noted below, while the Trade Facilitation Agreement is treated as delivering coordination gains, it can be interpreted equally well as a form of cooperation consistent with the terms-of-trade theory.
- 9 See also https://www.wto.org/english/tratop_e/serv_e/GATSqa_e.htm.
- 10 Indeed, when applied to services trade agreements, the terms-of-trade framework can help to interpret the different design features of the GATT and the GATS (Staiger and Sykes, 2021).
- 11 Some WTO members have questioned whether MFN remains fit for purpose in today’s trade environment. While this section focuses on the role of the MFN principle in facilitating multilateral tariff negotiations and in supporting durable market access commitments, some exceptions to the MFN principle and their rationale are discussed later in this chapter.
- 12 See https://www.wto.org/english/docs_e/legal_e/enabling1979_e.htm.
- 13 Bhagwati (1988) coined the term “first-difference reciprocity” to distinguish the notion of reciprocity in the GATT – which refers to a balance in the changes of market-access opportunities and obligations brought about by negotiated policy changes – from a notion of reciprocity that would require equality in the level of market access across trading partners.
- 14 A statement given by the Legal Advisor to the Director-General of the GATT (GATT document C/M/220), as quoted in the context of Article XXVIII renegotiations in WTO (1995), provides further detail in what typically went into these calculations. In describing the “fairly well-established criteria” that were considered in determining what would constitute the withdrawal of substantially equivalent concessions, it was noted that: “The first criterion was the development of the imports during, normally, the three years before the renegotiations started. What was taken into account was not just a statistical average, but also the trend in the development of trade during that period. Furthermore, account was taken of the size of the tariff increase being negotiated. Moreover, an estimate was made of the price elasticity of the product concerned.” (WTO, 1995).
- 15 This point is made in Bagwell and Staiger (2005) who, using their formal definition of reciprocal tariff changes, show that in the textbook general equilibrium neoclassical trade model, reciprocity and MFN treatment completely neutralize third-party effects of bilateral tariff bargaining. Ossa (2014) shows that the presence of differentiated products can qualify this result.
- 16 As Bagwell and Staiger (2014) explain and as Box B.4 makes clear, this mechanism is distinct from the possibly complementary mechanism that the exercise of S&DT took away the voice of developing economies in determining which developed-economy markets were liberalized through GATT bargains.
- 17 In addition, these simulations do not attempt to quantify the costs of complexity that discriminatory tariffs introduce for the governments that must administer these tariffs and the firms that must navigate them, complexity that can create additional costs in terms of lost income and diminished consumer choice.
- 18 See also https://www.wto.org/english/tratop_e/serv_e/GATSqa_e.htm.
- 19 In Meade’s formulation (1955), “If a more liberal international economy is to be established by international agreement, one must search for a working compromise between the need effectively to curb protective devices and the need to give national governments freedom to adopt effective domestic economic policies for the attainment of legitimate domestic objectives”.
- 20 Article XI prohibits quantitative restrictions, but limited exceptions apply. Article XI:2 allows temporary export restrictions to address critical shortages (e.g. “foodstuffs or other products essential to the exporting Member”) and measures related to standards. Broader exceptions are also available under Article XX, “General Exceptions” (e.g. for health or environmental protection) and Article XXI, “Security Exceptions”.
- 21 See https://www.wto.org/english/tratop_e/agric_e/agboxes_e.htm.
- 22 See also https://www.wto.org/english/tratop_e/serv_e/GATSqa_e.htm.
- 23 To address development concerns, LDCs were granted a transition period that have successively been extended until 2034. The Doha Declaration on the TRIPS Agreement and Public Health enabled special compulsory licenses for exporting medicines to members with insufficient manufacturing capacity (Curtis, 2012). A 2022 Ministerial Decision further facilitated such export to COVID-19 vaccines.
- 24 See WTO official document G/MA/W/23/Rev.16, available at <https://docs.wto.org/>.

- 25 A full list of WTO Article XXVIII procedures is available in the Goods Schedules eLibrary. See also WTO official document G/MA/W/123/13, available at <https://docs.wto.org/>.
- 26 In the case of a safeguard measure, among other requirements, the surge in imports must result from the “effect of” that member’s WTO obligations, including tariff concessions recorded in its goods schedules, relating to that product. In such a situation, the safeguard measure imposed amounts to the member suspending the obligation, or withdrawing or modifying the concession, in question “to the extent and for such time as may be necessary” to prevent injury to its domestic industry. The member imposing the safeguard measure must “endeavour to maintain a substantially equivalent level of concessions and other obligations” between it and exporting members. Toward this objective, the importing member may agree to compensate exporting members that are affected by the safeguard measure. If no agreement is reached between the parties on any adequate means of trade compensation, the Agreement on Safeguards allows the affected exporting members, provided certain conditions are met, to suspend substantially equivalent concessions or obligations to the trade of the imposing member. The underlying aim is to achieve a certain “rebalancing of concessions” among members.
- 27 See <https://itip-services-worldbank.wto.org/SearchApplied.aspx>.
- 28 See <https://itip-services-worldbank.wto.org/PSTRIBSTRIDashboard.aspx>.
- 29 Judicial economy allows that a WTO panel does not have to rule on every legal claim if deciding fewer issues is enough to find a complete resolution to a dispute. See https://www.wto.org/english/tratop_e/dispu_e/disp_settlement_cbt_e/c10s4p1_e.htm.
- 30 See https://www.wto.org/english/res_e/publications_e/ai17_e/tableofcases_e.pdf.
- 31 See WTO official document WT/MIN(22)/39, available at <https://docs.wto.org/>.
- 32 While anti-dumping measures are formally initiated at the request of domestic industries, there is evidence that their use reflects broader strategic considerations at the national level. In particular, Prusa and Skeath (2002) show that governments may employ anti-dumping actions to retaliate against, or exert leverage on, trading partners that have previously imposed similar measures, suggesting a pattern of reciprocal or punitive use beyond purely industry-driven motives.
- 33 See https://www.wto.org/english/docs_e/legal_e/gatt47_e.htm#art6.
- 34 See https://www.wto.org/english/docs_e/legal_e/enabling1979_e.htm.
- 35 See the World Bank-WTO Preferential Services Trade Restrictions Index (PSTRI), which shows, for example, that in recent major agreements, such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP), preferential commitments are much closer to applied policies than to multilateral bindings. This indicates that preferential agreements tend to reduce the “water” between bound and applied regimes.
- 36 The simulations compare the outcome of a setting under which RTA partners set tariffs to zero with a setting under which they are engaged in bilateral Nash bargaining with equal bargaining power (whereby the agreement maximizes the product of the two parties’ net gains relative to a fallback situation without agreement like in Nash (1950) and Binmore et al. (1986)). Since the outcome of a larger economy weighs more heavily in this bargain, outcomes will be more favourable for larger economies, even with equal bargaining power. Tariffs vis-à-vis non-RTA partners are the same in the two settings (and kept equal to their actual levels). The simulations are based on the assumption that bargaining frictions arising under discriminatory tariffs are not large enough to prevent successful negotiations altogether. Moreover, the simulations abstract from the additional costs of complexity that discriminatory tariffs introduce for the governments that must administer these tariffs and the firms that must navigate them.
- 37 This refers to changes made during the 1954–55 Review Session of the GATT, which substantially rewrote Article XVIII to give developing countries greater flexibility.
- 38 Alongside these economic arguments, S&DT also rests on an equity rationale that is normative rather than efficiency based. According to this view, what matters is not only differences in market power or capacity, but the structural and historical inequalities with which developing economies enter the system, so that applying identical obligations to members with very unequal starting points is itself inequitable. The principle of non-reciprocity introduced in Part IV of the GATT and in the Enabling Clause was grounded in this reasoning, treating the development of poorer economies as an objective of the system in its own right rather than as a by-product of trade liberalization. Many members continue to make the case in these terms, holding that equal conditions need not imply identical obligations and that responsibilities should reflect a member’s circumstances.
- 39 See https://www.wto.org/english/tratop_e/serv_e/ldc_mods_negs_e.htm.
- 40 The IFDA and the ECA were negotiated as standalone agreements, and participants have requested their incorporation into Annex 4 of the WTO Agreement.
- 41 Further methodological details are available in Appendix B.1.
- 42 In 2025, five EAC members (Burundi, Kenya, Rwanda, Tanzania and Uganda) were the top notifiers, submitting a total of 1,789 TBT notifications.
- 43 For instance, the TBT Committee has a Transparency Working Group, which is open to all members and brings together a diverse group of active participants to improve notification practices and transparency procedures. This effort has further facilitated clear and timely information exchange and follow-up on regulatory developments.
- 44 See <https://tradeconcerns.wto.org/>.
- 45 Similarly, high number of downloads of WTO notification handbooks illustrate the practical value of guidance that

helps members to comply with notification obligations and navigate evolving trade regulations. The most downloaded English-language handbook in 2024 was on TBT, with 1,060 downloads, followed by handbooks on services (871), regional trade agreements (848), preferential trade arrangement notifications (509), rules of origin (505) and SPS (426).

- 46 For instance, at the request of the Council for Trade in Goods, a document was prepared by the WTO Secretariat to outline the status of notifications in the goods area. See WTO official document G/C/W/859 and subsequent updates, available via <https://docs.wto.org/>.
- 47 Similarly, targeted technical assistance events in 2025 – including national workshops on agriculture notifications in Belize, Comoros, Oman and Paraguay, and regional workshops for Central and Eastern European, Central Asian and Caucasus (CEECAC) and the Middle East – were followed by a marked increase in notification submissions among participating members as a result of the training.
- 48 Some have characterized certain WTO rules as “vague” because negotiators cannot foresee and precisely specify every future contingency, which results in the use of open-ended standards that leave the precise applicability of those rules to be resolved case by case.
- 49 Note that statistics on dispute settlement activity in this section take into account data to end-2025.
- 50 For instance, Türkiye agreed with the European Union to use Article 25 arbitration to deal with any appeal of the panel report in a dispute on measures concerning pharmaceutical products (DS583), and Indonesia agreed with the European Union to use Article 25 arbitration to deal with any appeal of the compliance panel report in a dispute on measures concerning palm oil and oil-palm crop-based biofuels (DS593).
- 51 For the purposes of this analysis, the term “FTA” refers to free trade areas and customs unions within the meaning

of Article XXIV of the GATT (“Territorial Application – Frontier Traffic – Customs Unions and Free-trade Areas”), and does not include other forms of bilateral or preferential arrangements. However, these FTAs are assumed to cover both goods and services trade, even where services commitments are not separately notified under Article V of the GATS (“Economic Integration”).

- 52 Bloc assignment is based on the absolute distance between the ideal point estimates of states’ political preferences based on voting patterns in the United Nations General Assembly (Bailey, Strezhnev and Voeten, 2017; Goes and Bekkers, 2023).
- 53 See <https://www.gtap.agecon.purdue.edu/databases/v12/>.
- 54 Details on the way digitalization is modelled are available in Bekkers, Kalachyhin and Teh (2025).
- 55 The third JSI, the Investment Facilitation for Development Agreement (IFDA) is not considered in this analysis, since it is about facilitating FDI and sales by foreign affiliate sales which cannot be analysed with the trade model employed. A model with both trade and affiliate sales and FDI would be required as in Bekkers et al. (2026). As such, the projected GDP effects of the *Enhanced cooperation world* scenario in this analysis provides a lower bound.
- 56 Employing estimates from the literature, services trade costs are included in the baseline, assuming that 50 per cent of these costs are income-generating (Hoekman and Shepherd, 2021).
- 57 See <https://www.oecd.org/en/data/datasets/oecd-index-of-digital-trade-integration-and-openness-indigo.html>.
- 58 Further robustness checks show that limiting the trade cost reduction and associated rise in trade related to digitalization would further limit the GDP effects substantially. However, these results are not reported, since the digitalization related trade cost reductions are a realistic feature of the baseline.

The value of the WTO

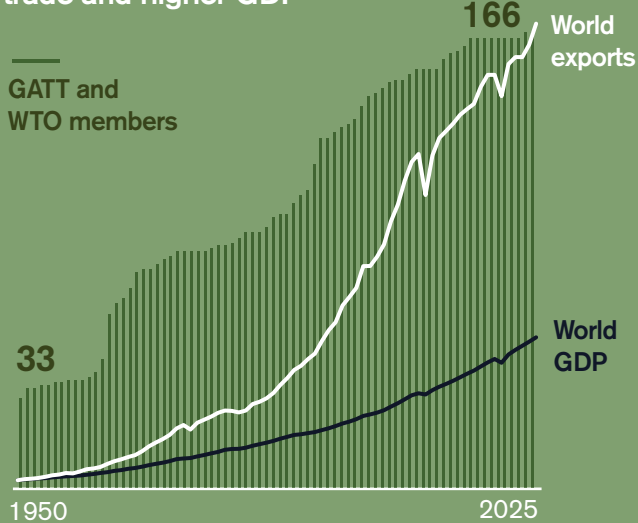
The WTO acts as a forum for trade bargaining, airing trade concerns and dispute settlement.

166 members representing

98% of world trade

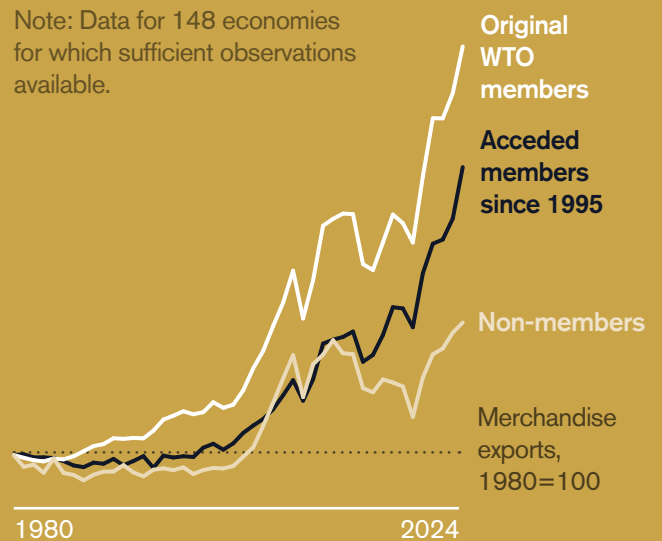
The WTO helps to prevent mutually damaging trade conflict, as rules-based cooperation makes trade policy more predictable and transparent and helps to protect smaller economies.

Growing membership of the multilateral trading system has coincided with more trade and higher GDP



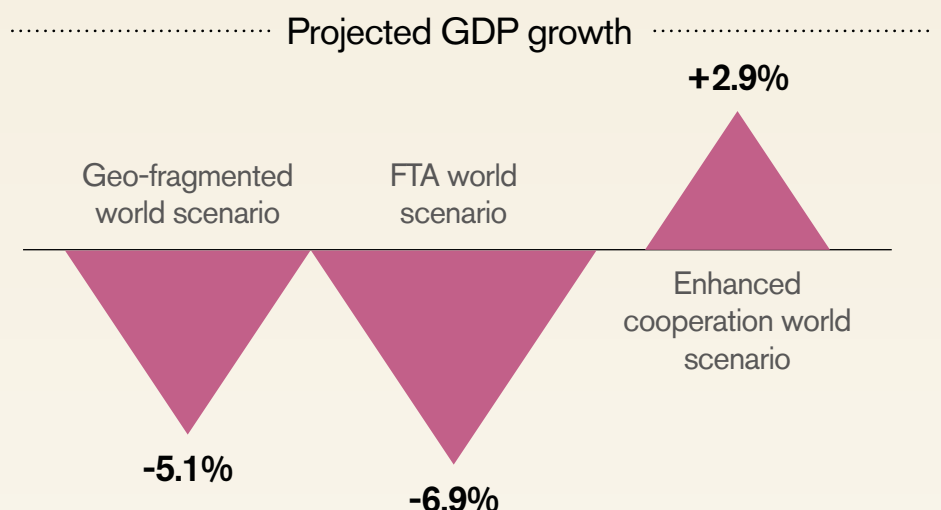
Export growth has been stronger among WTO members compared with non-members.

Note: Data for 148 economies for which sufficient observations available.



What if the WTO did not exist?

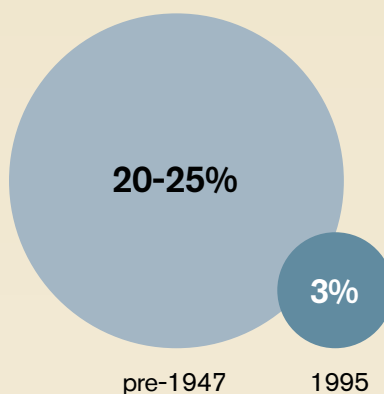
Not having the WTO would potentially cost 5-10% of global GDP by 2050 according to new WTO simulations. This arises from losses due to trade fragmentation and missed gains from further cooperation.



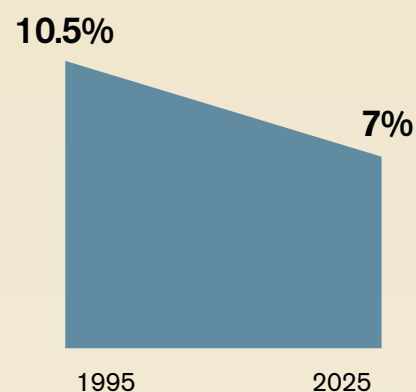
Trade negotiations

As a result of trade negotiations, tariffs among major economies declined from 20-25% in 1947 to around 3% by 1995. Since the WTO's creation in 1995, the average tariff among economies that acceded to the WTO fell from 10.5% to 7%.

GATT major economies' tariff reductions



WTO new members' tariff reductions



Transparency

WTO members have submitted over 150,000 notifications about trade measures since the establishment of the WTO. WTO bodies provide a channel for airing trade concerns, de-escalating conflict and resolving issues without recourse to dispute settlement.



Notifications

Members alert trading partners about proposed new measures and changes to existing measures. Trading partners often approach each other for questions and comments

Specific trade concerns

Members regularly raise questions at a full membership committee to resolve concerns

Disputes

Only a small number of concerns result in disputes

Dispute settlement

The WTO offers multiple ways to resolve disputes



Consultation among members

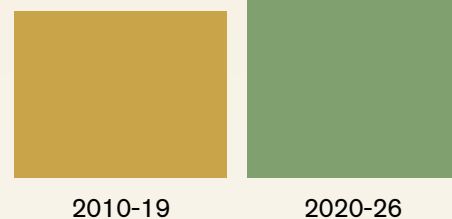


Panel adjudication



Arbitration

Mutually agreed solutions
increased 3x compared with the previous decade



Three scenarios for the future of global trade

WTO simulations show both the costs of losing the WTO and the possible gains from deeper cooperation

Costs and gains

A more uncertain trading environment in a geo-fragmented or FTA world would reduce global growth in both exports and GDP, while enhanced cooperation would lead to economic gains.

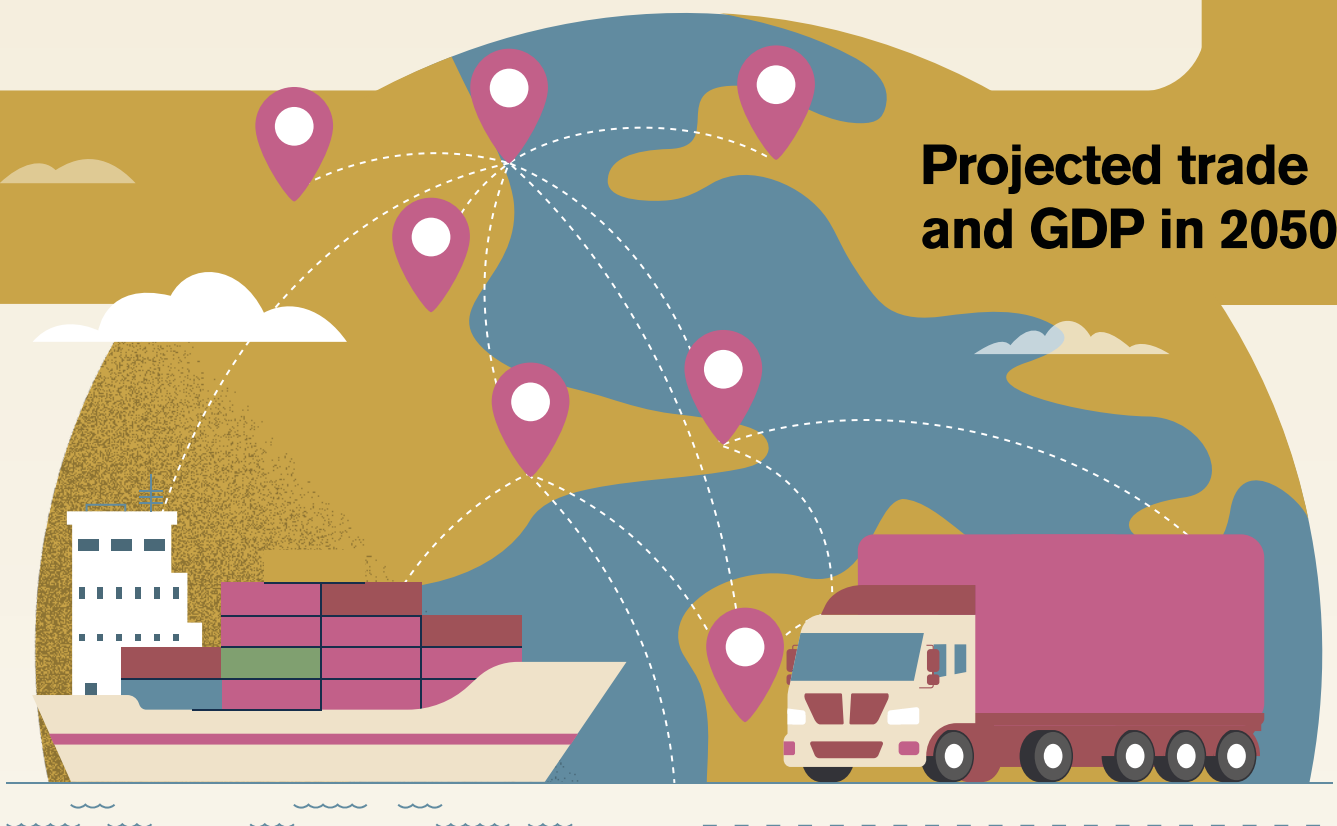


The impacts would be felt most in least-developed countries (LDCs).



Changes in export growth would affect services and agriculture the most.

Projected trade and GDP in 2050



Impact on
global growth

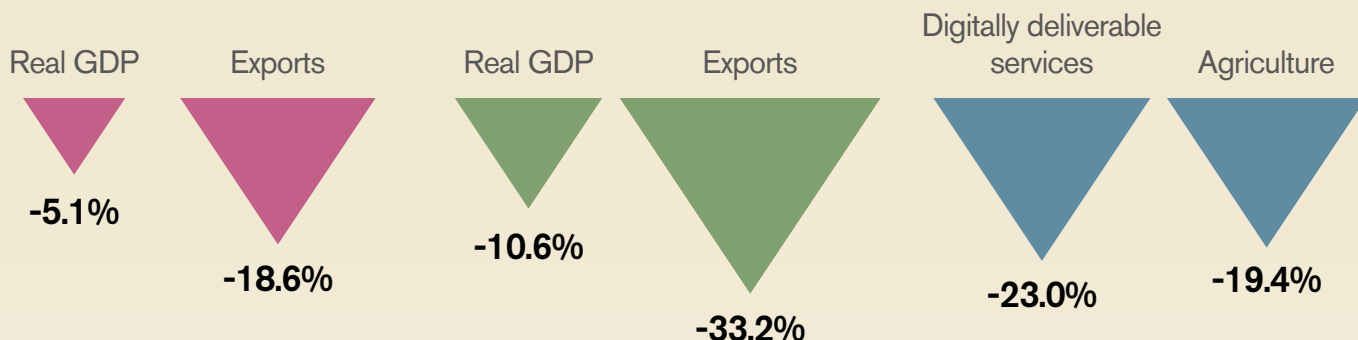
Impact on
growth in LDCs

Impact on sectoral
export growth

1

The Geo-fragmented world scenario

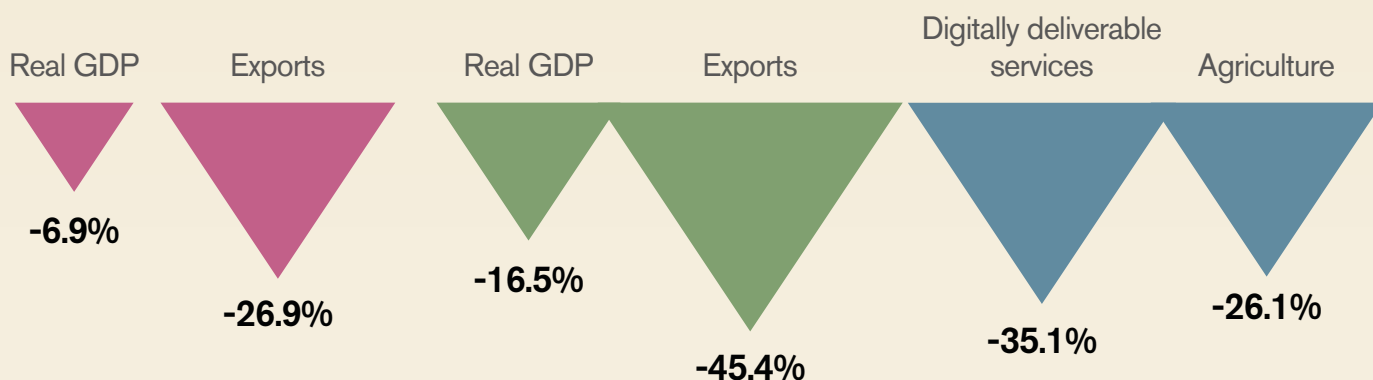
Multilateral trade disciplines collapse and the world divides into economically aligned blocs and non-aligned economies.



2

The FTA world scenario

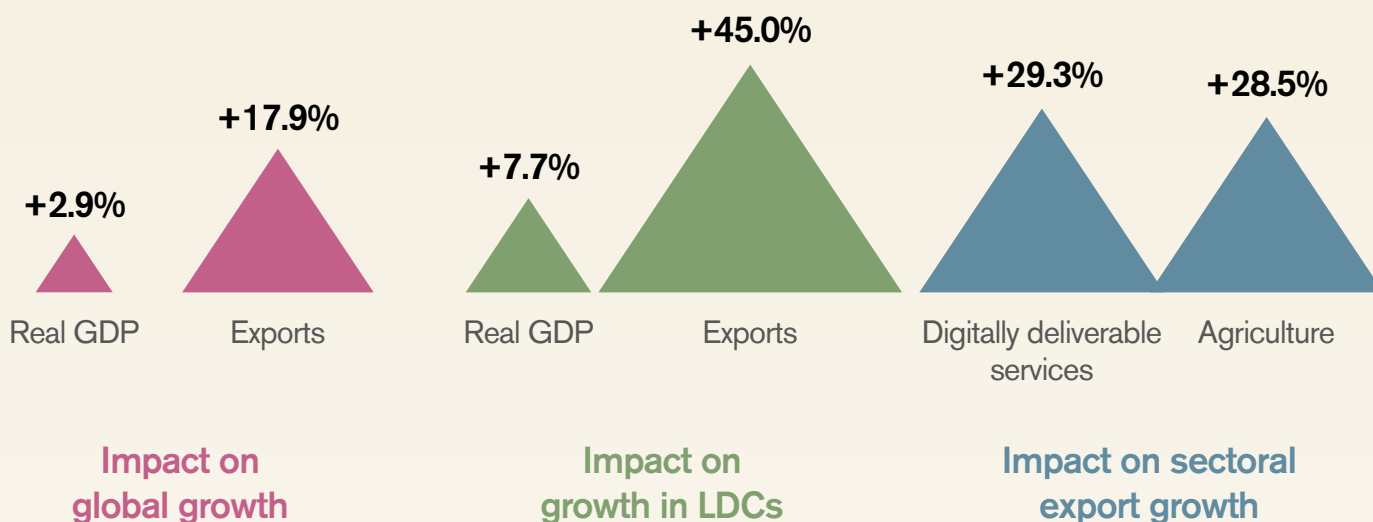
Global trade policy cooperation breaks down and is replaced with free trade areas (FTAs), with tariffs on non-FTA trade set in a non-cooperative way.



3

The Enhanced cooperation world scenario

The multilateral trading system centred around the WTO is preserved and extended, increasing global integration.



C Developments that challenge the system

Over the past three decades, global trade has undergone significant structural shifts. The distribution of global economic activity has shifted toward fast-growing emerging economies. The relevance of differences in economic systems and the extent of government interventions in markets have grown. The expansion of global value chains (GVCs) has increased global economic interdependence, while digital transformation has altered what is traded and how it is traded, and climate change has underlined the role of trade in finding ways to adapt. The WTO now operates in a multipolar, deeply integrated global economy in which interests are more diverse and strategic competition is more salient. As a result of these shifts, the WTO has come under strain. This chapter examines major trends reshaping the global economy, the reasons why these are straining the multilateral trading system and the ways in which the system has tried to keep pace.

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3. The changing nature of trade is creating potential for new spillovers	148
4. Geopolitical tensions and the transition to a multipolar global economy	162
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Key points

- Over eight decades, the multilateral trade cooperation embodied in the GATT and subsequently the WTO has successfully fostered a deeply integrated, multipolar global economy.
- The share of low and middle-income economies in global trade has nearly doubled, rising from 23 per cent in 1995 to 45 per cent in 2024. While this rapid change may have created a gap between members' commitments and today's economic realities, it also creates new opportunities.
- Governments' economic interventions and their spillovers on trading partners have become more prominent in WTO discussions. New industrial strategies have led to an increasing use of subsidies, and this has brought level-playing-field questions to the fore in discussions of rules-based cooperation.
- The world economy has become far more deeply integrated since the Second World War. The greater complexity of global economic linkages has also increased the complexity of implementing trade policies. Meanwhile, global crises and geopolitical tensions in recent years have recast interdependence as a security issue.
- Since the mid-1990s, digital technologies have fundamentally reshaped international trade. The rapid emergence of artificial intelligence (AI) is amplifying this transformation, generating significant economic opportunities while at the same time creating new challenges.
- The importance and scope of environmental policy have changed dramatically since the WTO was established in 1995. A lack of coordination of environmental and trade policies risks reducing the potential of those policies to support the transition to a less carbon-intensive economy, and could create a negative impact on trading partners.

The WTO's current challenges are not wholly new; many of today's reform issues have deep roots in the GATT era. From early in its history, the GATT had to grapple with how to accommodate later arrivals to reciprocal tariff liberalization. E. Wyndham White, the first Director-General of the GATT, captured this bargaining power problem in the 1952 "GATT in Action" report, describing the position facing the 1950-51 Torquay Round:

"A number of European countries with a comparatively low level of tariff rates considered that they had entered the Torquay negotiations at a disadvantage. Having bound many of their rates of duty in 1947 and 1949, what could these low-tariff countries offer at Torquay in order to obtain further concessions from the countries with higher levels of tariffs?" (Interim Commission for the International Trade Organization, 1952).

The same early years also saw the GATT addressing a variety of issues, including integrating economies with different economic systems, enhancing the benefits of membership for developing economies, disciplining subsidies and state intervention, and managing regional agreements without undermining multilateralism. Innovation was required, even for basic drafting of documents, for as GATT membership expanded and negotiating rounds grew more complex, the system needed a way to track progress toward consensus (see Box A.1 in Chapter A). Understanding how the GATT confronted these challenges will not solve today's problems, but it offers a reminder of what is possible and a useful context for current reform discussions.

What has changed since the GATT is the nature, scale and systemic importance of these issues. The GATT began as a relatively small group of members focused primarily on border measures in goods trade. The WTO is a near-universal organization that currently counts 166 members, operating in a deeply integrated, multipolar world economy. Emerging economies account for a much larger share of global trade than when the WTO was created, and are the principal suppliers in many sectors. GVCs link firms and workers across jurisdictions. Services, data, digital trade and intangible assets have become central to trade. Geopolitical tensions between major trading partners have altered the perceived balance between the benefits and potential costs of economic interdependence. A diverse set of policy instruments to address climate change, industrial development and redevelopment, and national security now shapes trade relations as much as tariffs once did. The

WTO was built in large part to manage trade policy spillovers; today, it needs to manage the spillovers from a broader and more complex set of policies, and this raises a fundamental question: what do these changes mean for a rules-based system conceived in a very different economic and geopolitical era? This chapter examines major trends reshaping the global economy and addresses three related questions: why do they strain the existing system, how has the system tried to keep pace, and what is the price of falling short?

1. A changing economic power distribution is straining old bargains

The rapid integration of developing economies into the global economy and the WTO has led to unprecedented income convergence and poverty reduction. The share of low and middle-income economies in global merchandise trade (imports plus exports) has nearly doubled, rising from 23 per cent in 1995 to 45 per cent in 2024. This expansion, which underpinned substantial GDP growth and contributed to lifting hundreds of millions of people out of poverty, coincided with the creation of the WTO in 1995 and aligns with the WTO's foundational objectives to raise living standards and ensure that developing economies secure a share in the growth in international trade commensurate with the needs of their economic development.¹ By providing a stable, rules-based framework, the WTO has functioned not only as a forum for negotiation, but as a catalyst for integrating emerging markets into the global economic core, institutionalizing trade as an engine for sustainable development.

The sustained and rapid convergence of many developing economies toward high-income levels has transformed the landscape of international trade. A number of developing economies have become regional or even global trading powers, gaining significant import market power and becoming principal suppliers of many products to other WTO members. As the growth trajectories of some developing economies rapidly diverged from others, developing members have also become more diverse in terms of their economic power.

(a) Evolving import market power and principal supplier status

The distribution of import market power has shifted markedly toward emerging economies

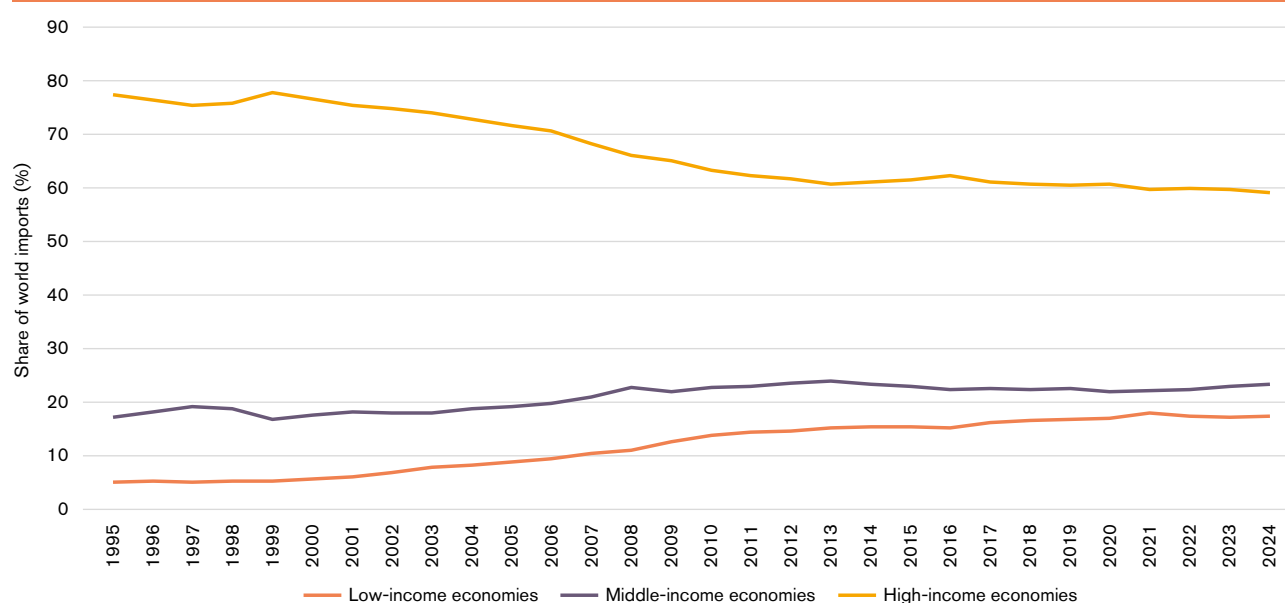
since 1995. While high-income economies maintain the largest share of total merchandise imports, low and middle-income economies have increased their share from less than 25 to over 40 per cent. Figure C.1 illustrates this expansion in global import shares, reflecting the increased consumption and purchasing weight of these middle-income economies. This implies that the capacity to influence world prices through domestic trade policy is now distributed across a broader set of global actors than at the time of the WTO's creation, some with relatively high tariff bindings.² The opinion piece by Professor Paola Conconi explores what the world trading system offers small and medium-sized economies, and what is needed to preserve this system for their benefit.

The changes in import market power since the Uruguay Round tariff bindings were established may have created new tariff bargaining opportunities, as a gap has emerged between current market realities and the tariff bindings established during the Uruguay Round. As discussed in Chapter B, according to the terms-of-trade theory – whereby part of the tariff burden is shifted from an importer onto foreign exporters in the form of lower export prices – an important function of the multilateral trading system is to discipline large economies with incentives to exercise market power at the expense of trading partners, a function that is

achieved only when tariff bindings reflect a member's actual influence on world prices (Bagwell and Staiger, 2002b; Staiger, 2022). Empirical evidence from Jakubik, Keck and Piermartini (2024) confirms that the incentive to curb the unilateral exercise of market power was a statistically significant driver of the original commitments reached during the Uruguay Round and in subsequent WTO accessions; the latter is also confirmed by the results of Bagwell and Staiger (2011). Further evidence that WTO membership reduces the imprint of market power on a member's tariffs is provided by Ludema and Mayda (2013) and Soderbery (2018). However, because current commitments remain tethered to historical data, they may no longer provide an effective corrective mechanism for the terms-of-trade spillovers generated by contemporary economic actors. Jakubik, Keck and Piermartini (2024) estimate that this discrepancy between the current market power of some economies and their tariff bindings is highly sector-specific.

Alongside the shift in import market power, the landscape of potential bargaining participation – as determined by economies' principal supplier status – has also changed. As discussed in Chapter B, the first five rounds of GATT negotiations took the form of simultaneous bilateral bargains organized around the principal supplier rule,

Figure C.1: Low and middle-income economies are claiming a growing share of world merchandise imports



Source: WTO Secretariat calculations.

Note: The figure groups economies based on their income classification as of 1995 according to the World Bank.

Small and medium powers in the multilateral trade system

by Paola Conconi

Professor of Economics, University of Oxford

The multilateral trading system, established with the 1947 General Agreement on Tariffs and Trade (GATT) and greatly expanded with the creation of the WTO in 1995, created a rules-based system in which trade concessions were extended to all members, commitments were bound, and violations could be challenged through institutional procedures.

The GATT/WTO system has been highly successful in expanding trade, lowering barriers and providing a predictable framework for economic exchange. But its importance for small and medium-sized economies goes beyond aggregate trade gains. In particular, the non-discrimination principle of most-favoured-nation (MFN) treatment has helped smaller members to obtain benefits they might not have been able to secure through bilateral bargaining alone. By generalizing concessions across the membership, non-discrimination has limited the ability of larger economies to reserve the best terms for themselves.

The system is now under strain. The United States has blocked the appointment of new members of the Appellate Body, the WTO's highest appeals tribunal, which consequently stopped functioning in 2019. This has weakened enforcement of multilateral rules: given that their appeals can no longer be heard, countries may delay or avoid compliance with adverse rulings. National security and strategic autonomy are increasingly invoked to justify trade restrictions, undermining trade policy predictability. Issues including digital trade, artificial intelligence (AI), climate-related measures, industrial policy, subsidies and state-owned enterprises are stretching rules designed for an earlier era.

The problem is not simply that the WTO has failed to update its rules. The trading system was built around bargains struck under an earlier distribution of economic power. Emerging economies now account for a much larger share of global trade, but tariff bindings and other market access commitments still reflect the Uruguay Round era. Some advanced economies argue that this has put them at a disadvantage: they have little left to offer in terms of tariff concessions, since they have bound their MFN tariffs at low levels; in contrast, emerging economies have high MFN tariff bindings, which gives them more power in trade negotiations. In the absence of a supranational authority with autonomous enforcement powers, international

agreements must be self-enforcing: members comply only if the long-term benefits of cooperation outweigh the short-term gains from defection (Bagwell and Staiger, 1997; Maggi, 1999; Conconi and Perroni, 2009). For the multilateral trading system to endure, large members must continue to see compliance with its rules as serving their interests.

For small and medium powers, this crisis is particularly risky. If large economies lose faith in the multilateral trading system, they are more likely to turn to exclusive agreements, unilateral instruments or power-based trade relations. The shift toward digital trade, climate measures, industrial policy, subsidies and national security also makes smaller economies vulnerable to fragmented standards, competing subsidy regimes, export controls and discriminatory regional arrangements. The more trade governance moves into exclusive or power-based settings, the harder it becomes for smaller members to shape the rules that affect them.

For the system to survive, it must therefore be reformed. WTO reform is essential to preserving cooperation among large economies and preventing mutually destructive trade policies (e.g., Bagwell and Staiger, 1999). But it is also key for smaller economies, whose voices are weakened in an increasingly multipolar and politicized global economy. For them, the WTO is not only a forum for trade liberalization; it is a source of institutional protection.

A key challenge is that WTO reform requires consensus among 166 members that differ in size, development levels and domestic economic models. As a result, any member can effectively block reform. If consensus cannot be achieved multilaterally, one way forward is to pursue WTO-compatible plurilateral initiatives. These must remain open, transparent and anchored in the multilateral framework. For small and medium powers, the priority is therefore not simply more trade liberalization, but the preservation of a system in which rules, rather than raw bargaining power, structure global trade.

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which states that nations should primarily negotiate tariff concessions on a specific product with the partner that serves as their main source of imports of that product into their market.³ While the Kennedy and Tokyo rounds experimented with formula-based reductions, the Uruguay Round saw a strategic return to negotiations structured around principal supplier relationships to maintain the integrity of the MFN principle. By reducing the degree to which economies can benefit from tariff cuts without offering their own reciprocal concessions, the principal supplier rule remains a central tool for identifying viable bargaining pairs and managing the complexity of bilateral trade interests. As shown by Table C.1, WTO research suggests that if bilateral trade negotiations were to take place today under the principal supplier rule, they would potentially differ significantly from those that would have taken place in 1995, with many more “North-South” and “South-South” bargaining pairs based on how these bilateral principal supplier relationships have evolved.

The shifts in import market power and principal supplier status open new possibilities for reciprocal MFN tariff negotiations. First, economies that have recently gained significant import market power are still currently operating under historical tariff bindings that reflect their past, weaker economic positions.⁴ Consequently, in view of the shifts in market power that have occurred since the Uruguay Round, the terms-of-trade theory implies that there may now be new scope for negotiated commitments to address this gap and achieve additional market access bargaining gains across WTO members. Second, some developing and emerging economies may have always possessed market power, but were historically excluded from active bargaining because they lacked

principal supplier status in key destination markets. As these nations achieve that status today, they too can potentially address this gap and achieve market access bargaining gains with other WTO members.

The return to traditionally structured market access negotiations was already suggested under the GATT as a means to better integrate less-developed economies following the shift toward formula-based tariff reductions. Finger (1979) posited that a return to reciprocal, request-and-offer, product-by-product tariff bargaining could be effective if refocused on exchanges between major industrial economies and their primary less developed trading partners. However, he noted that the feasibility of this approach remained contingent on “substantial bilateral, principal supplier trade flows between the proposed participants that are subject to negotiable trade restrictions”. The changing landscape of market power and principal supplier status since the Uruguay Round points to the possibility that this contingency may now be met, both for new North-South and for new South-South bargains.

Analysed through the lens of the terms-of-trade theory, the gap between existing commitments and current economic realities suggests substantial untapped potential for mutually beneficial gains from further bargaining. As shown in Figure C.1, the capacity to influence world prices through domestic trade policy is now distributed across a broader set of global actors than at the time of the WTO’s formation. And as shown in Table C.1, the identity of principal suppliers has changed meaningfully since 1995, altering the bargaining possibilities of different members. Specifically,

Table C.1: Principal supplier relationships have changed between 1995 and 2024

Exporter	Importer	
	North	South
North	116,961 → 101,167 (71% → 58%)	341,321 → 228,687 (74% → 41%)
South	48,234 → 73,054 (29% → 42%)	122,391 → 330,781 (26% → 59%)

Source: WTO Secretariat calculations.

Note: Figures are the sum of the number of distinct six-digit Harmonized System (HS) product and destination pairs in which an economy is the top exporting partner of the importing economy among all exporting partners facing the MFN tariff from the importing economy. Percentages represent the share of principle suppliers from the “North”/“South”. Green (orange) shading reflects a positive (negative) percentage change in principal supplier relationship between 1995 and 2024. “North” comprises economies classified by the World Bank as high-income on the basis of 1995 gross national income per capita; “South” comprises all other economies.

among economies that were GATT members at the conclusion of the Uruguay Round, there were 387 new potential bargaining pairs in 2024, i.e., pairs of economies that were mutually the principal suppliers of one or more goods to each other (among suppliers facing the MFN tariff) in 2024 and that had not exhibited this feature in 1995. This represents a significant shift when compared to the baseline of only 861 such pairs in total that existed at the end of the Uruguay Round. These changing trade patterns may have created entirely new North-South and South-South corridors where economies are now mutually principal suppliers to each other for one or more goods, and have incentives to bargain reciprocally with each other for lower MFN tariffs. Finding a way to unlock the potential for mutually beneficial gains through further reciprocal MFN tariff liberalization remains a central prospect for WTO members.

The terms-of-trade theory also suggests that developing economies that did not take part in the reciprocal tariff bargaining process could be missing out on economic advantages that industrialized economies achieved through a half-century of reciprocal MFN tariff liberalization (Jawara and Kwa, 2003; Bagwell and Staiger, 2014). Multilateral tariff negotiations were designed to maintain broadly stable world prices among active participants. Indeed, empirical evidence from recent negotiation rounds suggests that the principle of reciprocity has played a role in stabilizing world prices by tying domestic tariff liberalization to foreign market access concessions (Limão, 2006, 2007; Karacaovali and Limão, 2008). Because this neutralization of world price fluctuations prevents unreciprocated terms-of-trade windfalls from systematically spilling over to non-participants, the economic benefits of the market access bargain remain largely contained within the circle of active negotiators (see Box B.4 in Chapter B).

However, low tariff bindings in developed economies may limit the potential for reciprocal exchange. In the case of North-South bargaining, addressing this gap and achieving the potential gains is made challenging by a bargaining asymmetry – between early liberalizers and later arrivals to reciprocal tariff liberalization – that would be familiar from the early days of the GATT (see the quotation by E. Wyndham White at the beginning of this chapter) and that is sometimes described as the “latecomers” problem (Bagwell and Staiger,

2014). In its current manifestation, this challenge arises because industrialized economies have spent decades incrementally negotiating their MFN tariffs down to minimal levels. In contrast, many developing economies were not actively engaged in these earlier tariff negotiations and maintain higher tariff bindings as a result, although those that acceded more recently were required to accept much more stringent binding ceilings and significantly lower their applied rates upon joining. This creates an imbalance where developed economies possess limited remaining bargaining leverage to offer in exchange for the substantial concessions they now seek from emerging partners. Theoretically, the problem is that past negotiations become outdated when the arrival of powerful new actors was not fully anticipated in the original design, and untapped bargaining potential persists if the asymmetries in existing tariff bindings create an impasse where the traditional engine of reciprocity stalls (Bagwell and Staiger, 2014).⁵

The existing multilateral framework contains legal mechanisms that allow for the adjustment of tariff bindings. For example, as discussed in Chapter B, GATT Article XXVIII (“Modification of Schedules”) allows members to withdraw or modify concessions by endeavouring to maintain a general level of reciprocal and mutually advantageous concessions through compensatory adjustments or, alternatively, accept the withdrawal of substantially equivalent concessions by impacted trading partners. Whether the use of Article XXVIII could provide the needed flexibility for this purpose is an open question. Historically, as summarized by E. Wyndham White in the aftermath of the Torquay Round (1950-51), the problem of late arrivals to reciprocal liberalization was discussed as follows:

“The rules adopted by the Contracting Parties for their negotiations stipulate that the binding of a low duty or of duty-free treatment is to be recognized as a concession equivalent in value to the substantial reduction of high tariffs or the elimination of tariff preferences. Some thought that, in observance of this rule, the high-tariff countries should make further reductions in their duties in exchange for the prolongation of the binding of low duties.” (Interim Commission for the International Trade Organization, 1952).

(b) Special and differential treatment for a diverse group of developing members

As reviewed in Chapter B, there are over 150 special and differential treatment (S&DT) provisions across WTO agreements. These provisions seek to expand developing members' trade opportunities through improved market access and to safeguard their interests within the trading system. They also afford developing members greater flexibility in their commitments, their actions, and their use of policy instruments, alongside longer transition periods for the implementation of commitments. Finally, they provide for technical assistance and include provisions aimed specifically at least-developed country (LDC) members.

The economic rise of many developing economies poses a challenge to addressing S&DT in the negotiations. Today, two-thirds of WTO members are developing economies. They account for nearly half of global merchandise exports. One of the key issues in the WTO reform discussions has been the dilemma that members face in addressing S&DT in ongoing and future negotiations. This issue is primarily driven by the practice of self-designation of developing-economy status. Developing economies may access S&DT without differentiation, but as some developing economies have experienced growth and major changes in their trade capacity since 1995, some developed WTO members are reluctant to accord an across-the-board or horizontal S&DT without a meaningful differentiation.

Meanwhile, developing economies continue to stress the importance of flexibilities that reflect their development needs and capacities. Developing economies are calling for better or fuller implementation of existing S&DT provisions in WTO agreements that would afford them the policy space needed to spur innovation, diversify their economies and boost overall economic development (see Section B.2). They also seek longer transition periods to integrate new rules that are commensurate with their capacity. Beyond S&DT provisions, differences of views continue to persist on how to address the longstanding requests of some developing economies, for example in the context of the G90 coalition. In the area of agriculture, calls for the continuation of the agricultural reform process mandated by Article XX of the Agreement on Agriculture remain an important element of negotiations (see Section C.2).

It is important to emphasize that the discussion in the previous subsection about evolving import market power and principal supplier status does not constitute an argument against S&DT provisions in the multilateral trading system. Rather, it points to a more narrow and nuanced implication. If a developing economy qualifies for S&DT and is also a principal supplier of particular products in the markets of some of its trading partners, the exercise of its right to refrain from reciprocal tariff bargaining on those products may not be its economically optimal strategy. By opting out of reciprocity, such an economy may forego opportunities to shape negotiated outcomes and fully capture the associated gains. In these circumstances, non-reciprocity may entail significant opportunity costs despite the availability of S&DT flexibilities (see Box B.4 in Chapter B).

New S&DT approaches have been adopted in recent WTO agreements. In the approach to S&DT in recent agreements, it is increasingly recognized that developing economies need to implement commitments, albeit in a manner commensurate with their capacity. One of the defining features of the Trade Facilitation Agreement (TFA), which entered into force in February 2017, has been the implementation of commitments in stages that recognize the administrative, financial or institutional capacities of developing members and LDCs. The TFA enabled these members to set their own pace of implementation and to benefit from capacity-building support. Meanwhile, according to the Agreement on Fisheries Subsidies, which entered into force in September 2025, all members commit to prohibiting subsidies contributing to illegal, unreported or unregulated fishing. Neither of these agreements exempts developing members or LDCs permanently from any of their disciplines.

Recent discussions on development at the WTO call for an evidence-based approach to S&DT, or to accord special treatment to developing economies based on objective criteria. There have been instances in the past where flexibilities were based on specific criteria (e.g. Article 27 of the Agreement on Subsidies and Countervailing Measures on exemption of developing economies from phasing out export subsidies), and the Agreement on Fisheries Subsidies revived this approach by offering flexibilities to certain members in their notification obligations: LDCs and developing economies with an annual share of global volume

of marine capture production not exceeding 0.8 per cent can make certain notifications every four years, instead of every year, as other members are required to do.

One of the ways that the challenge of S&DT could potentially be addressed is by means of upfront commitments not to avail of S&DT in WTO negotiations. For example, the prior announcement by China in 2022 not to seek to use the flexibility provided for by the 12th WTO Ministerial Conference's Ministerial Decision concerning the TRIPS Agreement (Agreement on Trade-Related Aspects of Intellectual Property Rights) paved the way for the adoption of the Decision. The Decision temporarily relaxed certain rules governing compulsory licensing for the production and supply of COVID-19 vaccines.⁶ In addition, in recent years, a number of developing members, including Brazil, China, Costa Rica, the Republic of Korea and Singapore, have expressed their willingness not to seek S&DT in current or future negotiations without prejudice to their developing economy status.

2. The growing relevance of different economic systems and government interventions

The degree and form of governmental involvement in economies have become more diverse across the WTO membership since the creation of the WTO. Since 1995, 38 economies have acceded to the organization; many of these were formerly centrally planned economies in the process of economic transformation. Terms negotiated in their working party reports and protocols of accession reflect the specific economic structures and policy arrangements that each of these economies brought to the table, as well as the reforms that incumbent members requested from them. More than two-thirds of acceding members committed to regular reports on developments in their respective privatization programmes. One-third of acceding members made commitments that extended beyond standard GATT Article XVII disciplines on state trading enterprises, and the accession terms of three members included provisions allowing other members to apply alternative methodologies for price comparisons in anti-dumping proceedings. Moreover, government interventions in markets have become more important in many economies, with a renewed emphasis on industrial strategies and an intensified use of government

policies to address environmental and economic resilience issues (see also sections C.3(c) and C.4(a)).

Issues related to government interventions in markets and their economic spillovers on trading partners have become more prominent in WTO discussions. Records of discussions in the WTO General Council show that members have increasingly drawn attention to differences in economic systems as well as to industrial policy and its economic spillovers (see Figure C.2).

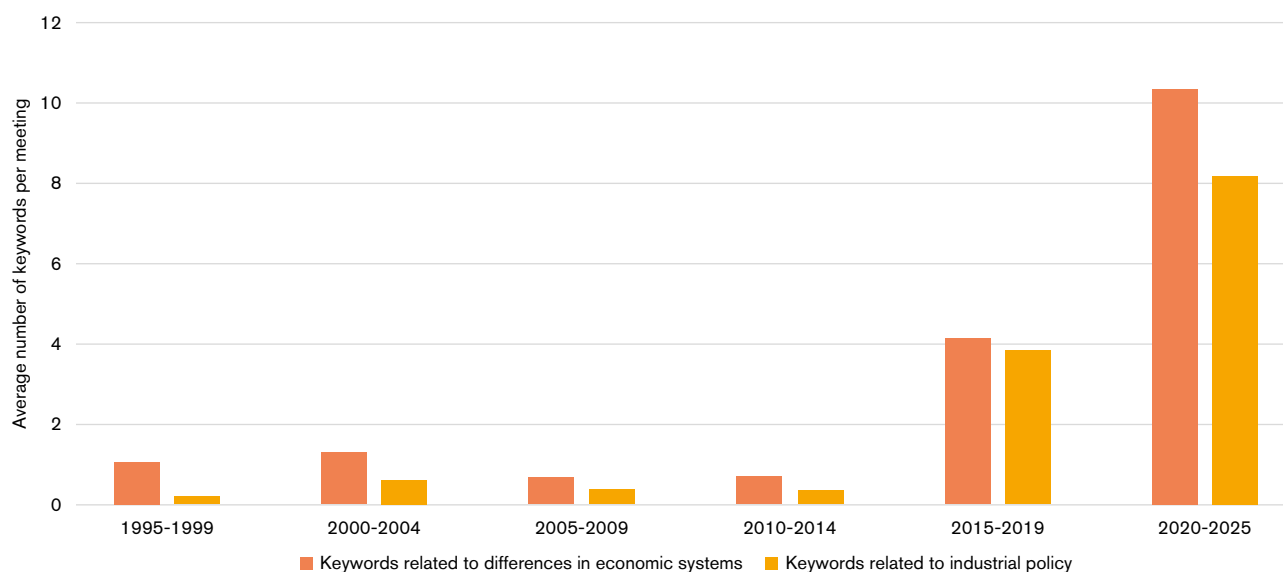
(a) Interface challenges arising from different economic systems

History provides numerous examples of the challenges that arose from the diversity of governmental involvement in the economies of GATT contracting parties and WTO members. International trade law Professor John H. Jackson coined the phrase the “interface problem” to describe the kinds of challenges that can arise from differences in economic and regulatory systems that sit within a single rules-based system (Jackson, 1990; 1997; Jackson et al., 2008). While Jackson was focused on the then-contemporaneous case of market and centrally planned economies in the 1980s, the same types of challenges could stem from a wide variety of differences, such as in terms of the role of state-owned enterprises in an economy, levels of development and regulatory preferences.

Jackson broadly grouped these interface challenges into two categories: first, securing an economy's interest in protecting its market access in another economy, and second, securing an economy's interest in ensuring a level playing field for domestic producers facing import competition in its own or third markets. Some of these challenges were addressed through new rules, while others were addressed through provisions in accession protocols, some of which took a transitory form.

(i) Securing market access commitments and ensuring a level playing field

The first of Jackson's interface challenges on protecting market access gains was already a live issue at the outset of the GATT. When negotiating the International Trade Organization (ITO) that ultimately led to the GATT, the negotiating parties grappled with how to secure market access outcomes negotiated between economies premised on different systems or policy preferences

Figure C.2: Prominence of some issues related to government interventions in markets has increased in WTO discussions (1995-2025)

Source: WTO Secretariat calculations.

Note: The figure shows the average number of keywords per WTO General Council meeting between 1995 and 2025 that relate to differences in economic systems as well as to industrial policy, as recorded in meeting minutes.

(Gerschenkron, 1947; Williams, 1947). In particular, at a time when it was envisaged that the Soviet Union might join, the default approach to structuring market access concessions through reciprocal tariff reductions secured by anti-circumvention disciplines seemed inapposite for centrally planned economies. Similar issues arose when Poland and Romania subsequently sought to accede to the GATT. Not only did they lack tariff systems, but the quantities and sources of their imports were decided by state-run monopolies⁷ (Davey, 1998; Kostecki, 1979). Moreover, even if market access concessions were agreed with the centrally planned economies, the gains could be eroded if their domestic prices were fixed by the state at uncompetitive levels, or if the state-run monopolies sold imports on the domestic market with mark-ups that nullified the expected gains (Jackson, 1989; Davey, 1998). State-run monopolies could also conceivably make purchasing decisions that had the effect of quantitative restrictions or discrimination in favour of certain domestic or foreign suppliers. Although these issues were most visible in relation to centrally planned economies, some aspects also arose in relation to other types of economies that featured a prominent role for state trading enterprises in certain sectors. In more recent times, similar questions were considered during the accession of some WTO members.⁸

The second of Jackson's interface challenges on ensuring a level playing field for domestic producers has arisen primarily in the context of GATT and WTO accessions. In the GATT accessions of Hungary,⁹ Poland¹⁰ and Romania,¹¹ there was a concern that prices and costs in centrally planned economies may be artificially low, which could mask dumping if those artificially low prices and costs were used to ascertain whether dumping was occurring (Kostecki, 1979). In more recent times, analogous issues arose during the accessions of some WTO members. In the accessions of China, Tajikistan and Viet Nam, for instance, several members noted that certain features of their economic systems could lead to special difficulties in determining cost and price comparability in the context of anti-dumping investigations.¹² Additionally, in some of these accessions, there were concerns around the potential for market disruptions arising from post-accession increases in imports, particularly if such increases were to exceed the economic adjustment capacities of domestic industries in existing GATT/ WTO members.¹³

As some contracting parties' economic systems evolved after the creation of the GATT, a further set of market access-related interface challenges arose. These challenges again pertained

to economies with significant levels of governmental involvement. For example, in 1954, Czechoslovakia (a founding member of the GATT) articulated a concern that centrally planned economies could see their market access gains eroded if their centrally fixed domestic prices were used by other contracting parties when ascertaining whether to apply anti-dumping duties. Czechoslovakia's concern was that centrally fixed domestic prices might be higher than export prices in foreign markets solely as a function of being fixed by the state rather than reflecting the kind of discriminatory pricing behaviours typically associated with "dumping". Czechoslovakia submitted in this regard that "[i]n commercial relations between countries with different economic systems account should be taken of the different functions of individual economic notions in these two systems". Although "dumping" requires a comparison between domestic and export prices, Czechoslovakia pointed to the "incomparability of export and internal prices... being subject to different economic laws in the two different systems".¹⁴

Similar concerns were advanced by India in 1971 over the potential for anti-dumping duties to erode market access for developing economies. This was due to the differing economic policy preferences and constraints of developing economies, which may naturally produce domestic prices that were higher than export prices.¹⁵ In particular, India explained that, in some cases, "the prevailing domestic prices have no direct relationship with the prices at which the goods could be sold by [developing countries] in the international markets", for instance due to "structural imbalances, transport bottle-necks, and restrictions imposed on imports for balance-of-payments reasons" which result in "the prices of domestically produced and imported essential raw materials as well as intermediate products rule at artificially high levels". India likewise explained that "[t]o raise revenue for financing their developmental programmes these countries are required to impose high customs duties and fiscal charges both on imports of raw materials used in the manufacture as well as on finished product". From this perspective, developing economies' market access gains could be eroded if developed economies reflexively treated lower-priced exports from developing economies as being "dumped" without recognizing that their higher domestic prices might simply reflect their developmental status and economic system.

(ii) A variety of approaches to interface challenges

When confronted with the interface challenges described in the previous subsection, GATT contracting parties, and subsequently WTO members, have found various ways to accommodate differences in economic systems.

The institutional approach to accommodating different economic systems within a single framework of rules has often involved identifying pragmatic and case-by-case solutions depending on the particular nature of a given interface challenge.

A novel approach was devised in response to the challenge of how to structure market access commitments for centrally planned economies. This involved guaranteeing minimum import purchases. In particular, already in the earliest drafts of the ITO, the United States proposed that centrally planned economies "shall undertake to import in the aggregate over a period products of the other members valued at not less than an amount to be agreed upon", with "[t]his purchase arrangement... subject to periodic adjustment" (Davey, 1998; Gerschenkron, 1947). The United States took inspiration in this regard from its earlier trade treaty with the Soviet Union, in which market access outcomes were likewise structured in terms of guaranteed minimum import purchases by the Soviet Union in return for tariff concessions on an MFN basis by the United States (Gerschenkron, 1947; Hull, 1935). This proposal was not ultimately included in the GATT, given that no such economies joined at the outset. However, the same basic approach was revived when certain centrally planned economies sought to join the GATT some decades later. Upon acceding in 1967, Poland's market access concessions took the form of a commitment to increase the total value of its imports from GATT contracting parties by not less than 7 per cent per annum, subject to renegotiation from 1971.¹⁶ Romania took a similar approach upon its accession in 1971, albeit committing to increase imports in relative rather than absolute terms.¹⁷ These innovations provided a means of "interfacing" market access concessions between different economic systems. As time passed, however, they were criticized for failing to account for variables such as inflation, exchange rates, balance-of-payments issues and challenges in allocating an aggregate quantitative commitment in line with the MFN principle (Davey, 1998; Kostecki, 1979).

Another approach was devised in response to the challenge of how to secure market access commitments vis-a-vis economies with state trading enterprises. In particular, the GATT contracting parties settled on a framework in which such enterprises were required to abide by certain disciplines to mitigate against the potential erosion of market access outcomes. Specifically, it was decided that such enterprises would abide by rules on quantitative restrictions (Ad Articles XI, XII, XIII, XIV and XVIII to the GATT), refrain from reselling imports at mark-ups beyond the applicable tariff binding, and transact in accordance with commercial considerations and the principle of non-discrimination. In more recent times, additional commitments in this regard have been made in certain accessions to guarantee or expand the right to trade by private enterprises and to refrain from influencing the decisions of state trading enterprises.¹⁸ Some accessions have also involved commitments regarding price controls to alleviate the concern that such controls could impair market access commitments on goods and services.¹⁹

As a further approach, the rules were clarified in a flexible manner to address the concerns that market access could be eroded through anti-dumping measures for economies with different systems. For instance, in relation to its concerns described above, Czechoslovakia proposed amending Article VI of the GATT on anti-dumping,²⁰ but the GATT contracting parties opted instead for an interpretive note that clarified that the existing Article VI of the GATT (“Anti-dumping and Countervailing Duties”) was capable of addressing its concerns.²¹ This interpretive note recognised that Article VI allowed for a different approach to comparing prices (which is central to determining “dumping”) when those prices were formed in different economic systems, specifically when one such price was formed in “a country which has a complete or substantially complete monopoly of its trade and where all domestic prices are fixed by the State”. Following the clarification in the Kennedy Round Anti-Dumping Code that a “particular market situation” affecting price comparability could be a ground to reject domestic prices, India sought to rely on this new possibility to address its own concern, calling for a recognition that the different economic circumstances of developing economies comprised a “particular market situation”.²² This proposal was subsequently joined by a group of developing

economies in the Tokyo Round which sought to have the “special characteristics of their economies” recognized as a “particular market situation”.²³ This eventually led to a decision by the Committee on Anti-Dumping Practices recognising that a different approach to comparing prices might be warranted due to the different economic context in developing economies whereby “governments play a large role in promoting economic growth”.²⁴

Additional “interface mechanisms” were devised to protect domestic producers facing import competition from economies with different systems or policy preferences. The accession protocols of economies with different economic systems included special types of flexibilities allowing for temporary restrictions on imports from these newly acceded economies. For instance, special safeguard clauses were included in some accession protocols to allow GATT contracting parties (and later, WTO members) to restrict imports from acceding parties (or members) if they increased in such quantities as to threaten or cause serious injury. These clauses were included, for instance, in the GATT accession protocols of Poland,²⁵ Romania²⁶ and Hungary,²⁷ and in China’s WTO accession protocol.²⁸ In the case of China, these were described as “transitional safeguards” available for a 12-year period. As another example, in the accession processes of Poland and Romania, the concern that dumping by their exporters could be masked by variations in the way prices form across different systems was addressed by confirming that other GATT contracting parties could use the alternative approach to price comparison, described above, in the interpretive note to Article VI²⁹ (Kostecki, 1979). Even though Hungary did not unambiguously qualify as a country “where all domestic prices are fixed by the State” under that interpretive note, the GATT contracting parties likewise allowed this interpretive note to be invoked in respect of Hungarian imports if “appropriate and not unreasonable” in a given case.³⁰ More recently, analogous clauses addressing issues of price comparability resulting from the absence of market conditions were included in the WTO accession protocols of China, Viet Nam and Tajikistan. Additionally, the “particular market situation” aspect of the Kennedy Round’s Anti-Dumping Code was replicated in the Uruguay Round’s Anti-Dumping Agreement. This concept has since been relied on by various national authorities in cases where the prices

being compared in an anti-dumping investigation have been formed in different economic contexts, thereby impugning their comparability.³¹

(iii) Anti-dumping and “interface methodologies”

The extent to which some members have applied anti-dumping measures in certain contexts can help shed light on the present scope of interface issues. In particular, anti-dumping measures have been widely recognized as an instrument used by some jurisdictions to manage differences among economic systems and economic policy preferences (Jackson, 1997; Du, 2022; Lang, 2019).³² Indeed, in his earliest works on the matter, Jackson (1989; 1990; 1997) identified anti-dumping measures as one of the main interface mechanisms. This is because, as discussed above, differences between the economic contexts in which respective prices are formed can impact their ability to be compared, which in turn can play a role in whether dumping exists and whether anti-dumping measures are justified. As Jacob Viner explained in his seminal text (Viner, 1923), dumping can arise not only from the private pricing decisions of individual firms, but also from differing governmental policy settings that shape how prices are formed, such as higher tariff protection that allows firms to charge higher prices in their home market. Accordingly, when ascertaining dumping, governments may opt to reject the investigated exporters’ domestic sales prices on the grounds of a “market situation”, “non-market economy” considerations, or analogous rationales that prevent a fair comparison with the export price. The extent to which anti-dumping measures rely on these approaches, referred to collectively as “interface methodologies”,³³ may help to shed light on the present scope of interface challenges.

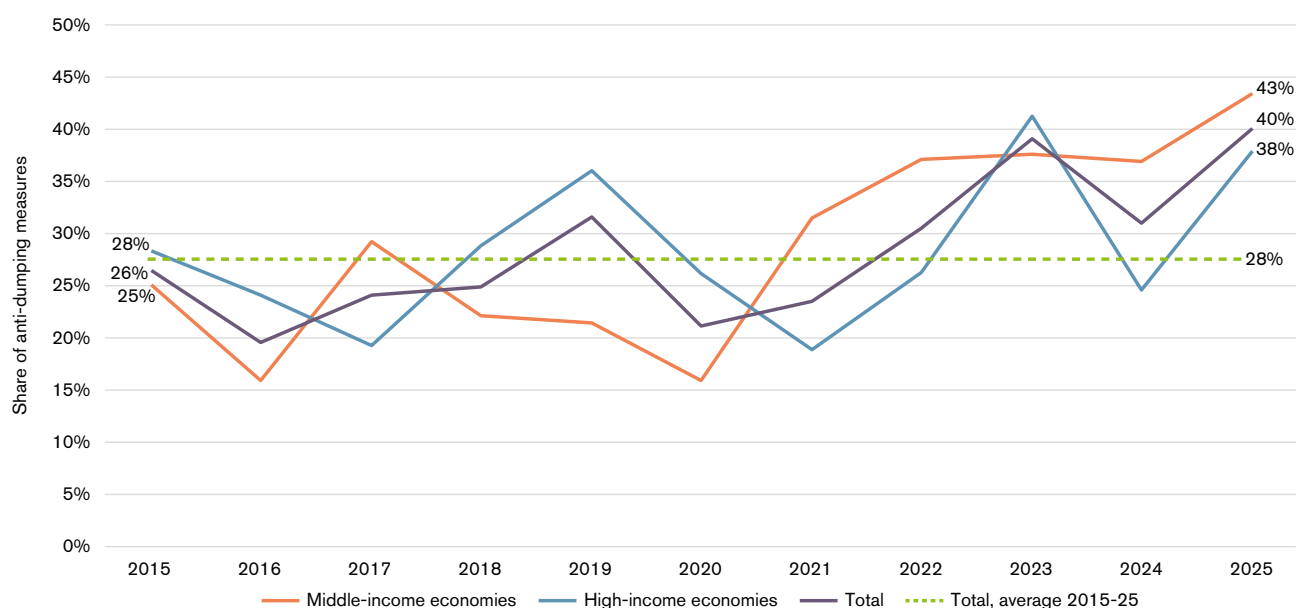
Over the past decade, investigating authorities have relied on an interface methodology in more than one-quarter of anti-dumping investigations. This is illustrated in Figure C.3, in which the analysis covers seven major users of anti-dumping measures (India, the United States, the European Union, China, Brazil, Canada and Australia) that together accounted for almost two-thirds of all such measures imposed over the period analysed (2015 to 2025). Investigating authorities in each of these members at various times ascertained dumping by reference to differences in economic

systems or policy preferences, although the rate at which they did so varied considerably – from less than one-tenth of China’s investigations to more than half of those of the European Union. Figure C.3 also shows an increasing trend in the use of anti-dumping measures based on interface methodologies. Among the seven investigating authorities, the share of measures using an interface methodology rose from around one-quarter in 2015 to more than one-third a decade later. Anecdotally, anti-dumping measures have tended to rely on an interface methodology in situations where investigating authorities found that government policies or support measures affected input costs or price comparability.³⁴ However, there are also instances in recent years in which other phenomena, such as allegedly weak labour standards or the role of economic sanctions, contributed to “market situation” findings.³⁵ In that regard, it is noteworthy that legislative and regulatory initiatives in some jurisdictions have sought to clarify the role of anti-dumping measures in addressing regulatory differences, such as those pertaining to labour and environmental protections.³⁶ It remains to be seen whether the anti-dumping systems of domestic jurisdictions will evolve to account for such regulatory differences in a more routine manner.

(b) Increasing government interventions in markets

Issues related to the cross-border spillovers of government interventions extend beyond those related to the interface challenges discussed in the previous subsection. Broader questions around ensuring a level playing field for domestic producers also arise in relation to subsidies and other policies, or the lack of thereof, in the context of economies with similar economic systems.

The rise of new industrial strategies has led to an increasing use of subsidies, making the discussions about their cross-border effects more central to rules-based cooperation. The rise of industrial policies over the past 15 years has been linked to policy objectives ranging from promoting competitiveness in strategic sectors and accelerating the green transition and digital transformation to, more recently, supply chain resilience and national security. The relevance of these policies has also been discussed in relation to broader macroeconomic outcomes (see Box C.1). While mapping and quantifying industrial policies

Figure C.3: Anti-dumping measures imposed by high- and middle-income economies based on an interface methodology

Source: WTO Secretariat calculations.

Note: The data are based on final anti-dumping determinations of Australia, Canada, the European Union and the United States (high-income economies) and of Brazil, China and India (middle-income economies) that resulted in measures imposed between 2015 and 2025. For this analysis, interface methodology refers to cases in which the investigating authority declined to rely on the exporter's domestic prices or costs for normal value purposes on the basis of findings concerning market situations, non-market economy conditions, significant distortions or comparable rationales affecting price or cost comparability. This category is used for analytical purposes and does not imply a view as to the WTO consistency of any measure.

remains an inherently difficult task, available evidence suggests that subsidies are the instrument most widely used, particularly among upper middle-income and high-income economies (Bown, 2024; IMF, 2025; Fernandes and Reed, 2026). As discussed in Section B.2(c), subsidies are considered a legitimate tool for achieving public policy goals, and WTO rules address only the types of subsidies that have the potential to generate negative cross-border spillovers by tilting the competitive field, either at home or in foreign markets, toward subsidized firms.

Subsidies were recognized early in the GATT as a recurring challenge for the trading system. Unlike tariffs, subsidies could not simply be negotiated product by product, because they often served domestic policy objectives even as they affected foreign competitors. Identifying and compensating the affected trading partners was also recognized as a key challenge, since subsidies could often impact third parties, rendering some countervailing measures ineffective. Jackson (1997)

described subsidies as one of the “perplexities” of international trade law, requiring rules that distinguish between ordinary domestic policy space and measures with harmful cross-border effects. The historical GATT approach was to bring subsidies into view, create procedures for consultation where they harmed trading partners, permit offsetting duties in defined circumstances, and gradually sharpen the legal distinction between subsidies as domestic policy instruments and subsidies that became actionable because of their trade effects.

The Agreement on Agriculture introduced disciplines on domestic support in the agriculture sector, but some longstanding concerns remain. Agricultural Market Support (AMS) commitments were established under the Agreement on Agriculture following the Uruguay Round. Because these commitments were based largely on historical levels of support, members that had traditionally provided substantial trade-distorting support entered the WTO with higher AMS entitlements, while those with

Box C.1: Trade imbalances are persistent

Trade imbalances have long been a concern for policymakers because persistent imbalances potentially lead to demands for corrective trade policy actions. Recent tariff actions – framed in part as efforts to reduce bilateral deficits – may be one example. Notable precedents include trade tensions between the United States and Japan in the 1980s and the global imbalance debates following the 2008 financial crisis. Indeed, empirical research shows that variations in trade imbalances, particularly at the bilateral level, are strong predictors of trade action (Delpeuch, Martin and Fize, 2025).

Trade imbalances *per se* are not necessarily problematic from an economic perspective (Ossa et al., 2025). Sectoral imbalances can arise from specialization: an economy with a comparative advantage in services may run a surplus in services and a deficit in goods, and *vice versa*. Changes in an open economy's savings, investment, borrowing and consumption behaviour would translate into external imbalances, including trade imbalances. From this perspective, trade imbalances are not always signs of dysfunction, but channels through which economies realize the gains from trade across sectors and over time.

While trade imbalances can reflect healthy economic forces, they may also be associated with various domestic and international disequilibria, such as home-grown domestic macroeconomic imbalances, financial debt build-up, market access and industrial policy distortions, or stickiness of exchange rates. If such distortions are not corrected, it may affect confidence in the trading system and the expectation that it will generate fair outcomes and equitable economic benefits.

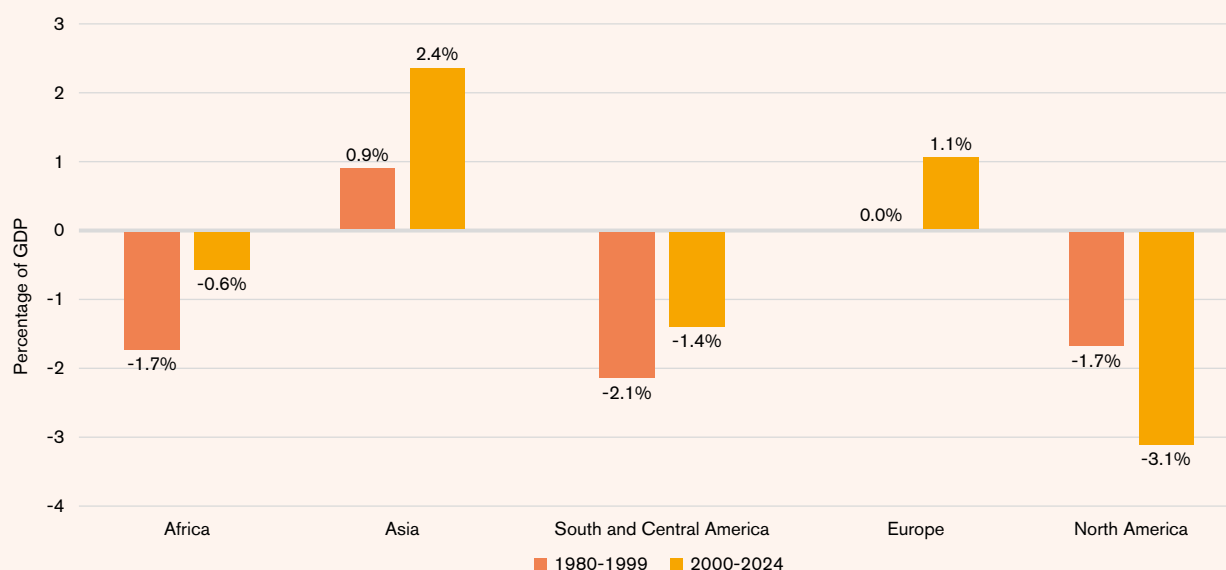
The effectiveness of policy action to address imbalances depends on the identification of their causes, which, at times, can be difficult to disentangle. Imbalances can be driven by a mix of macroeconomic factors (for example, large and sustained fiscal deficits or undervalued exchange rates) and micro-economic factors, including preferences or distortions that affect resources allocation toward production or consumption.

A foundational principle of economic policy design is that each distortion should be addressed with the instrument that targets it most directly. This targeting principle, formalized by Nobel Laureate Jan Tinbergen and widely applied in public economics, suggests that trade distortions are best addressed with trade policy, while macroeconomic imbalances are more effectively handled with macroeconomic instruments. Using one to address the other is not only inefficient but may also have unintended consequences.

The WTO Secretariat has run quantitative simulations to compare the impact of macroeconomic actions (a reduction in savings rate in surplus regions offset by a proportional increase of that savings rate in the deficit regions) relative to that of tariff increases on trade imbalances between regions (Ossa et al., 2025). A conclusion of those simulations is that, while trade policies can, in principle, influence aggregate trade imbalances, macroeconomic policies would play a far more decisive role to correct them. Macroeconomic rebalancing implying a 2.5 percentage point increase in current gross savings-to-GDP ratio in North America, matched by a corresponding decline in the main surplus regions, Asia and Europe, would be sufficient to close actual aggregate trade gaps. However, in this scenario, sectoral imbalances, such as those existing in manufacturing, would remain resistant. Tariffs, on the other hand, can reduce manufacturing imbalances, albeit at the expense of other sectors, and would only impact aggregate imbalances at a fairly high GDP cost, unless savings-investment decisions respond to tariffs.

Addressing persistent trade imbalances (see Figure C.4) would require coherence across policy domains, as well as deeper cooperation among institutions with complementary mandates and a shared stake in global economic stability. This insight was already acknowledged at the creation of the WTO when trade ministers affirmed that, “difficulties the origins of which lie outside the trade field cannot be redressed through measures taken in the trade field alone”.³⁷ In today's interconnected global economy, this insight remains as relevant as ever. Trade policy alone cannot correct policy imbalances and be an answer to non-trade policy concerns. WTO rules do not aim to fix consumption or saving patterns at home, will not solve competitiveness issues of domestic industries, and are not a prime driver of capital flows, all of which influence current account balances. These issues require a mix of cooperation in the macro-financial field and proper domestic policies, which lie outside the remit of the WTO.

Figure C.4: Trade imbalances are persistent



Source: WTO Secretariat calculations based on World Bank data.

Note: The figure shows the current account balance as percentage of GDP by region, averaged over the periods 1980 to 1999 and 2000 to 2024.

limited support at the time relied primarily on *de minimis* allowances. Developing members have argued that this approach resulted in unequal policy space and constrained their ability to expand support programmes aimed at objectives such as food security and rural development. Concerns regarding these asymmetries have since become an important element of the agriculture negotiations.

The Agreement on Subsidies and Countervailing Measures (SCM) strengthened subsidy disciplines, which have become increasingly relevant as the use of these policy instruments has expanded. As discussed in Section B.2.(c) of Chapter B, the SCM Agreement expanded beyond earlier GATT subsidy disciplines by establishing multilateral rules on prohibited and actionable subsidies, the use of countervailing measures, and notification and transparency obligations. These disciplines have been increasingly tested as subsidies have become more prevalent. As discussed in Section B.2.(d) of Chapter B, countervailing measures are the primary instrument to protect domestic producers from subsidized foreign competition in the domestic market. The proliferation of subsidies is thus mirrored in the use of countervailing measures, which has more than doubled in the past decade compared

to the two previous decades (see Figure B.11 in Chapter B).

When subsidies by other members distort competition in export markets, the options for addressing these concerns are confined largely to the WTO's dispute settlement procedure.

The use of this remedy has been relatively limited, especially in recent years as the dispute settlement system has come under strain. This may also reflect a limitation inherent in the WTO's prospective-only remedy: a subsidy can persist throughout the litigation period, and the productive capacity or learning-by-doing it generated may already be locked in before any withdrawal is required, so the remedy can come too late to undo the harm (Grossman and Sykes, 2025).

Achieving transparency on subsidies remains a challenge. Evidence on the scope and scale of government support in industrial sectors remains relatively scarce. One reason for this lack of transparency is the insufficient information disclosed by governments, both in the context of national budgetary processes and in WTO notifications. The share of WTO members that provided mandatory subsidy notifications to the Committee on Subsidies and Countervailing Measures was just 59 per cent between 2015 and 2024, and 77 per cent of

these notifications arrived late. While the average delay has improved compared to the previous two decades, it remains at more than one year on average (see Table B.3 in Chapter B). Suggested causes include limited administrative capacity, reluctance to expose programmes that might invite a dispute, and disagreement over what counts as a notifiable subsidy (IMF et al., 2022). A similar picture emerges in the Committee on Agriculture, where domestic support notifications are the main target of questions raised on individual notifications (see Figure B.16 in Chapter B), suggesting issues with notifications clarity, completeness or quality. The resulting picture is incomplete in both coverage and detail, prompting efforts to fill the gaps outside the notification system, such as the Joint Subsidy Platform³⁸ launched by the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the World Bank and the WTO, which seeks to consolidate information on the nature, size and impact of subsidies.

The failure to address concerns related to subsidies effectively risks fragmenting trade governance and undermining trust in the system. Such concerns may affect confidence in the rules designed to maintain the balance of negotiated commitments while preserving legitimate policy space.³⁹ Where members consider that existing disciplines or remedies do not adequately address perceived spillovers, there is a risk that responses will shift toward unilateral measures or fragmented approaches. Greater transparency, clearer analytical distinctions and continued rules-based cooperation can help manage the risk.

Subsidy disciplines are best addressed at the multilateral level. Unlike tariffs or other market access measures that can be implemented in a discriminatory manner, the benefit of any negotiated reduction in a subsidy is inherently MFN and cannot be confined to the negotiating partner. Only a multilateral forum, in which every beneficiary is represented, can overcome this free-rider problem and preserve the balance of commitments the system was built to protect.

3. The changing nature of trade is creating potential for new spillovers

The increased complexity of GVCs, the rapid digitalization of economic activity, and

growing concerns over climate change and environmental sustainability are altering both the nature of trade and the policies that govern it. As a result of GVCs, trade measures adopted in one economy can generate cumulative or unintended effects along supply chains, amplifying costs and distortions internationally through novel channels. Advances in digital technologies have contributed to an increase in the share of services in total trade by enabling a growing proportion of services to be supplied across borders through the internet. Economic transformation linked to sustainability objectives is moving policy debates away from traditional border measures and toward domestic regulations, standards and industrial policies.

These changes in trade are raising a number of challenges for the WTO. The rise of GVCs has increased the complexity of economic relations, making it more difficult to assess the impact of trade policies. Moreover, the trade in customized inputs underpinning GVCs introduces novel channels through which government policy choices can have cross-border impacts, as parties are locked in a supply relationship with limited options to change trading partners. The increase in the share of services in trade raises an additional challenge because it elevates the importance of General Agreement on Trade in Services (GATS), and the GATS is mostly concerned with negotiating over regulatory measures regarding market access commitments. This raises sensitive issues regarding regulatory approaches that negotiations over GATT tariff commitments have not had to confront, making further cooperation challenging. A similar challenge arises from the link between environmental policies and trade policy as, although there need not to be a trade-off, environmental policies can create new spillovers and alter the balance of market access commitments.

(a) The rise of GVCs increases the complexity of trade policymaking

The world economy is far more deeply integrated than it was at the end of the Second World War. International trade as a share of global GDP has almost quadrupled since the 1950s and today accounts for close to 60 per cent of global economic activity. Trade has become the backbone of intricate cross-border production networks, linking firms' production activities across multiple jurisdictions. In 2024, GVCs accounted for 46 per cent of global trade, not far off their 2022 peak of 48 per cent

(UIBE et al., 2025). Much of this integration reflects technological change – advances in transportation, communications and digital connectivity – but it has also been enabled by predictable trade rules.

(i) GVCs complicate assessment of the impacts of trade policy

The complexity of GVC linkages complicates the impact assessment of trade policies. The wider scope for cross-border and cross-sector spillovers has direct economic impacts, but also makes it more difficult to assess the effects of trade policies. Tariffs do not affect only the sectors to which they are directly applied, they can also propagate through production networks by impacting the competitiveness of firms using imported inputs or supplying downstream industries. The economic concept of “effective rate of protection” (ERP) captures this complexity by measuring the overall effect of the tariff structure on the value-added generated by domestic producers, taking into account both tariffs on final goods and tariffs on intermediate inputs.

In order to compute ERP, it is necessary to account for upstream and downstream production linkages, tariffs applied at all production stages, and substitution patterns. Blanchard, Boice and Johnson (2026) show that once GVC linkages are incorporated, the sectoral effects of tariffs can differ substantially from statutory tariff rates, both in terms of the sectors affected and the magnitude of protection. Figure C.5 illustrates this point by showing the effect of a hypothetical 10 per cent increase in import tariffs on all final goods. The first component of each bar captures the direct protection arising from a sector’s own tariff, while the second component captures additional protection transmitted through GVC linkages. Despite the uniform tariff increase, the effects vary substantially across sectors. Downstream industries that sell a larger share of their output directly to final consumers, such as furniture, motor vehicles, electrical equipment, pharmaceuticals and textiles, experience relatively large direct effects. At the same time, production linkages transmit part of these final-goods tariffs upstream, generating sizeable indirect effects in sectors such as metals, minerals, paper, rubber and plastics, and wood. The figure also shows that tariffs on goods can confer a degree of effective protection on services sectors through their role as suppliers of inputs to goods-producing industries. While the magnitude of ERP varies across economies and tariff scenarios, the analysis

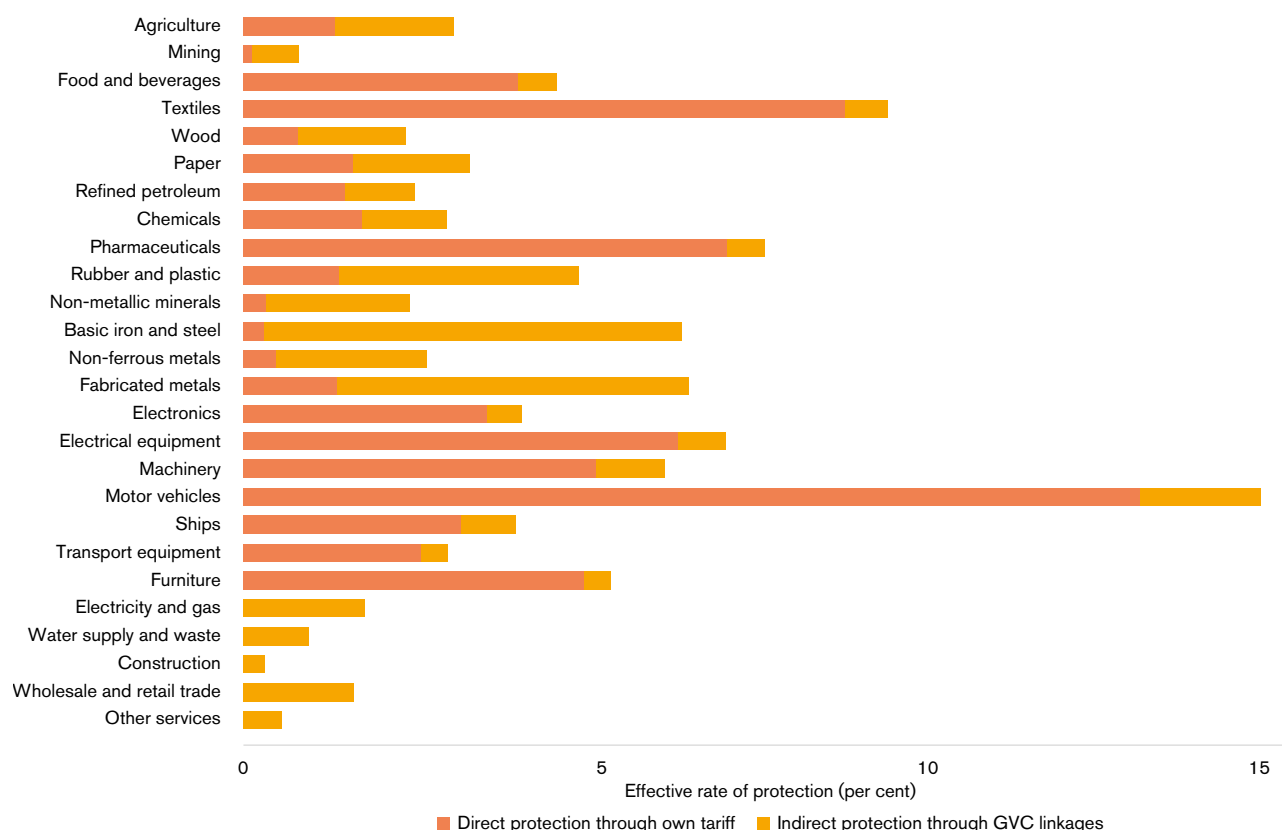
illustrates how complex production networks can reduce the transparency of trade policy effects and thus complicate trade policy design, implementation and negotiations.

(ii) Trade in customized inputs introduces new channels for cross-border policy spillovers

The rise of relationship-specific trade in customized inputs associated with GVCs exposes gaps in existing trade institutions. A growing share of tradable intermediate inputs is no longer standardized but tailored to specific buyers. For example, most components in modern smartphone supply chains are specific to particular brands due to technical specifications. As a result, the prices of a growing share of traded goods are determined bilaterally between specific buyers and sellers, rather than through open-market mechanisms. Such transactions require a high degree of predictability and contractual reliability. However, contract enforcement across borders is typically more complex and less effective than domestic enforcement, which can complicate these transactions and discourage trade in customized inputs.

The relationship-specific nature of customized inputs introduces novel channels through which government policy choices can have cross-border impacts, as parties are locked in a supply relationship with limited access to alternative buyers or sellers. This can impact both the nature and the magnitude of cross-border policy spillovers (Alviarez et al., 2026). For example, export taxes on customized inputs can seem more desirable, as the tax burden will be partially passed on to foreign buyers. Similarly, importing economies may have incentives to distort both border and behind-the-border measures in order to shift bargaining power from foreign input suppliers to domestic buyers of these inputs, raising the question of whether existing multilateral trade institutions, traditionally focused on shallow integration through disciplines on border measures, are sufficient to address the policy spillovers generated by increasingly integrated production networks (Antràs and Staiger, 2012a, 2012b).

Regional trade agreements (RTAs) are playing increasingly important roles in a global economy characterized by complex GVCs. In general, reaching consensus on measures that

Figure C.5: The effective rate of protection can differ significantly from the statutory import tariff rate

Source: Adapted from Blanchard, Boice and Johnson (2026).

Note: The figure shows the decomposition of the effective rate of protection, which measures protection as the shift in demand for a sector's real value added in response to a tariff change, following a hypothetical 10 per cent increase in import tariffs on all final goods, accounting for the effect of GVC linkages.

require coordination of behind-the-border policies is more difficult within the multilateral trading system (Maggi and Ossa, 2021). The opportunities arising from GVCs have encouraged the formations of new RTAs governing an expanded scope of GVC-related areas, such as in cross-border investment or intellectual property (IP) rights, which, in turn, has boosted trade in intermediate goods among the RTA partners (Orefice and Rocha, 2014). This relationship largely reflects the fact that deeper integration helps reduce contractual uncertainty by harmonizing divergent domestic regulations, strengthening enforcement mechanisms and providing credible commitment devices, especially for economies with weaker institutional frameworks (WTO, 2014).

(iii) The firm has become an important organizing principle of global trade

The global economy reflects an increasingly intertwined production and ownership

network. The rise of GVCs has been accompanied by the expansion of organizational production networks, as intermediate trade occurs through both outsourcing to unaffiliated foreign parties and offshoring to affiliated suppliers. Unlike in 1947, when the GATT was first ratified, the firm, instead of the national economy confined by borders, has become an important organizing principle of global trade. According to World Bank data, global foreign direct investment inflows rose from roughly 1-2 per cent of world GDP in the early 1990s to peaks above 4-5 per cent prior to the global financial crisis, before moderating to around 2-3 per cent of world GDP in recent years (World Bank, 2026). Data from the US Census Bureau show that approximately 90 per cent of US exports and imports are conducted by multinational firms (Bernard et al., 2009). Related-party trade, defined as trade by US companies with their subsidiaries abroad, as well as trade by US subsidiaries of foreign companies with their parent

companies, accounted for 49 per cent of US imports and 33 per cent of US exports in 2025 (US Census Bureau, 2026).

The blurring of boundaries between ownership, suppliers and location has led to a wider scope for cross-border policy spillovers. A trade measure imposed on imports from one economy may in practice affect production by firms headquartered in another economy and relying on inputs sourced from a third economy, which may itself include the importing economy. As global supply chains become more geographically fragmented and involve multiple cross-border stages, a single final product may be subject to trade barriers, whether tariffs or non-tariff measures, at multiple points along the production process (Yi, 2003). As a result, changes in trade policy, and the associated adjustments in terms of trade, can generate complex and sometimes unintended effects that propagate through GVCs. These interdependencies may partially offset incentives to impose trade barriers, as policy measures can generate spillovers that feed back to the implementing economy through ownership and trade networks (Baldwin, 2006; Blanchard, 2007; Baldwin et al., 2009; Blanchard, 2010; Blanchard, Boice and Johnson, 2026). Nevertheless, the potential costs associated with trade barriers and fragmentation can be amplified in such an environment.

(b) Digital transformation and the rise of artificial intelligence (AI)

Since the mid-1990s, digital technologies have fundamentally reshaped international trade. Major advances in internet connectivity, computing power and digital technologies have enabled information, services and knowledge to move across borders more rapidly, supporting the rapid growth of digital trade. As a result, digitalization has transformed not only how economies trade, but increasingly what they trade and how they implement trade policy. Services, including digitally delivered services or services produced using AI tools, now account for a growing share of international exchange, complementing and, in some cases, replacing traditional trade in physical goods. As a result, domestic regulations – including rules on data flows, the recognition of professional qualifications and IP – are increasingly shaping conditions of international trade and may create more significant barriers than traditional border measures such as tariffs.

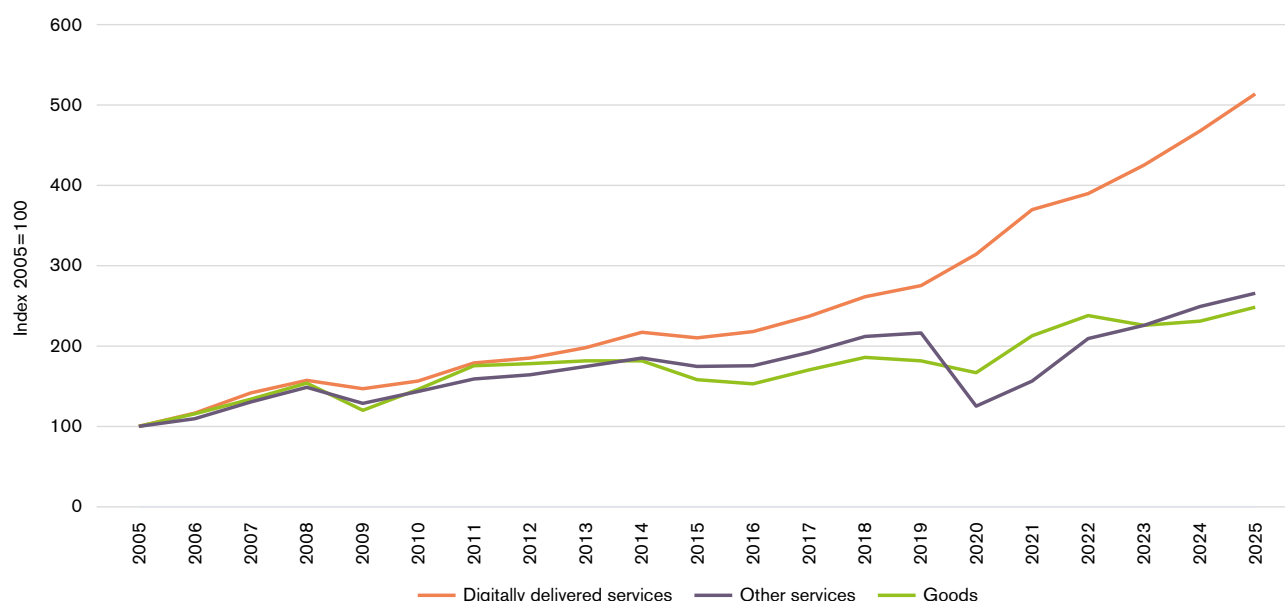
Over the last decade, the share of digitally delivered services in total global trade has steadily increased. By 2025, trade in commercial services reached an estimated 27.6 per cent share of total global trade, its highest level since 2005 when these data become available. This growth has been largely driven by the rapid expansion of digitally delivered services, particularly professional, computer and financial services, which are well suited to electronic cross-border delivery. According to WTO estimates, digitally delivered services, now representing 55 per cent of global services exports, grew by 10 per cent in 2025 alone (see Figure C.6).

The rapid emergence of AI is amplifying this transformation, generating significant economic opportunities while at the same time creating new challenges. AI is expanding the range of services that can be delivered digitally, reshaping production processes across sectors and lowering the costs of creating, processing and transmitting information. Together, digitalization and AI have the potential to raise productivity, stimulate innovation and reduce trade barriers, thereby supporting economic growth and development. WTO simulations project that AI could increase global trade by 40 per cent by 2040, with the largest gains concentrated in digitally deliverable services. Under the most favourable scenario, where technology adoption and policy frameworks converge, AI could add 13.2 per cent to global GDP over the next 15 years (WTO, 2025). At the same time, these technologies can also generate uneven adjustment costs across and within economies, as well as raise privacy, security and competition concerns, requiring governments to strike a careful balance between promoting innovation and addressing legitimate public policy concerns.

(i) The range of policies related to digital trade and AI is growing

As the digital economy expands, governments have responded with a growing range of policies related to digital trade and AI. These include industrial subsidies, export restrictions, data governance measures, privacy rules and cybersecurity requirements. Available evidence shows that digital trade-related policy interventions have increased steadily across all regions of the world. Regulation of cross-border data flows provides a particularly clear illustration of this trend. Figure C.7 illustrates the evolution of policy announcements affecting data flows through regulation, using information drawn

Figure C.6: Digitally delivered services exports see faster growth than goods and other services (2005-25)



Source: WTO Secretariat calculations.

Note: Digitally deliverable services include information and communications technology (ICT), financial services, IP, insurance and other business services.

from the Digital Trade Integration Database, which systematically compiles digital policy measures introduced by governments. The growing number of measures reflects the increasing strategic importance that governments attach to the digital economy.

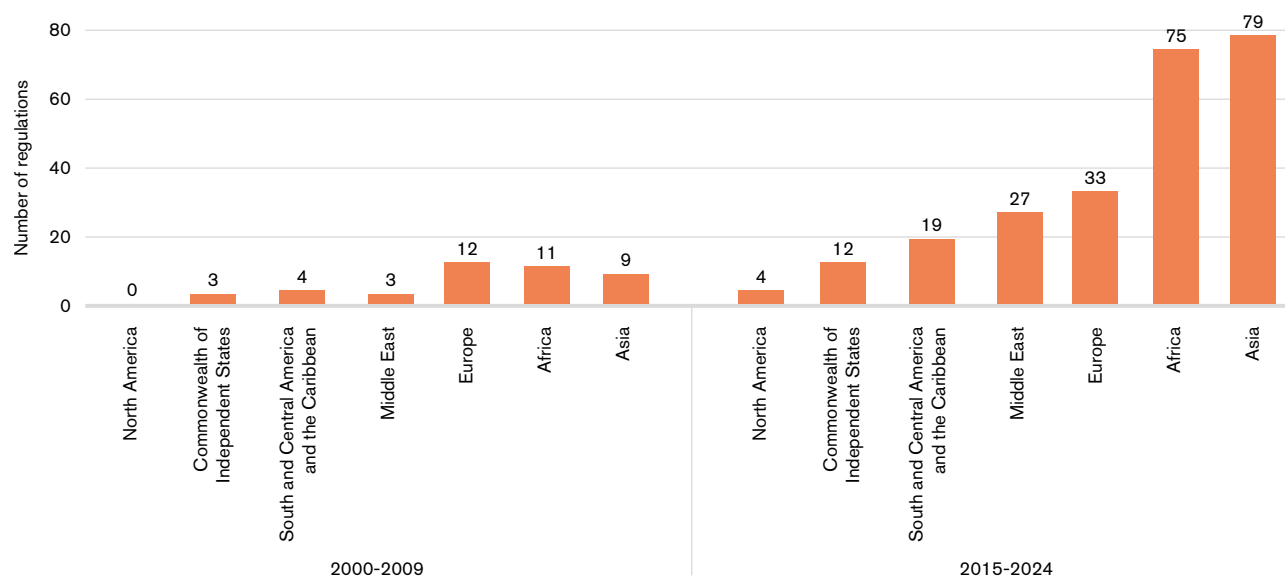
Legitimate domestic objectives may require digital regulation, but differences in national regulatory approaches can also increase trade costs, fragment digital markets and generate new cross-border spillovers. Privacy regulation protects citizens' data. Cybersecurity requirements protect critical infrastructure. Consumer protection rules prevent fraud and manipulation. Yet these policies may also fragment markets by requiring firms to comply with divergent or incompatible national rules, localize data or operations, and duplicate compliance procedures across jurisdictions. They may therefore generate both pecuniary (price-based) and non-pecuniary cross-border spillovers. The pecuniary spillovers operate through trade effects and the terms of trade and can result in an under-provision of openness – an issue that trade agreements could address (Staiger, 2021). The non-pecuniary spillovers arise when digital regulations pursuing objectives such as privacy, cybersecurity or national security create cross-border effects that do

not operate through prices. As the digital economy becomes more integrated, addressing these cross-border externalities increasingly requires international regulatory cooperation.

(ii) Existing policy disciplines and venues for cooperation related to the digital and AI economy are important

WTO members have been able to set up institutional structures to help shape international cooperation on digital trade issues. The Work Programme on Electronic Commerce is one such attempt. Adopted by the WTO General Council in 1998, it laid the groundwork for discussions on trade-related aspects of e-commerce. Although it has not produced concrete recommendations, the Work Programme has provided a forum for members to exchange experiences and explore digital trade issues and their trade implications. In addition, for over 25 years the moratorium on customs duties on electronic transmissions was a central feature of the international trading environment for digital trade and the moratorium decision was replicated in several RTAs and plurilateral initiatives. At the 14th Ministerial Conference in Yaoundé in 2026, WTO members

Figure C.7: The number of regulations relating to cross-border data flows has increased



Source: WTO Secretariat calculations based on Digital Trade Integration database (<https://dti.eui.eu/>).

were unable to reach consensus on extending the moratorium and the Work Programme.

The WTO framework nevertheless continues to provide an important foundation for governing digital trade, primarily through the GATS. There is broad consensus that electronic commerce falls within the scope of WTO agreements, even when there is no specific reference to e-commerce or digitalization. The GATS is particularly relevant because many services can be supplied electronically and because a number of services sectors provide the infrastructure that enables digital trade. The GATS is “technology-neutral”,⁴⁰ and therefore covers the supply of services traded through electronic means, as through all other technological means. It contains both general obligations – MFN and transparency – and specific commitments on market access and national treatment.

Beyond the GATS, multilateral rules for trade in goods and IP are also relevant for digital and AI-related trade. The Information Technology Agreement (ITA) and its expansion facilitate access to the technology that underpins digital trade by eliminating tariffs on a broad range of information and communications technology (ICT) products. The TFA encourages the use of digital technologies to expedite customs procedures. The Technical Barriers

to Trade (TBT) Agreement promotes regulatory convergence and mutual recognition to facilitate trade in AI-related goods. The TRIPS Agreement and the multilateral IP system that it has created provide the legal framework in which IP rights support markets by making intangible assets tradable, licensable and protected internationally. Together, these agreements help create the conditions under which digital trade can develop across borders.

Building on the existing WTO framework, in 2024 a group of WTO members concluded negotiations of the Agreement on Electronic Commerce (ECA). This agreement establishes baseline digital trade rules to address fragmentation in digital trade regulation by creating common disciplines that facilitate cross-border digital trade, foster an open digital environment and promote trust in online transactions. Its provisions include commitments related to electronic transactions frameworks, paperless trading, online consumer protection and protection of personal data, and a permanent ban on applying customs duties on electronic transmissions. Although consensus on incorporating the ECA into the WTO framework has not been reached, the agreement demonstrates that there is interest in addressing some of the regulatory challenges posed by digitalization.

(iii) The rapid evolution of the digital and AI economy is outstripping existing WTO disciplines

Although WTO agreements remain relevant, the rapid evolution of the digital and AI economy exposes areas where existing disciplines provide only partial guidance. These new challenges relate to the need both to address new pecuniary and non-pecuniary cross-border spillovers and to enhance cooperation to capture coordination gains.

One challenge is to capture the potential gains from further cooperation by extending the coverage of digital trade-related commitments.

The examination of specific commitments under the GATS in sectors relevant to e-commerce (i.e., digitally enabled and enabling services, as well as services sectors like distribution that are relevant for the online sale of goods) show that members have so far made uneven use of GATS commitments to reduce trade barriers or to bind existing levels of openness through commitments. It is important to note that most services commitments reflect negotiations concluded almost 30 years ago, before e-commerce became a major component of the global economy. At that time, services were predominantly traded via commercial presence (mode 3 of the four modes of supply of services under the GATS);⁴¹ since then, the digital transformation has increasingly been making cross-border service trade (mode 1) possible (WTO, 2019). This gap in the coverage of e-commerce in services has been opening up opportunities for new potential reciprocal market access bargaining.

Another challenge is to realize the gains from deeper integration, by cooperating on complex regulatory issues at the multilateral level. As digital trade increasingly depends on domestic regulatory frameworks governing data flows, privacy, cybersecurity, consumer protection and digital competition – issues that often entail important cross-border non-pecuniary spillovers – effective international cooperation increasingly requires coordination over domestic regulation rather than simply reducing border barriers. Interoperability is relevant for data governance, e-transactions and e-payments and digital trade facilitation (e.g., through single windows, or single data entry points for traders). Negotiating over regulations is qualitatively more complicated and politically more sensitive than negotiating tariff schedules, because it touches

directly on domestic policy, potentially raising issues of sovereignty, in ways that border measures may not (Staiger and Sykes, 2021).

A further challenge is to address digital and AI-related inclusiveness issues that require greater coherence between trade policy and other policy domains.

AI has important implications for inclusiveness, understood as the ability of economies and individuals to participate in and benefit from trade. Unequal access to digital infrastructure, skills, data and computing capacity can affect both the distribution of trade gains and the practical value of existing trade commitments. Furthermore, because of network externalities (whereby a product or service becomes more valuable as more people use it), digital markets may be more prone to global “winner-take-most” dynamics, where a single platform captures nearly the whole market. This can create new cross-border policy spillovers, as the conduct and regulation of large digital firms in one jurisdiction can affect market conditions in others through these network externalities. The global reach of these firms, and the implications for market access of how competition law and digital regulation are applied to them, have therefore made competition-related policies increasingly relevant to trade (WTO, 2018; 2025). These challenges matter for the WTO's ability to deliver broad-based benefits, but they cannot be addressed through trade policy alone. As discussed in the 2025 *World Trade Report* (WTO, 2025), such challenges require a “trade and” approach that strengthens coherence between trade policy and policies on competition, innovation, education, infrastructure and labour market adjustment.

The rise of AI is itself intensifying some of these challenges, while also creating a number of new challenges. These new challenges range from interoperability and accountability to strategic issues.

First, as with other technologies, interoperability problems arise when AI models, platforms, data systems and applications cannot communicate or exchange information with each other or be easily substituted for one another. This makes it harder to combine data or transfer it between systems. In addition, economies may have different documentation, testing, risk management and conformity assessment requirements, which may oblige firms to repeat

essentially similar assessments for each jurisdiction. Economically, limited interoperability can produce vendor lock-in, i.e., once a firm has adapted its data, software, workforce and business processes to one platform, switching providers becomes costly. This can weaken competition, reinforce the position of large incumbent platforms and make it harder for smaller firms or foreign suppliers to enter the market. It can also fragment markets. Developers may have to produce separate versions of the same service for different platforms or jurisdictions, raising fixed costs and preventing AI services from scaling internationally. A lack of interoperability can also contribute to the risk of over-dependence on a single source for economies that are importers of AI services. International standards can help to promote interoperability by providing common specifications for data quality, system lifecycles, evaluation and governance, thereby reducing trade barriers without requiring economies to adopt identical regulations. The WTO is not a standard-setting organization, but it can help with coordinating policies across jurisdictions (see Section B.2 in Chapter B).

Second, AI creates new IP challenges. Existing TRIPS disciplines were developed around human authorship and invention and do not resolve questions relating to ownership of AI-generated outputs, the use of copyrighted material in training datasets or the patentability of AI-assisted discoveries.

Third, AI creates new accountability issues. AI safety and algorithmic accountability are emerging regulatory priorities with genuine cross-border dimensions. An AI system developed in one jurisdiction can cause harm across many others simultaneously and continue to evolve autonomously after deployment, creating non-pecuniary spillovers that are difficult to attribute, contain or address (WTO, 2025).

Finally, AI has raised the perceived economic and security value of the sectors that contribute to its development – especially semiconductors, computing infrastructure and critical minerals. AI-specific industrial policy, such as large-scale public subsidies for AI development, or export controls of advanced semiconductors and chips, represents a new dimension of strategic trade intervention.

Efforts at the regional level offer a partial response to these challenges. RTAs and digital

economy agreements provide example of cooperation for digital rule-making and AI cooperation. Since January 2020, about 60 agreements containing e-commerce or digital trade provisions have been signed.⁴² Digital trade commitments have evolved from a few provisions scattered throughout RTAs into standalone substantive chapters, separate from the services and investment chapters, including specific provisions requiring cross-border data flows for digital trade, with exceptions for privacy, security or public policy objectives, and exemptions, most notably for government procurement. In addition, increasingly agreements include provisions on aspects that transcend traditional digital trade rule-making, such as AI, competition policy related to the digital economy, digital identities and digital inclusion, as well as fintech (i.e., digital payments, online banking and investment tools) and lawtech (i.e., digital tools that apply to the delivery of legal services) cooperation, standardization, interoperability or mutual recognition regarding electronic means (Burri, Callo-Müller and Kugler, 2024). AI-specific provisions remain relatively rare. As of September 2025, only 2 per cent of RTAs and digital economy agreements incorporated explicitly AI-related provisions (WTO, 2025). These provisions generally take the form of best-endeavour clauses (i.e., which require parties to do everything possible to achieve the relevant result) or recognition statements encouraging the development of governance frameworks to promote the trusted, safe and responsible use of AI (WTO, 2024b).

It is important to note that these regional initiatives appear to complement rather than replace multilateral cooperation. The OECD Index of Digital Trade Integration and Openness (INDIGO), covering 193 economies since 2000, estimates that the world economy is just 8.5 per cent of the way toward what could be considered full global digital trade integration and openness (OECD, 2026). Most existing integration stems from multilateral WTO initiatives – including the Telecommunications Reference Paper,⁴³ the Information Technology Agreement,⁴⁴ the e-commerce moratorium (which expired in 2026)⁴⁵ and the Trade Facilitation Agreement (TFA)⁴⁶ – while RTAs account for only around 10 per cent of integration. This suggests that multilateral cooperation remains the main driver of digital trade integration. Rather than competing with multilateralism, regional and plurilateral initiatives could therefore reinforce multilateral discussions

by providing practical experiences that could inform broader rule-making.

(iv) The significant costs of uncoordinated digital trade and AI policies

The benefits of fostering cooperation on digital- and AI-related trade issues are substantial. Cooperation can reduce policy uncertainty and avoid the costs of fragmented digital markets. Greater technical and regulatory interoperability can lower the costs of adapting data, models and applications to different platforms and jurisdictions, reduce vendor lock-in, and make it easier for firms to switch providers or operate across markets. International cooperation on data privacy could also help to prevent a race to the bottom through regulatory competition, in which governments weaken domestic regulation to attract or retain economic activity (Goldfarb and Trefler, 2019). Moreover, privacy, cybersecurity and other digital regulations can generate non-pecuniary cross-border spillovers that do not operate through prices and are distinct from the pecuniary spillovers underlying regulatory competition (Bagwell and Staiger, 2001), creating additional grounds for cooperation over regulatory measures. Cooperation could also help to contain costly subsidy races in strategic sectors and reduce the risk of tit-for-tat restrictions on critical minerals, semiconductors and other essential inputs. By improving transparency, promoting interoperability and managing strategic dependencies collectively, economies could strengthen resilience and preserve legitimate regulatory objectives without unnecessarily distorting competition, fragmenting markets or intensifying geopolitical tensions.

The economic costs of insufficient international cooperation are measurable. Recent evidence illustrates both the potential gains from policy coordination and the costs of fragmentation. A joint OECD-WTO report (2025) finds that global approaches combining open data flows with appropriate safeguards could increase global exports by 3.6 per cent and GDP by 1.8 per cent. The gains are particularly meaningful for low-income and lower middle-income economies, exceeding 4 per cent of their GDP. By contrast, full data fragmentation (“data autarky”) could reduce global GDP by 4.5 per cent and exports by 8.5 per cent, while unrestricted data flows without safeguards would also lower global GDP and exports by eroding trust. Fragmentation along geoeconomic blocs would likewise impose significant economic

costs, exceeding 1 per cent of global GDP. These findings suggest that global solutions to data flow issues balancing openness with safeguards yields the strongest economic outcomes.

The contrast between the potential economic benefits of cooperation and the institutional difficulty of achieving consensus illustrates one of the defining governance challenges of the digital economy. Preserving the benefits of openness while addressing the cross-border spillovers generated by digital and AI-related unilateral policies requires that international cooperation moves beyond mere commitments in traditional border measures. Digital transformation and AI innovation and development require cooperation over domestic regulation. Consensus-based negotiations among a diverse WTO membership become more complex. But this complexity does not eliminate the need for multilateral cooperation, as the pecuniary and non-pecuniary spillovers that digital and AI transformation entail are global.

(c) Environmental transformation and the transition to net zero emissions

The importance and scope of environmental policy have changed dramatically since the WTO was established in 1995. Environmental policy actions have grown in response to the triple challenge of climate change, pollution and biodiversity loss. Climate change has gained prominence on WTO members’ policy agendas due to rising awareness and fast-approaching emission reduction targets under the Paris Agreement (OECD et al., 2024). As of 2025, over 90 per cent of the 195 parties to the Paris Agreement have adopted quantified emission reduction targets, and more than 95 economies have announced net zero pledges, covering over 85 per cent of global energy-related CO₂ emissions. Such pledges have translated into concrete policy measures. For example, in 1995 the share of global greenhouse gas emissions (i.e., emissions of gases that trap heat in the atmosphere, such as CO₂) covered by either emission trading or carbon taxes stood at 0.7 per cent, while by 2025 this share had climbed to 28 per cent.⁴⁷

Global emissions remain far above reduction targets, and so environmental policy actions are expected to increase in the future. Although many economies have adopted increasingly ambitious intermediate and long-term targets on

climate mitigation, the International Energy Agency (IEA) estimates that current policies and projected emissions trajectories remain significantly off track from pathways consistent with limiting global warming to no more than 1.5°C by reducing greenhouse gas emissions (IEA, 2025) (see Figure C.8 for three possible global warming scenarios).

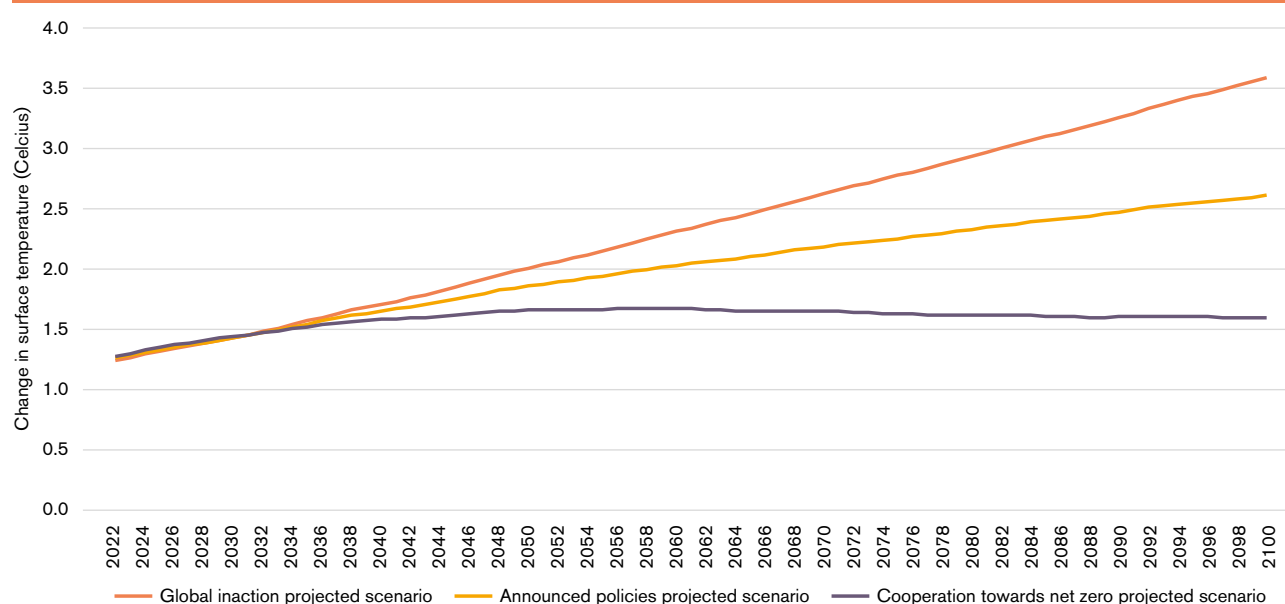
As environmental policy actions have increased, so have the number of environment-related notifications at the WTO. WTO agreements require members to notify the WTO when they adopt new measures or change existing ones that could affect trade. From 2009 to 2024, members notified more than 7,000 climate-related measures to the WTO, with the number of measures increasing by 40 per cent after 2017. Roughly two-thirds of these measures pursue the objectives of energy conservation and the transition to alternative and renewable energy (see Figure C.9). WTO members rely on support measures to advance their climate-related objectives along with technical regulations and conformity assessment procedures. Export and import restrictions are also used. The economic sectors mostly affected by these measures are manufacturing, energy, chemicals and agriculture.

(i) Interaction between environmental and trade policies

WTO rules prevent the misuse of environmental measures for protectionist purposes while preserving policy space for environmental action. As is the case with other policies implemented in pursuit of legitimate societal objectives, WTO members remain free to adopt environmental measures at the level of protection they consider appropriate, even when such measures may significantly affect trade, provided in particular they are not applied in a manner that results in arbitrary or unjustifiable discrimination or constitutes disguised protectionism. WTO jurisprudence has consistently confirmed members' right to pursue legitimate environmental objectives, while ensuring that such measures remain coherent, proportionate and non-discriminatory (WTO, 2020a). In this sense, the WTO framework preserves policy space for environmental action and prevents the misuse of environmental measures for protectionist purposes, thereby supporting predictability and cooperation in international trade relations.

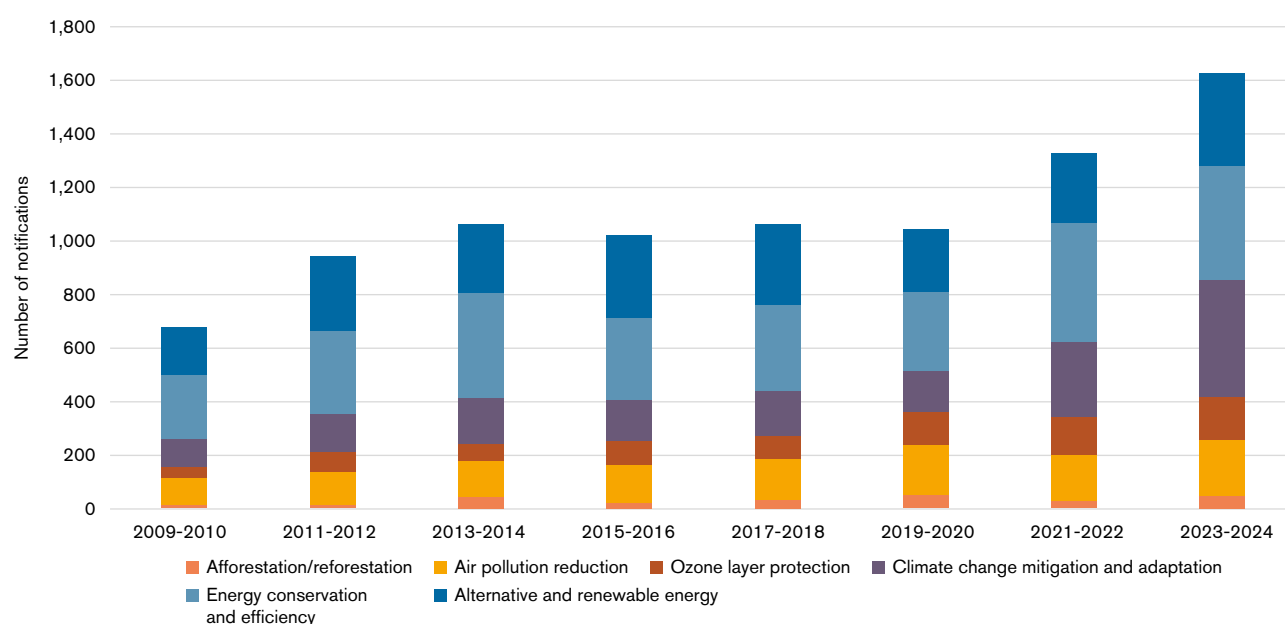
Fundamentally, both trade policy cooperation and climate change policies aim at addressing

Figure C.8: Without international cooperation, global warming is projected to continue increasing



Source: Adapted from Bekkers, Kalachyhin and Teh (2025).

Note: In the "global inaction" projected scenario, economies do not take further action toward reducing their CO₂ emissions. In the "announced policies" projected scenario, economies independently undertake actions to mitigate their carbon emissions, resulting in varying levels of climate ambition across nations. In this scenario carbon prices are set at a level that targets emission reductions announced in the nationally determined contributions until 2030, after which carbon prices follow a linear growth trajectory until 2050. In the "cooperation towards net zero" projected scenario, economies cooperate to tackle climate change and reach net zero emissions by 2050.

Figure C.9: Environment-related notifications to the WTO have more than doubled

Source: WTO Secretariat calculations based on WTO Environmental Database.

Note: The data are based on environment-related notifications submitted by WTO members pursuant to the transparency requirements of the WTO agreements. Data have been aggregated into two-years periods to reduce year-on-year fluctuation caused by the biennial nature of notifications of the Agreement on Subsidies and Countervailing Measures.

cross-border spillovers. However, the nature of these spillovers differs importantly across the two domains, and, if policies are uncoordinated, they can act at cross purposes. As discussed previously, WTO rules exist in large part to guide governments away from policy choices that may harm their trading partners. In a similar way, climate policies are an effort to guide choices that ultimately determine the carbon footprint of economic activity. A key difference is that WTO rules primarily address pecuniary (price-based) spillovers arising from trade policies, whereas carbon emissions into the atmosphere create a negative spillover that is not automatically transmitted through prices (a non-pecuniary spillover). Therefore, there need not be tension between these frameworks, even if in some cases, such as global trade in electric vehicles, policymakers have to deal with a confluence of environmental, trade policy and other spillovers (Barwick et al., 2026; Staiger, 2022; see also Becko and Costinot (2026) for a unified treatment of these spillovers in the context of trade agreements).

Some measures that advance environmental objectives may generate positive global environmental spillovers as well as reshape

trade flows and affect competitiveness. The scale of the gap between actual and desired emissions, and other broader environment goals, implies that economies will be required to implement a wide range of transformative policies impacting almost all areas of economic activity to achieve these goals (UNEP, 2023). The policy mix includes environmental tax and pricing systems, regulations and standards, trade facilitation, subsidies, tariffs and quantitative restrictions (see Box C.2). Some of these policies, especially when applied on a large scale and by large economies, may have trade effects that create negative cross-border spillovers and alter the value of WTO market access commitments. For instance, production subsidies to support green technologies can generate positive spillovers by increasing the innovation and adoption of green technologies and contribute to lower global greenhouse gas emissions (WTO, 2023c). At the same time, however, subsidy-driven shifts in trade patterns can create systemic negative spillovers that give rise to frictions between trading partners, particularly when subsidies are perceived to affect competitiveness, technological leadership or the fairness of market conditions. Similarly, climate policies operationalized through

price-based and other measures, such as regulations and standards, can be globally beneficial by helping internalize the negative externalities from greenhouse gas emissions. However, if certain jurisdictions adopt more ambitious climate measures than other jurisdictions, this can alter the balance of market access commitments.

Moreover, carbon taxes can give rise to carbon leakage problems and trigger carbon border adjustments. The basic economic logic of the carbon leakage problem and attempts to address it with border carbon adjustments can be understood in two steps with a simple example. First, an economy imposes a carbon tax on its domestic producers at a level calibrated to reach its emission reduction objectives over a set timeframe. This tax has no

direct effects on foreign exporters' market access to this economy, because the tax is imposed only on domestic producers. However, the carbon tax may distort the balance of market access commitments indirectly, as it can cause domestic production costs to increase relative to the production costs of foreign exporters, with the latter becoming more competitive in the economy's market. Hence, the imposition of this carbon tax worsens the conditions of competition for domestic producers relative to foreign exporters, and can potentially lead to carbon leakage, especially if carbon taxes are absent in other jurisdictions and carbon-intensive production moves from this economy to other economies with low carbon taxes (WTO, 2023c). Second, the economy imposing a carbon tax may react to the loss of competitiveness

Box C.2: Environmental policy instruments

A growing number of economies are using trade-related policies to address climate change.

Economies can draw upon a mix of different policy instruments, including environmental tax and pricing systems, regulations and standards, subsidies and quantitative restrictions (Stiglitz et al., 2017). The experiences of WTO members show that a range of policies can be relevant, spanning trade facilitation, regulations, government procurement, services and tariffs, amongst others (WTO, 2023b; 2024a).

Carbon pricing, which places a cost on emitting greenhouse gases, is typically the most cost-efficient solution, as a single carbon price incentivizes economic agents to adopt the emissions-reduction solutions with the lowest abatement cost (i.e., the cost of an intervention that can reduce emissions by one tonne) until marginal abatement costs are equalized. Carbon prices can be introduced directly via a carbon tax or indirectly through an emissions trading scheme.

The second approach – regulations and standards, or non-price-based measures – is widely used to advance environmental goals, including to overcome market failures and deal with circumstances where responsiveness to price signals is weak. Effective regulations and standards create demand signals for low-emissions materials and products, helping to scale green markets and supporting green procurement (OECD, 2022). WTO notification data reveal that regulations and standards are the most frequently applied type of trade-related measure used to address environmental objectives.⁴⁸

Complementary and framework policies are the third component of a comprehensive policy mix. These include policies that provide enabling conditions by lowering the economic and social costs of decarbonization. They fall into two broad categories: measures to accelerate the development and deployment of new green technologies, such as subsidies and upgrading infrastructure networks; and policies to address the distributional effects of climate policies, such as revenue recycling, social transfers and just transition programmes. With revenue recycling, the proceeds of policies like carbon prices can be rebated to the public through income transfers and social supports. Just transition policies can support the retraining and reallocation of workers in shrinking carbon intensive industries into new industries.

Subsidies designed to promote environmental policy goals are expected to grow substantially and have the potential to shape global trade. Estimates place the scale of government support for renewable power among G20 economies at over US\$ 160 billion in 2023. This is expected to double by 2030 (Laan et al., 2024). According to OECD data, the production of solar cells and modules was one of the most subsidized sectors over the period 2005-24, with subsidies amounting to over 3 per cent of firm revenue (OECD, 2026).

by implementing a border carbon adjustment that extends its carbon tax regime to imported products and eliminates the risk of carbon leakage. The economy might also exempt its exported products from the regime, in effect converting the carbon tax on its producers into a carbon tax on its consumers.

Discussions in WTO bodies illustrate a wide range of views among members on border carbon adjustments and their impact on trade.

For example, some members consider that border carbon adjustment measures are trade-restrictive and run counter to WTO principles, and some also mention the need to consider the principles of the United Nations Framework Convention on Climate Change (UNFCCC). Other members consider them to be legitimate policy tools to address carbon leakage (WTO, 2023b).⁴⁹

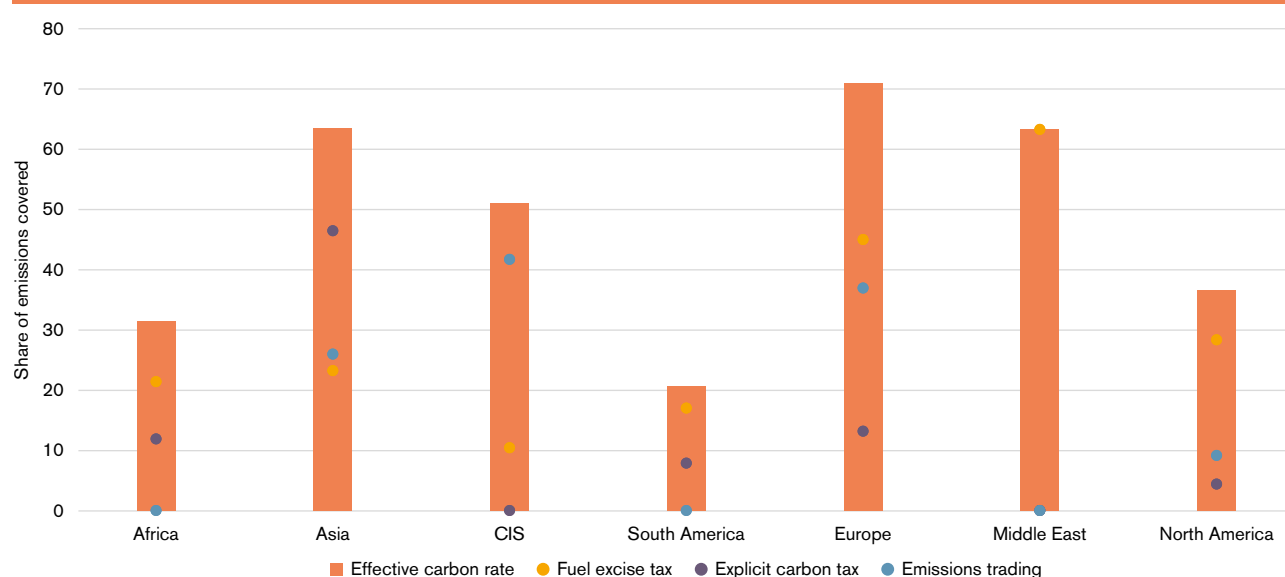
Implementing border carbon adjustment measures also involves a host of design questions. Designing a border carbon adjustment mechanism raises important questions on sectoral coverage, country coverage and how to measure emissions, as well as how to account for carbon mitigation policies in foreign economies (WTO, 2022c). The lack of information on the carbon intensity of production is a practical barrier to implementing border carbon measures while also satisfying MFN

commitments. Information gaps could arise in relation to price matching of carbon costs or carbon content matching of production emissions. In both cases, there is a wide array of economy-specific and product-specific prices that could make up a border carbon adjustment tax schedule. This reflects the wide range of carbon intensities of production, explicit carbon taxes and effective carbon rates across economies, all of which also vary over time (see Figure C.10). However, the potentially significant difficulties relating to primary data collection in many economies, especially in developing economies and LDCs, could result in reliance on average economy-level calculations. In turn, such an approach could be to the disadvantage of more environmentally efficient producers located in relatively more carbon-intensive economies where firm-level data cannot easily be demonstrated or verified. As a result, products with comparable carbon content, but originating from different economies, could face different import charges.⁵⁰ Equally, this information barrier could lead to differential treatment of domestic and foreign goods of the same carbon intensity.

(ii) Environmental policy and transparency at the WTO

Trade and environmental sustainability have been embedded in the WTO's architecture and work since its establishment. The preamble to

Figure C.10: Carbon pricing policy instruments and their coverage vary by region



Source: Adapted from OECD (2025a).

Note: The Effective Carbon Rate (ECR) is the sum of fuel excise taxes, carbon taxes and tradable emission permits.

the Marrakesh Agreement establishing the WTO refers to “the optimal use of the world’s resources in accordance with the objective of sustainable development” as a central principle, while the ministers in Marrakesh also established the Committee on Trade and Environment (CTE) to examine the relationship between trade and environmental policies. Article XX of the GATT (“General Exceptions”) allows WTO members to seek the justification of GATT-inconsistent measures if these are necessary to protect human, animal or plant life or health, or if the measures relate to the conservation of exhaustible natural resources.

The regular work of the CTE, as well as the work of member-led initiatives, seeks to respond to the challenges and opportunities that may arise from the interaction of environmental and trade policy. The CTE focuses on the impact of trade policies on the environment and of environment policies on trade through multilateral dialogue and cooperation. One example from the recent work of the CTE is in the area of methodologies for measuring emissions that are the basis for trade-related climate measures, such as border adjustment mechanisms, green procurement or product labelling. Since 2025, the CTE has been working to promote transparency and interoperability and to address development aspects of trade-related climate measures and carbon standards.⁵¹ A voluntary information-sharing exercise on trade and climate measures was launched on a pilot basis in 2026. Other topics of discussion include energy transition, sustainable agriculture and the transfer of environmental technology. The TBT Committee and the CTE are platforms to support regulatory cooperation in this area, including on topics like decarbonization standards, lithium-ion batteries, climate change and buildings, clean energy and biofuels. Since 2021, and as a complement to the CTE, a series of member-led environmental initiatives – namely, the Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade (DPP), the Trade and Environmental Sustainability Structured Discussions (TESSD), and the Fossil Fuel Subsidy Reform (FFSR) initiative – have addressed specific topics at the intersection of trade and environmental protection. Most recently, in 2026, the WTO Agreement on Fisheries Subsidies, the first WTO agreement with sustainability at its core, came into force.

(iii) Aligning trade and environmental policy

Trade policies can be designed to promote trade that helps achieve environmental goals. Currently, tariff and non-tariff barriers tend to be

lower in carbon-intensive industries than in clean industries (Shapiro, 2021), and indeed, carbon-intensive goods tend to be traded more than less carbon-intensive ones (Le Moigne and Ossa, 2021). Members have a range of opportunities to reorient their trade policies to promote cleaner production and consumption (WTO, 2023b; 2023c). Some WTO members are already using trade policy tools like tariff rebalancing or trade facilitation measures as a means for achieving their climate targets.

International trade can have direct benefits on the environment by improving efficiency.

International trade can increase the scale and diffusion of environmental technology, as well as facilitate indirect benefits by improving incomes and living standards, which increase the resources that can be used to support environmental goals and adaptation (Copeland and Taylor, 2004; WTO, 2023c). Reaping the benefits of trade in supporting environmental goals depends in part on stemming further fragmentation related to trade and environmental policies.

A reorientation of global production in favour of the least carbon-intensive producer would reduce global emissions and could be greatly facilitated by a well-functioning trading system.

An important benefit would come through a “green comparative advantage”, whereby economies’ trade specialization re-orientates to include their carbon intensity of emissions with production expanding in the least carbon-intensive locations. Estimates indicate that the environmental gains from trade account for over 10 per cent of the greenhouse gas emissions reductions brought about by a global carbon tax (Le Moigne et al., 2026). Some developing economies and LDCs with a strong renewable energy potential and critical mineral endowments are well positioned to leverage a “green comparative advantage” and integrate into emerging decarbonized value chains (WTO, 2023). Conversely, trade policy fragmentation would mute benefits from green comparative advantages and the associated inclusion opportunities.

International cooperation around emission measurement standards, including within the WTO framework, can help to minimize trade costs associated with diverse climate policies.

Regulatory cooperation-building on WTO principles and guidance (such as the 2024 TBT Committee guidelines on conformity assessment procedures)⁵²

could help to support recognition of different methodologies, standards and approaches, thereby lowering transaction costs.

Greater international cooperation on transparency and the interoperability of environmental measures can reduce unnecessary trade costs, prevent policy fragmentation and enhance the effectiveness of environmental policies. Improved cooperation and coordination can also facilitate a better understanding of the rationale, implementation and enforcement of environmental measures, while reducing uncertainty for producers and exporters operating across multiple jurisdictions. In this context, international cooperation and coordinated trade approaches can play an important role in reducing unnecessary frictions, addressing cross-border spillovers, supporting a more cost-effective and inclusive decarbonization process, and harnessing the benefits of international trade to accelerate the global green transition.

(iv) The costs of uncoordinated environmental policy

Uncoordinated environmental policies risk slowing down the green transition and impacting trading partners. While environmental policies are important tools to protect the environment and accelerate the green transition, a lack of coordination in their design and implementation can reduce their effectiveness and create significant trade-related spillovers. Divergent carbon pricing schemes, subsidies, standards and border adjustment measures can increase compliance costs, disrupt supply chains, distort competitiveness and disproportionately affect smaller firms and developing economies. Such measures have increasingly given rise to trade concerns in WTO bodies, with concerns including effects on market access or uncertainty for exporters (see Figure C.11). Uncoordinated approaches could also invite retaliatory measures, subsidy races and broader trade tensions, with potentially adverse implications for global welfare, international cooperation and the predictability of the multilateral trading system (WTR, 2023b).

Inconsistencies between trade and environmental policy could undermine policy effectiveness. As already noted, environmental policy is much more prominent and economically consequential today than at the inception of the WTO in 1995. A failure to coordinate trade and

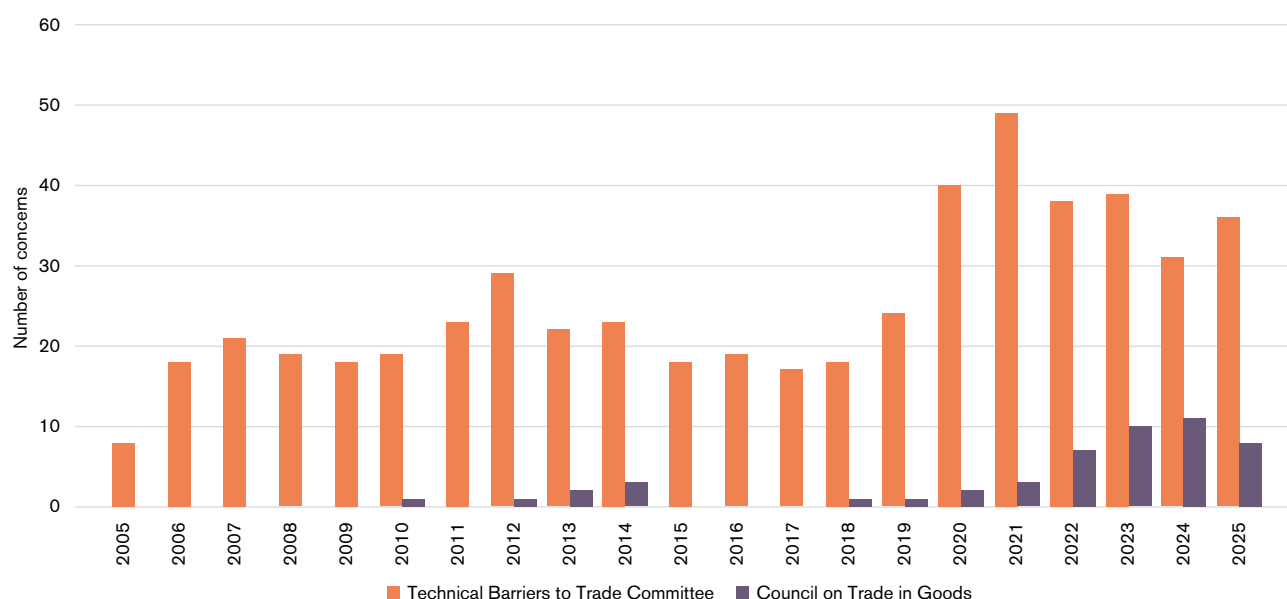
environmental policies risks significantly undermining the potential gains, whereas an open trading system can substantially enhance the effectiveness of environmental policy. For example, Le Moigne et al. (2026) show that a global carbon tax would induce firms to shift sourcing towards less carbon-intensive producers, allowing economies with lower-emission production methods to expand their exports.

4. Geopolitical tensions and the transition to a multipolar global economy

Global economic integration has led to more specialization, interdependence and complexity. Finer specialization within GVCs has concentrated the production of certain goods, especially parts and components, in a few locations. The number of potential bottleneck products – the majority of which are electronics and electronic inputs, such as cell phones and semiconductors, critical minerals such as rhodium and lithium, and agricultural goods such as soybeans and sunflower – more than doubled between 2000 and 2024 (UIBE et al., 2025; Bruno and Cipollina, 2026). This interdependence has also magnified the potential cross-border spillovers of trade policies. Trade policy mattered much less for the domestic economy in 1995 when the average ratio of trade to GDP was 43 per cent, than in 2025 when the ratio was 68 per cent.⁵³

Moreover, a series of global shocks and geopolitical tensions has recast interdependence as a security issue. Major shocks to the global economy, such as the COVID-19 pandemic and the war in Ukraine, have underlined concerns about the reliability, resilience and security of complex global supply chains. In addition, concerns about how dependence on foreign suppliers in strategic sectors can be exploited as geopolitical leverage have led to an increase in the prominence of security considerations in trade policymaking. At the same time, the proliferation of potentially dual-use technologies (i.e., technologies that can have both civilian and military uses) has steadily broadened the definition of what constitutes a strategic sector, prompting governments to pursue a broad set of protective measures on imports, exports and investment. The rise and persistence of trade barriers between the world's largest economies have catalysed a decoupling of trade flows between them.

Figure C.11: Trade concerns raised on measures to protect the environment have increased



Source: WTO Secretariat calculations based on WTO Trade Concerns Data Portal and analysis from Santana and Dobhal (2024) updated to the most recent years.

Note: The figure shows the number of concerns raised in the Technical Barriers to Trade (TBT) Committee on measures motivated by environmental protection and the number of concerns raised in the Council on Trade in Goods on measures related to environmental protection.

Global trade is increasingly sensitive to “geopolitical distance”, challenging multilateral cooperation in favour of a more fragmented global economy, where trust in trading partners increasingly shapes policy and business decisions. The economic costs of fragmentation are projected to be high, and place a disproportionate burden on small, open economies.

(a) Concerns about interdependence and production concentration

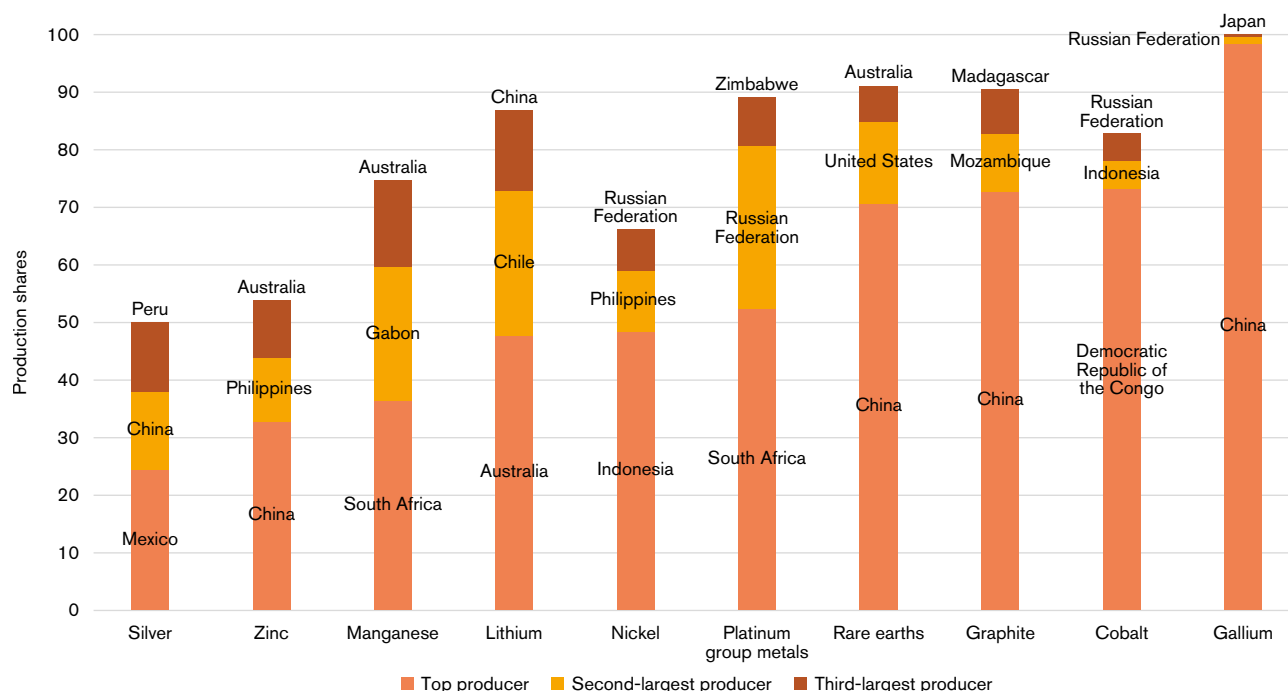
High concentration in certain sectors can turn local supply disruptions into wider economic and security risks. Policymakers are increasingly concerned that deeper interdependence could also create economic security risks. In some sectors, production is concentrated in only a few economies, often because of comparative advantages and economies of scale. The security concern is especially relevant for strategic sectors such as semiconductors and critical raw materials. According to OECD data, just five economies account for 75 per cent of value-added in the semiconductor industry, and four of these are in East Asia (OECD, 2025b). Similarly, for four types of critical minerals, the largest producer accounts for more than 50 per cent of global production, as shown in Figure C.12. These sectors

are also very far upstream, meaning that many other sectors use them as inputs, either directly or indirectly. As a result, a disruption in one or a few locations can lead to profound economic and security impacts that may affect sectors directly linked to national security, such as defence, food supply, energy systems and critical infrastructure, especially in the absence of short-term supply substitutes.

Increased geopolitical tensions and the expansion of potential dual-use technologies have further magnified trade-related national security concerns. Security concerns have become more relevant as geopolitical competition has intensified. Policymakers increasingly view economic interdependence as a potential source of strategic vulnerability, as reliance on foreign suppliers in strategic sectors may create leverage for foreign actors (Hirschman, 1980; Farrell and Newman, 2019; Clayton, Maggiori and Schreger, 2026). Compounding these dynamics, the definition of strategic sectors has broadened over time as digital and emerging technologies, such as AI, develop dual-use applications (Alekseev and Lin, 2026).

Various policies motivated by security and geopolitical considerations have expanded

Figure C.12: The production of several types of critical minerals is geographically concentrated



Source: WTO Secretariat calculations based on US Geological Survey (2017).

Note: The figure shows the production shares of the top three producers for selected critical minerals.

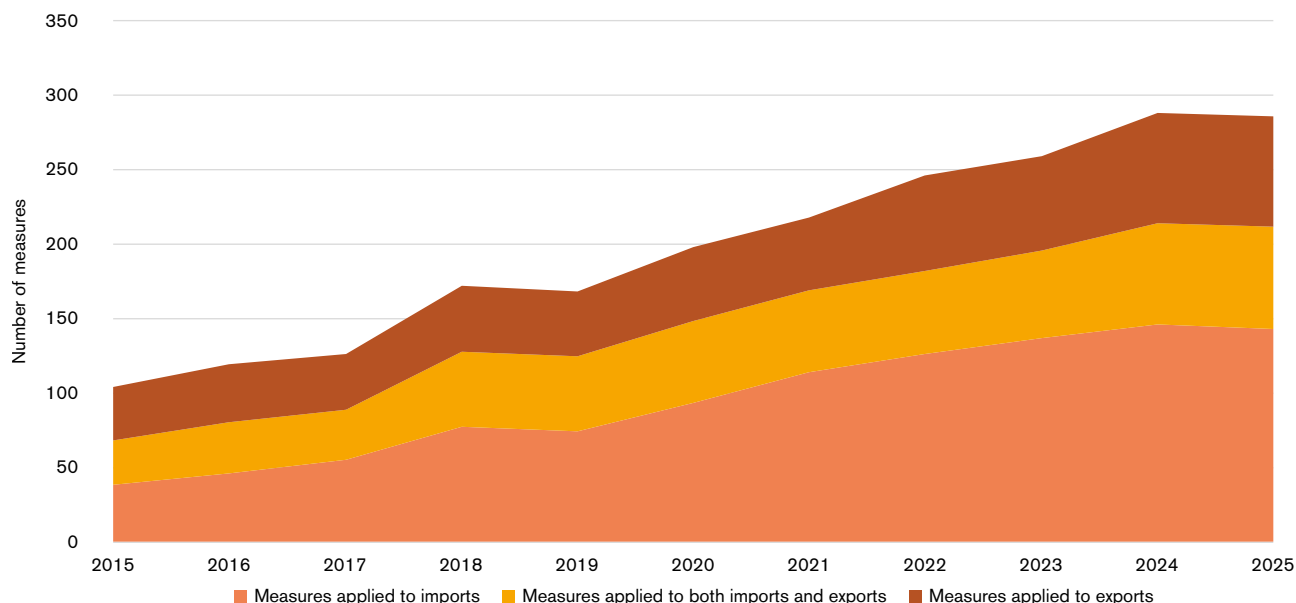
in response. Traditionally, industrial policy has been used to mitigate the decline of industries and associated labour market disruptions, and to develop capabilities in sectors with potential future economic importance or broader economic benefits. More recently, though, industrial policy has increasingly aimed to reduce dependence on foreign suppliers of strategic goods – particularly those from geopolitical competitors – to diversify supply sources and to maintain technological leadership in strategic technologies (Bown, 2024). Implemented industrial policy tools include subsidies, export controls and targeted trade deals (sectoral or otherwise limited trade agreements that are often focused on addressing non-tariff barriers through soft law provisions),⁵⁴ as well as other industrial policy instruments. Concerns about strategic dependence being exploited have contributed to the development of unilateral trade instruments.

Consistent with these trends, the number of quantitative restrictions notified under the security exception has increased over the last decade. Although Article XI:1 of the GATT provides for the general elimination of quantitative restrictions, members are allowed to introduce or maintain them

in a limited number of circumstances as exceptions. WTO rules acknowledge members' right to adopt necessary measures to protect national security, as reflected in the national security exception under GATT Article XXI. To enhance transparency, all members are required to notify prohibitions and other restrictions that they introduce or maintain on their trade in goods, including their legal justification. Figure C.13 shows that the number of quantitative restrictions, such as import or export controls and prohibitions, notified under the national security exception, has almost tripled over the last decade.

Targeted trade deals are becoming an increasingly prominent feature of the trade policy landscape to address resilience and security concerns. Agreements that are sectoral or otherwise limited in scope or coverage have become a more frequent instrument to address resilience and security concerns. For instance, the number of economy pairs connected through such targeted trade deals in the digital area has increased by a factor of 35 since 2019, and 80 per cent of targeted trade deals on critical minerals were signed between 2022 and 2024. Most critical mineral agreements involve a resource-rich economy and are intended

Figure C.13: Quantitative restrictions notified under the security exception have increased (2015-25)



Source: WTO Secretariat calculations based on WTO Quantitative Restrictions Notification Data Portal (<https://qr.wto.org/en/notifications>).

Note: This figure reports the number of quantitative restrictions in force notified to the WTO under GATT Article XXI.

to open new sourcing relationships to diversify supply of key inputs (UIBE et al., 2025). However, these agreements also raise concerns related to transparency and coordination (see Section B.2.(d) in Chapter B).

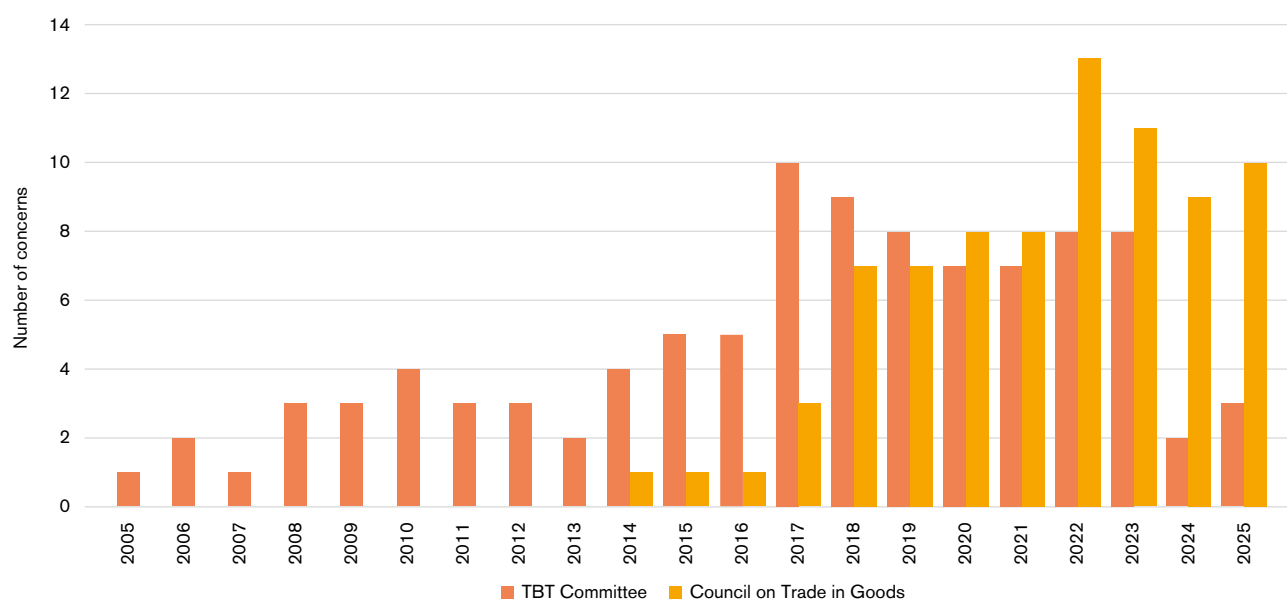
The expanding toolkits of national policies point to the need to clarify the nature of the flexibilities to address security concerns that are consistent with preserving the benefits of a rules-based system. The balance between security concerns and the rules-based system is becoming more challenging to maintain as security-motivated policies continue to expand. When security-related trade measures restrict trade, discriminate across trading partners or favour domestic firms, they generate concerns that are voiced by members in WTO bodies. Figure C.14 shows the increasing number of concerns raised on TBTs motivated by national security requirements, as well as the increasing number of concerns raised in the Council on Trade in Goods. Several of these concerns have recently escalated to the dispute settlement system.⁵⁵

Policies introduced to increase resilience and reduce security risks can impose large economic costs and deepen fragmentation. Trade growth since 2018 between the United States and China has consistently lagged behind

the respective trade of each of these members with other partners, reflecting a decoupling of trade flows between the world's two largest economies (Blanga-Gubbay and Rubínová, 2024). The same study shows that this decoupling pattern is part of a broader shift away from trading with politically non-aligned economies in times of heightened global uncertainty. Decoupling and friend-shoring strategies may come at a significant economic cost if they further reinforce geopolitical tensions and contribute to severe economic fragmentation (Evenett et al., 2025; Gopinath, 2023).

Economic modelling suggests that the transition from a globally integrated system to a fragmented landscape would be costly. Fragmentation does not merely increase trade costs; it stifles global productivity by disrupting the international production networks that underpin the global economy. As shown in Chapter B, a “Geo-fragmented world” scenario, in which security considerations and geopolitical alignments play a central role in shaping trade policy and trade cooperation is organized around geopolitical blocs, would result in an over 5 per cent loss of world GDP. The systemic vulnerability of developing economies further underscores these risks. In a fragmented landscape split into two major geopolitical blocs and a group of “unaligned” economies that do not belong

Figure C.14: The number of concerns raised on measures taken to protect national security has increased (2005-25)



Source: WTO Secretariat calculations based on WTO Trade Concerns Data Portal and analysis from Santana and Dobhal (2024) updated to the most recent years.

Note: The figure shows the number of concerns raised in the TBT Committee on measures motivated by national security requirements and the number of concerns raised in the Council on Trade in Goods on measures related to national security or geopolitical issues.

to either bloc, IMF research indicates that the median “unaligned” economy in Asia and Africa would face real per capita income losses 80 per cent and 120 per cent larger, respectively, than those of developed economies (Hakobyan, Meleshchuk and Zymek, 2023).

These high costs signal the importance of finding the right balance for flexibilities to protect national security, while preserving the benefits of the rules-based trading system.

While this is more challenging in the current environment than at any time over the past 80 years, achieving this balance, with flexibilities that account both for the security needs of member governments and the costs imposed on trading partners when flexibilities are exercised, is precisely what the rules-based system is meant to do.

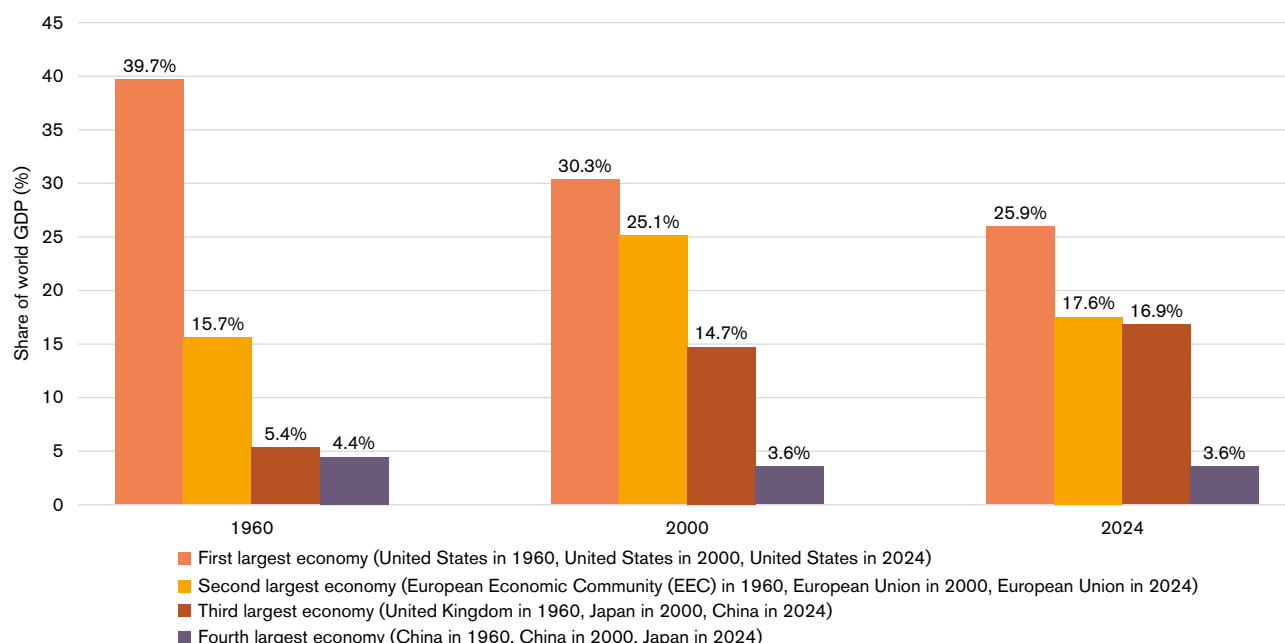
(b) The transition to a multipolar world

The rapid economic integration of the developing world over the past three decades has altered the balance of both economic and geopolitical power. While this shift reflects the successful realization of core multilateral objectives, it has produced an increasingly multipolar world.

The economic dimension of this change is evident in the distribution of world output, illustrated in Figure C.15: in 1960, a single dominant economy accounted for nearly 40 per cent of world GDP; by 2000, the second-largest economy had substantially narrowed the gap, though a notable margin to the third largest remained; and by 2024, economic size was distributed across three comparable poles. This evolution presents a new set of institutional challenges, as a system originally designed to facilitate global integration is increasingly called upon to manage the divergent interests of emerging and incumbent powers. This redistribution has been accompanied by a parallel geopolitical shift whereby the rules-based order is adapting to an environment where earlier shared security assumptions are overlaid by a more fragmented, multi-layered global hierarchy (WTO, 2023c).

According to classical “hegemonic stability” theory, a rules-based international order depends on the presence of a single dominant economy to sustain it. Such a regime constitutes an international public good, typically underprovided due to high coordination costs and a lack of enforcement (Kindleberger, 1975). A hegemon

Figure C.15: Shares of world GDP of the largest economies have shifted (1960-2024)



Source: WTO Secretariat calculations based on World Bank GDP data in current US dollars.

Note: Each cluster is a year; the four columns are the first to fourth largest economies that year. The European Union is included as a single entity with time-varying membership.

resolves this collective action problem: because it is large enough to capture benefits exceeding the costs of provision, it is rational for the hegemon to sponsor the system alone.⁵⁶ While smaller economies “free-ride” on the benefits of a rules-based system, the result is a stable order. The theory therefore predicts that liberal regimes endure only as long as a dominant power is willing to sustain them, and that erosion of the leading economy’s relative power will shift the underlying incentives for hegemonic leadership from individual sponsorship toward the challenges of collective action (Mattoo and Staiger, 2020). This pessimistic reading is echoed by historian and commentator Robert Kagan, who regards the rules-based international order that has prevailed over the past 80 years as a historical anomaly made possible by hegemonic leadership – an anomaly that may now be ending (Kagan, 2018). However, other theories suggest that international rules-based cooperation can persist after hegemonic decline (Keohane, 1984).

Emerging theories further explore the conditions under which leading economies may have incentives to overcome the collective action problem even in the absence of a hegemon. Whereas classical hegemonic stability theory emphasizes the necessity of a single sponsor,

this newer research explores conditions under which non-hegemonic actors might collectively uphold international rules as a rational safeguard against future economic volatility. Recent research by Carvalho et al. (2025) suggests that, while a hegemon is necessary to initiate a system, once it is in place its maintenance may be possible through a “strategic hedge” by non-hegemonic leading economies. These actors uphold multilateral rules to ensure against future exploitation if their influence declines – provided that they remain oriented toward the long term and that the system maintains high leadership turnover (see the opinion piece by Daniel Monte and Emanuel Ornelas). Middle powers can play a complementary role: dependent on a rules-based multilateral system for their own economic security, yet lacking the individual leverage to protect it against fragmentation, they cannot replace the leadership of a great power but can help to preserve cooperation through collective stewardship and institutional influence (Ossa, 2026).

A further challenge stems less from the distribution of economic power than from geopolitical rivalry itself. Geopolitical rivalry can undermine the logic of mutual gains at the heart of cooperative international institutions when rivals

International trade rules in a post-hegemonic world

by Daniel Monte

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Sustaining international trade rules requires more than updating provisions that may have become outdated. As Kindleberger (1975) argued, it is easier to sustain international rules when a leading economy is willing to bear a disproportionate share of the costs. But as the world becomes increasingly multipolar, incentives to remain constrained by rules have weakened, encouraging a shift toward power-based bargaining (Mattoo and Staiger, 2020). In such an environment, major economies may want rule-based constraints for others while seeking greater discretion for themselves in bilateral bargaining. This temptation to free-ride on others' compliance interacts with market power incentives, making a rules-based system difficult to sustain.

The question is therefore how to adapt the WTO to this new reality. We examine this challenge formally in Carvalho, Monte and Ornelas (2025) and in Carvalho et al. (2026).

A first response is to make the system more valuable. The key WTO principles of reciprocity and non-discrimination help governments internalize, or take into account, the cross-border consequences of unilateral trade policies, while limiting the role of bargaining power in tariff negotiations (Bagwell and Staiger, 1999). These principles must now be applied to a broader and more politically demanding set of policy problems. If WTO rules generate larger and more visible gains for both leading and non-leading economies, remaining inside the system becomes more attractive even for powerful members. Reform should therefore focus on areas where cooperation still offers large, unrealized benefits, including subsidies, industrial policy, climate-related trade measures, digital trade, and the interaction between trade and economic security.

A second response is to make the system more resilient to disruption. Our framework highlights a "Goldilocks" property of institutional stickiness. We know that rules are difficult to dismantle and rebuild;

otherwise, they would become disposable, cycling on and off as international and economic conditions shift. But if they are too costly to establish and maintain, even cooperative leaders will not invest in them. Only when maintaining and rebuilding rules is neither too cheap nor too costly can a durable rules-based equilibrium persist across changes in leadership. This has a practical implication: the WTO benefits from institutional arrangements that make rule-breaking costly and rule-rebuilding feasible but not effortless. Cooperative coalitions among like-minded members, plurilateral agreements and stronger dispute settlement mechanisms all serve this function.

A third response is more delicate: the system may need to offer additional flexibility without abandoning its core principles. This is not an argument for abandoning commitments. Our formal analysis shows that when the short-term gains from power-based negotiations are large relative to the long-term benefits from rules-based commitments, major economies may eventually become less supportive of the system. Sustainability may therefore require adjustments in the distribution of the gains from cooperation.

In sum, sustaining the WTO in an evolving global landscape requires acknowledging the new balance of economic and political forces. Rules that were self-enforcing under one configuration of global leadership may require adaptation to remain viable under another. The goal should be to reform the rules that govern the pursuit of power while giving leading economies both reasons to remain bound by them and the confidence that others will do the same in the future. The path forward lies in making the system sufficiently valuable, and resilient enough, that all major economies find it in their interest to remain bound by it.

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prioritize their strategic positions relative to one another. As Mearsheimer (2003) puts it,

“... states motivated by relative power concerns are likely to forgo large gains in their own power, if such gains give rival states even greater power, for smaller national gains that nevertheless provide them with a power advantage over their rivals”.⁵⁷

Historical evidence from the period between the two world wars suggests that multilateral frameworks can become paralyzed when states seek to use them to secure control over global resources rather than to foster cooperation (Brandtjen, 2026; Maiolo and Robson, 2025). In the 1930s, this paralysis left a vacuum in which the predictability of international law gave way to unilateral actions – retaliatory tariffs and export controls – and the volatility of geoeconomic leverage (James, 2009).

Yet history also provides examples demonstrating that cooperation can persist even during periods of intense systemic rivalry. Despite the binary nature of the 20th century Cold War standoff, the international community maintained functional channels for technical and economic coordination when interests aligned. For example, the Soviet Union remained engaged with the GATT on a technical level and participated in critical global commodity markets, such as the 1970s grain deals and the development of transcontinental gas pipelines to Western Europe. Even at the height of the Cold War, shared economic necessities kept these institutional bridges intact.

Economic theory suggests that when two states see each other as rivals, cooperating on trade can still make both of them better off, even when they take their rivalry into account. This holds as long as each government still cares at least somewhat about its own citizens' welfare. In that case, a nation can only advance its strategic goals effectively if it also keeps an eye on its own economic interests – in other words, rivalry does not erase the basic case for trade cooperation. However, the same theory suggests that reaching a cooperative outcome may require new mechanisms if geopolitical rivals are to adjust their trade relationships without imposing undue costs on other trade partners (Mattoo, Ruta and Staiger, 2024).

5. Conclusion

Over eight decades, the multilateral trade cooperation embodied in the GATT and subsequently the WTO has successfully fostered a deeply integrated, multipolar global economy. Global trade integration has distributed economic power more evenly, and has been a crucial element of economic growth. However, this very success has also contributed to multiple challenges for the rules-based system that saw its last comprehensive update 30 years ago.

The first of these challenges is the potential gap between historical legal commitments and modern economic realities. Driven by the rapid rise of emerging economies, the potential to generate cross-border trade spillovers is no longer concentrated among a few advanced nations. Because existing tariff bindings and flexibilities still largely reflect bargains struck decades ago, the system struggles to balance rights and obligations with the contemporary distribution of market power.

The second challenge the system faces concerns the growing relevance of different economic systems and government involvement in markets. Although the GATT and the WTO have experience creating instruments to address certain challenges arising from differences in economic systems and concerns related to government interventions, the scale and scope of modern industrial policies strain traditional disciplines and risk undermining trust in the ability of the rules-based system to maintain the balance of commitments.

Third, the changing nature of trade itself has shifted the frontier of international cooperation from border tariffs to domestic regulations, adding more complexity. GVCs, digital trade and the environmental transition have introduced deep structural interdependencies and new cross-border spillovers that the system must address.

Finally, these challenges are exacerbated by rising geopolitical tensions, which have altered the perceived balance between the benefits and risks of economic interdependence. As economies increasingly deploy trade measures to address national security, technological rivalry and supply chain vulnerabilities, the boundary between legitimate policy space and unilateral escape from rules becomes harder to maintain, with the emergence of geopolitical rivalry itself further complicating the picture.

Ultimately, leaving these challenges unaddressed carries a significant global opportunity cost and risks drifting away from rules-based cooperation toward less predictable and fragmented forms of governance. The results of economic modelling described in Section B.4 of Chapter B show that the benefits of enhancing multilateral cooperation could increase global income by 3 per cent, while letting

the system fragment could reduce global income by up to 7 per cent. Overall, rebalancing commitments, rebuilding trust in institutional mechanisms, advancing cooperation on more complex policies and addressing security-related concerns could help realize a scenario in which global income is 10 per cent higher than in the scenario in which challenges are left unaddressed.

Endnotes

- 1 See the Preamble of the Marrakesh Agreement Establishing the World Trade Organization, https://www.wto.org/english/docs_e/legal_e/marag_e.htm.
- 2 A study by Broda et al. (2008) identifies inverse export supply elasticities as the most direct measure of market power, noting that import shares serve as an imperfect but positively correlated proxy. However, time-varying estimates of these elasticities are unavailable. Consequently, an economy's share of world imports is used for each Harmonized System (HS) six-digit product as a proxy to capture the variation of market power over time, across economies and by product.
- 3 For example, the negotiating protocol for the Geneva (1947) Round (GATT document number E/PC/T/C. II/58, available at <https://docs.wto.org/>) describes the implications of the principal supplier rule for the organization of bargaining in the round as follows:

"Notwithstanding the multilateral character of the negotiations, it will usually be found that only two or three countries will be directly and primarily concerned in the concession on a particular product, and that the interest of other countries, although material, will be secondary. It is therefore proposed that the third stage of the negotiations will ordinarily consist of discussions on particular products between two, or possibly three or four countries. For the purpose of engaging in such negotiations, therefore, each country should to the extent practicable have separate groups of persons competent to negotiate with each of the other countries with which important negotiations are likely to be conducted."
- 4 From the standpoint of the traditional "optimal tariff" theory (Johnson, 1953), an economy that lacks market power is expected to maintain an optimal tariff of zero, as it cannot influence international prices to its advantage. In practice, however, many developing nations historically maintained elevated tariff structures to serve alternative domestic policy functions, such as securing fiscal revenue or promoting industrial growth. As noted in chapter B, the traditional optimal tariff theory can be extended to accommodate these objectives without changing the essential feature that nations with market power set tariffs that, from a global perspective, are inefficiently high in light of their underlying goals (Bagwell and Staiger, 2002b). While the terms-of-trade framework typically states that this feature arises in the presence of market power because importing governments actively manipulate world prices with their tariff choices, it could also be said that this feature arises because importing governments simply do not account for the costs that their tariff choices impose on foreign exporters through lower prices and profits (Staiger and Sykes, 2011).
- 5 A practical illustration of this problem can be found in the Environmental Goods Agreement (EGA) negotiations between 2014 and 2016. To address concerns about free-riding by major producers not participating in the talks on concessions extended on an MFN basis, China proposed a "snapback" mechanism, under which participants could reinstate their tariffs on covered goods if trade among EGA members fell below 70 per cent of global trade in those products, and if at least 3 per cent of such trade was accounted for by a WTO member not party to the agreement. The proposal sought, in effect, to convert critical mass from a one-off entry threshold into a continuing condition, making the durability of the concessions contingent on sustained participation. It was not adopted, in part because it was seen by some as cutting against the predictability that tariff bindings are meant to provide, and the question formed part of the disagreements that left the negotiations unconcluded. This episode nonetheless illustrates that the "latecomers" and free-rider problems are not merely theoretical, but are concerns with which WTO members grapple in practice.
- 6 In December 2005, when WTO members approved an amendment of the TRIPS Agreement in order to make permanent a decision on patents and public health originally adopted in 2003 (see https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm), 11 developing members indicated that they would not be using the special system of compulsory licenses as importers.
- 7 See GATT official document L/2806, available at <https://docs.wto.org/>.
- 8 See, for instance, Report of the Working Party on the Accession of China (WTO official document WT/ACC/CHN/49); Report of the Working Party on the Accession of Viet Nam (WTO official document WT/ACC/VNM/48), Report of the Working Party on the Accession of Ukraine (WTO official document WT/ACC/UKR/152), Report of the Working Party on the Accession of the Russian Federation (WTO official document WT/ACC/RUS/70), and Report of the Working Party on the Accession of the Republic of Kazakhstan (WTO official document WT/ACC/KAZ/93); WTO official documents available at <https://docs.wto.org/>.
- 9 See GATT official document L/3889, available at <https://docs.wto.org/>.
- 10 See GATT official document L/2806, available at <https://docs.wto.org/>.
- 11 See GATT official document L/3557, available at <https://docs.wto.org/>.
- 12 Protocol on the Accession of China (WTO official document WT/L/432), Report of the Working Party on the Accession of Viet Nam (WTO official document WT/ACC/VNM/48), and Report of the Working Party on the Accession of Tajikistan (WTO official document WT/ACC/TJK/30). WTO official documents are available at <https://docs.wto.org/>.
- 13 See GATT official document L/3889, available at <https://docs.wto.org/>; Protocol on the Accession of China (WTO official document WT/L/432) and Report of the Working Party on the Accession of China (WTO official document WT/ACC/CHN/49). WTO official documents are available at <https://docs.wto.org/>.
- 14 Proposals by the Czechoslovak Delegation, W.9/86 (9 December 1954); Memoranda received from the Governments of Czechoslovakia and Sweden (L/943, 26 November 1958): https://www.wto.org/gatt_docs/English/SULPDF/90720061.pdf.
- 15 See GATT official document Spec(71)98, available at <https://docs.wto.org/>.

- 16 See GATT official documents L/2851 and L/2806, available at <https://docs.wto.org/>.
- 17 See GATT official document L/3557, available at <https://docs.wto.org/>.
- 18 For example, see WTO official documents WT/ACC/CHN/49, WT/ACC/VNM/48, WT/ACC/RUS/70, and WT/ACC/KAZ/93, available at <https://docs.wto.org/>.
- 19 See WTO official documents WT/ACC/CHN/49, WT/ACC/VNM/48 and WT/ACC/RUS/70, available at <https://docs.wto.org/>.
- 20 See GATT official document W.9/86, available at <https://docs.wto.org/>.
- 21 See GATT official document W.9/220, available at <https://docs.wto.org/>.
- 22 See GATT official document Sepc(71)98, available at <https://docs.wto.org/>.
- 23 See GATT official document MTN/INF/30, available at <https://docs.wto.org/>.
- 24 See GATT official document ADP/M/2, available at <https://docs.wto.org/>.
- 25 See GATT official document L/2851, available at <https://docs.wto.org/>.
- 26 See GATT official document L/3557, available at <https://docs.wto.org/>.
- 27 See GATT official document L/3889, available at <https://docs.wto.org/>.
- 28 See GATT official document WT/L/432, available at <https://docs.wto.org/>.
- 29 See paragraph 13 of GATT official documents L/2806 and L/3557, available at <https://docs.wto.org/>.
- 30 See paragraph 18 of GATT official document L/3889, available at <https://docs.wto.org/>.
- 31 See, e.g., Australian Anti-Dumping Commission, Final Report No. 441: Alleged Dumping of Steel Pallet Racking Exported from the People's Republic of China and Malaysia (5 April 2019); USDOC, Issues and Decision Memorandum for the Final Affirmative Determination in the Anti-dumping Duty Investigation of Biodiesel from Argentina (20 February 2018); UK Trade Remedies Authority, Final Determination Case AD0012: Investigation into alleged dumping of aluminium extrusions from the People's Republic of China (16 December 2022); Canada Border Services Agency, Notice of conclusion of a re-investigation: Certain concrete reinforcing bar (10 May 2023).
- 32 See WTO official documents WT/WGTCP/W/88 and WT/WGTCP/W/78, available at <https://docs.wto.org/>.
- 33 These approaches are referred to collectively here as "interface methodologies", which is for analytical purposes only and which carries no implication as to the WTO consistency of these approaches and the anti-dumping proceedings in which they have been used. With respect to approaches based on a "particular market situation", one panel report adopted by the WTO Dispute Settlement Body (DSB) held that they are fact-specific and case-by-case inquiries that do not exclude situations arising from government actions. With respect to approaches based on non-market economy provisions in accession protocols, a panel was established to hear a complaint premised in part on the relevant provision having expired. The complainant later requested the panel to suspend its work, which ultimately resulted in the panel's authority to hear the case lapsing.
- 34 See, e.g., USDOC, Issues and Decision Memorandum for the Final Affirmative Determination in the Less-Than-Fair-Value Investigation of Large Diameter Welded Pipe from the Republic of Korea (19 February 2019); ADC, Final Report No. 441: Alleged Dumping of Steel Pallet Racking Exported from The People's Republic of China and Malaysia (5 April 2019); CBSA, Statement of Reasons Concerning the Final Determinations with respect to the Dumping of Certain Silicon Metal (18 October 2017); Commission Implementing Regulation (EU) 2024/1040 of 27 March 2024 imposing a definitive anti-dumping duty on imports of certain polyethylene terephthalate originating in People's Republic of China (2 April 2024); MOFCOM, Final Determination of An Anti-Dumping Investigation into N-Propanol Exported from the United States (17 November 2020).
- 35 See, e.g., CBSA, Notice of conclusion of a re-investigation: Certain concrete reinforcing bar (10 May 2023); USDOC, Decision Memorandum for the Preliminary Affirmative Determination in the Less-Than-Fair-Value Investigation of Hardwood and Decorative Plywood from Indonesia (24 February 2026); USDOC, Decision Memorandum for the Preliminary Determination in the Less-Than-Fair-Value Investigation of Certain Freight Rail Couplers and Parts Thereof from India; USDOC, Issues and Decision Memorandum for the Final Results of the Anti-dumping Duty Administrative Review of Certain Frozen Warmwater Shrimp from India; 2023-2024.
- 36 See, e.g., Regulations Improving and Strengthening the Enforcement of Trade Remedies, 89 Fed. Reg. 20766 (25 March 2024); Amending Regulation (EU) 2017/2321, recital 4 and art 1(1) amending art 2(6a)(b); Department of Industry, Science and Resources, Strengthening Australia's Trade Remedies System: consultation paper.
- 37 "Declaration on the Contribution of the World Trade Organization to Achieving Greater Coherence in Global Economic Policymaking" – see https://www.wto.org/english/docs_e/legal_e/32-dchor_e.htm.
- 38 See www.subsidydata.org.
- 39 In his discussion of how those who drafted the GATT conceived of the concept of nullification or impairment and the role of Article XXIII, Petersmann (1997) notes how one negotiator summed up the approach:

"We shall achieve...if our negotiations are successful, a careful balance of the interests of the contracting parties. This balance rests upon certain assumptions as to the character of the underlying situation in the years to come. And it involves a mutuality of obligations and benefits. If, with the passage of time, the underlying situation should change or the benefits accorded any contracting party should be impaired, the balance would be destroyed. It is the purpose of Article XXIII to restore this balance by providing for a compensatory adjustment in the obligations which the contracting party has assumed."

- 40 In the sense that it does not contain any provisions that distinguish between the different technological means through which a service may be supplied, although some members have expressed the view that the issue is complex and needs further examination (see WTO official document S/C/W/74, available from <https://docs.wto.org/>).
- 41 See https://www.wto.org/english/tratop_e/serv_e/gatsqa_e.htm for information concerning the four modes of supply of services under the GATS.
- 42 Trade Agreement Provisions on Electronic Commerce and Data 2025 (<https://unilu.ch/taped>).
- 43 See https://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm.
- 44 See https://www.wto.org/english/tratop_e/inftec_e/inftec_e.htm.
- 45 See https://www.wto.org/english/tratop_e/ecom_e/ecom_work_programme_e.htm.
- 46 See https://www.wto.org/english/tratop_e/tradfa_e/tradfa_e.htm.
- 47 See <https://carbonpricingdashboard.worldbank.org/>.
- 48 See <https://edb.wto.org/>.
- 49 Another consideration is how to recognize climate mitigation efforts of trading partners when these differ from domestic approaches. Under the border carbon adjustment mechanisms adopted and proposed to date, recognition is limited to effective carbon prices paid in the economy of origin, which are then deducted from the carbon border fee levied. Therefore, other approaches, such as regulations that mandate emissions cuts, or subsidies that incentivize cleaner technologies, are not credited directly, only indirectly, to the extent that the production process ends up generating lower emissions, which can then be measured and verified in line with the carbon border mechanism.
- 50 In principle, an MFN border carbon adjustment that is calibrated to offset the added cost of production faced by domestic producers as a result of the domestic carbon tax would obviate the need to measure emissions from foreign suppliers, while preventing carbon leakage by neutralizing the market access consequences of the carbon tax (Staiger, 2022).
- 51 For instance, a group of eight members (Australia, Canada, Chile, Costa Rica, Israel, Japan, the Republic of Korea, New Zealand, and the United Kingdom), led by Japan, have proposed “non-binding guidance on methodologies for measuring embedded emissions”, including an information sharing template for transparency on such measures (see WTO official documents WT/CTE/W/269/Rev.5 and WT/CTE/W/271, available at <https://docs.wto.org/>). China has proposed strengthening discussions on carbon standards in the CTE and other WTO bodies (see WTO official document WT/CTE/270).
- 52 See WTO official document G/TBT/54, available at <https://docs.wto.org/>.
- 53 See <https://databank.worldbank.org/source/world-development-indicators>.
- 54 As per UIBE et al. (2025).
- 55 See for instance disputes concerning *Russia – Measures Concerning Traffic in Transit*, 2019; *United States – Certain Measures on Steel and Aluminium Products*, 2022; *United States – Origin Marking Requirement*, 2022.
- 56 The central prediction of hegemonic stability theory arises naturally from the terms-of-trade perspective on trade agreements described in Chapter B of this report (Bagwell and Staiger, 1999).
- 57 As Mattoo, Ruta and Staiger (2024) observe, Mearsheimer (2003) quotes from Adam Smith's *The Wealth of Nations* to provide an illustration of how states behave when forced to choose between wealth and relative power:

“In 1651, England put into effect the famous Navigation Act, protectionist legislation designed to damage Holland's commerce and ultimately cripple the Dutch economy. The legislation mandated that all goods imported into England be carried either in English ships or ships owned by the country that originally produced the goods. Since the Dutch produced few goods themselves, this measure would badly damage their shipping, the central ingredient in their economic success. Of course, the Navigation Act would hurt England's economy as well, mainly because it would rob England of the benefits of free trade. ‘The act of navigation,’ Smith wrote, ‘is not favourable to foreign commerce, or to the growth of that opulence that can arise from it.’ Nevertheless, Smith considered the legislation ‘the wisest of all the commercial regulations of England’ because it did more damage to the Dutch economy than to the English economy, and in the mid-seventeenth century Holland was ‘the only naval power which could endanger the security of England’.”

1

Wider distribution of economic power

Existing WTO commitments were made when markets looked very different to today. The challenge now is to ensure both developed and developing economies can benefit from new tariff bargaining opportunities.

45%

of global trade

Low and middle-income economies' share of global trade has nearly doubled since 1995, now accounting for 45 per cent of trade.

Four challenges facing the WTO

The WTO's rules are foundational for global trade, but a rapidly changing world economy is challenging that system.

In General Council meetings, **members' discussions** about different economic systems and industrial policy increased tenfold in 2020-25 compared with 1995-2000.

1995-2000

2020-2025

2

Greater role of government interventions

The increasing use of industrial policies and the diversity of economic systems raise level-playing-field concerns. The challenge is to ensure trade rules maintain the balance of members' commitments while preserving policy space.

3

The changing nature of trade

Global value chains, digitalization and environmental objectives have shifted the focus of international cooperation from border tariffs to domestic regulations, adding more complexity.

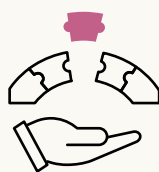


Digitally delivered services, such as computer and financial services, grew more than fivefold between 2005 and 2025. They now represent 55% of global services exports.



The WTO must adapt to the world economy it helped to create

The future of the multilateral, rules-based trading system will depend on members' ability to:



Repair what is broken



Preserve what works



Cooperate and avoid fragmentation

1960

2000

2024

The global economy grew from one dominant economy in 1960 to two leading economies in 2000 and three broadly comparable economic hubs by 2024.

4

Rising geopolitical tensions and a multipolar global economy

Concerns about supply-chain concentration, technological rivalry, national and economic security, and a multipolar world make it harder for economies to sustain cooperation.



Conclusion

The multilateral trading system is at a critical juncture. The system has helped to create a far more open, integrated, interconnected global economy than that which existed before the establishment of the General Agreement on Tariffs and Trade (GATT) in 1947 and of the WTO in 1995. Yet this transformation has also contributed to generating new forms of economic friction and political tension that are increasingly testing the system's existing rules and flexibilities, as well as its capacity to respond to the changing composition and nature of trade. The central challenge facing the WTO today is how the system can continue to adapt to a world economy where cooperation is more necessary but also more difficult.

This report argues that the rules-based trading system has delivered substantial benefits over the past eight decades, and that, despite new challenges, it continues to deliver important benefits today. The system has helped to support an unprecedented expansion of world trade, economic growth, technological diffusion and income convergence. The period following the Second World War witnessed one of the fastest and most sustained increases in living standards in modern history, underpinned in significant part by the progressive opening and stabilization of international trade relations. Today, the WTO continues to help members use trade as a means to sustain growth and development.

At the same time, the benefits of trade have been unevenly shared across economies, regions, sectors, firms and workers. Although some developing economies have experienced sustained development and declining levels of poverty, others have struggled to diversify exports or attract investment. Within some developed economies, trade and technological change have generated pressures that domestic policies have sometimes struggled to manage. Although the gains from open trade have been widely dispersed, the costs of this economic transition have often been concentrated in certain sectors and communities. These and other change-driven tensions have contributed to a growing dissatisfaction with globalization in some economies.

Yet the existence of uneven outcomes does not negate the broader achievements of

the trading system, nor does it diminish the significance of the institutional framework that has helped to make those achievements possible. The continuing value of the WTO lies in the market access concessions negotiated by members over successive rounds, as well as in the wider architecture of cooperation the system created. Built on reciprocity, non-discrimination, binding commitments, transparency obligations, institutional dialogue, dispute settlement and flexibilities, the system has established a legal framework for global trade, making it more predictable and less vulnerable to unilateral disruption. This multilateral architecture has offered governments and firms the certainty that market access commitments would endure over time, and has opened the door for smaller economies to participate in global trade. Despite its imperfections, the rules-based trading system has created a more stable environment for investment, specialization and the expansion of cross-border production networks. It has also provided mechanisms through which economies with differing economic systems, policy preferences and levels of development can work and trade together.

These achievements reflected the economic logic of the system's design. From an economic perspective, the GATT and the WTO have enabled members to move away from unilateral protectionism. By exchanging market access concessions, making openness reciprocal, non-discriminatory and enforceable, and providing a forum in which diverse economies can manage interdependence through cooperation, the multilateral trading system has demonstrated that trade openness requires both disciplines and flexibilities. The balance of openness, predictability and flexibility has helped to deliver growth and development. However, this same system, together with technological changes and the uneven distribution of the benefits of open trade, has transformed the economic and political conditions under which it operates.

The world economy today differs fundamentally from that faced by the post-Second World War architects of the GATT or even the negotiators of the Uruguay Round. Trade negotiations are no

longer centred primarily on tariffs affecting finished industrial goods exchanged between a relatively small group of advanced economies. The nature of trade policymaking has become considerably more complex as cross-border production networks have deepened economic interdependence, digitalization and artificial intelligence (AI) are reshaping core functions of the global economy, and environmental, resilience and security concerns are prompting governments to intervene more actively in markets. At the same time, the WTO membership has become more diverse, while the global distribution of economic power has become more diffuse and multipolar: the integration of major developing economies into the global trading system was among the system's most significant accomplishments, but it also altered the balance of interests and the negotiating dynamics within the WTO itself. The system, which was originally designed around a small group of relatively like-minded economies, now encompasses diverse economic models, development priorities and geopolitical interests.

Were multilateral cooperation to be weakened, this would not eliminate the underlying coordination problems that the system was created to address. An absence of rules would not prevent cross-border spillovers of domestic trade policies. Although unilateral actions may appear to offer greater policy autonomy in the short term, if pursued simultaneously by many economies, they could generate collective outcomes that could leave all economies worse off – a risk that the period between the two world wars powerfully illustrates.

Recent simulations by WTO economists published in this report show that a world without the WTO would be costly, especially for lower-income economies. The analysis of the results from three simulated scenarios – in which trade cooperation is organized around geopolitical blocs, in which multilateral cooperation is replaced by a network of free trade agreements, and in which multilateral cooperation is strengthened relative to the status quo – suggests that the long-term costs of not having the WTO would range between 5 and 10 per cent of global GDP. More broadly, the erosion of WTO disciplines would not only reduce predictability and weaken confidence in market access commitments, but would also make it harder to manage the cross-border spillovers created by new technologies, climate policies, supply chain vulnerabilities and geopolitical tensions.

The challenges facing the WTO should therefore not be interpreted as evidence that its founding purposes or rules have become obsolete. On the contrary, many of the forces straining the system also reinforce the continuing importance of those purposes and rules. A more integrated and multipolar global economy increases the need for mechanisms that can manage policy spillovers and provide channels for dialogue among diverse economies with differing interests and priorities. Digitalization, climate change, supply-chain vulnerabilities and geopolitical tensions are all inherently multilateral challenges that no bilateral or regional arrangement, however ambitious, can adequately manage alone.

However, the challenges mean that the WTO cannot simply continue operating as it has in the past. The current situation, with all the challenges that it entails, requires that the WTO evolve. The future of the multilateral trading system will depend in significant part on the ability of WTO members to adapt the ways in which they cooperate to the realities of a changed world economy. The system's central challenge is how it can accommodate members' diverse economic systems, development levels and policy preferences, while preserving sufficient coherence and reciprocity to sustain confidence in the overall framework. It also needs to determine how, in a world in which economic integration and geopolitical competition increasingly coexist, members can manage interdependence through rules, negotiation and institutionalized cooperation, rather than by turning to unilateralism or discrimination.

The challenge is considerable, but the logic that originally led members to pursue rules-based trade cooperation remains compelling. The multilateral trading system was built on the recognition that stable and mutually beneficial economic relations require institutions, rules and mechanisms capable of reconciling national interests with shared international stability. That logic remains as relevant today as it was at the system's founding. At this critical juncture, the future of the multilateral trading system will depend on members' ability to fix what is broken, update what is outdated, preserve what works, and adapt their cooperation to the realities of a changing world.

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Note

WTO members are frequently referred to as “countries”, although some members are not countries in the usual sense of the word but are officially “customs territories”. The definition of geographical and other groupings in this report does not imply an expression of opinion by the WTO Secretariat concerning the status of any country or territory, the delimitation of its frontiers, nor the rights and obligations of any WTO member in respect of WTO agreements. There are no WTO definitions of “developed” and “developing” economies. Members announce for themselves whether they are “developed” or “developing” economies. The references to developing and developed economies, as well as any other sub-categories of members used in this report, are for statistical purposes only, and do not imply an expression of opinion by the Secretariat concerning the status of any country or territory, the delimitation of its frontiers, nor the rights and obligations of any WTO member in respect of WTO agreements.

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World Trade Report 2026

The multilateral trading system is at a critical juncture. Over eight decades, it has provided comprehensive rules for trade in goods, services and intellectual property, and has delivered substantial value – in terms of reducing trade barriers, providing a predictable trade environment and supporting an almost fifty-fold expansion in global trade, growth and better living standards – but these gains have not been shared evenly, and some economies, workers and communities have benefitted more than others.

By creating a more open and integrated world economy, where trade policy has become increasingly important, the multilateral trading system has also created an environment where trade frictions have become more complex, WTO membership has become more diverse and economic power has been more widely distributed. Shifts in economic power, differences in economic systems, growing government interventions, the ubiquity of global value chains, the rising importance of digitalization and artificial intelligence, environmental challenges and geopolitical tensions are testing rules designed in an earlier era. The principle of non-discrimination among trading partners, reciprocity, tariff commitments, transparency about trade measures, dispute settlement and flexibilities for developing economies remain central to trade cooperation, but they are increasingly under strain.

Nevertheless, the WTO's purpose is more relevant today than ever. The challenge now is not to preserve the status quo, but to adapt rules-based cooperation to a more integrated, multipolar and diverse global economy, so that the foundations of an open global trading system are strengthened, and the benefits of trade are shared by all.

