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US tariff challenge vs Italian tariff engineering: the pathway forward?

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*The tariffs have finally arrived,
and I think their implications are going to be far-reaching.
We don't know for sure how deep those consequences are going to be,
but they are not good for the world's economy
and it's debatable they're going to be good for American workers either.*

Daron Acemoglu
Nobel Prize in Economic Sciences 2024

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US tariff challenge vs Italian tariff engineering: the pathway forward?

Abstract

The recent US tariff challenge requests strategic responses and suggests an immediate path that involves a combination of risk-sharing, supply chain adjustments, and legal/product modifications.

A potential way forward is for Italian companies to adapt by sharing tariff burdens with distributors, adjusting product designs through “*tariff engineering*”, exploring direct investment in the US to circumvent tariffs, and strengthening brand positioning for premium goods. The overall approach involves a multi-pronged strategy balancing immediate adaptation with long-term market positioning.

ABBREVIATIONS

ACI	Anti-Coercion Instrument
AGOA	African Growth and Opportunity Act
B3W	Build Back Better World
BRI	Belt and Road Initiative
CAR	Cumulative Abnormal Return
CBAM	Carbon Border Adjustment Mechanism
CBP	Customs and Border Protection
COO	Country of origin
CROSS	Customs Rulings Online Search System
CRS	Congressional Research Service
CTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
DID or DD	Difference-In-Differences
DSB	Dispute Settlement Body
DSGE	Dynamic Stochastic General Equilibrium
DSU	Dispute Settlement Understanding
EHM	Efficient-Market Hypothesis
EIB	European Investment Bank
EPU	Economic Policy Uncertainty
FDI	Foreign Direct Investment
FTZ	Free Trade Zone
GATT	General Agreement on Tariffs and Trade
GCV	Global Value Chain
GHG	Greenhouse Gas
GVA	Gross Value Added
HS	Harmonized System
HTS	Harmonized Tariff Schedule
IEEPA	International Economic Emergency Powers Act
IQR	Interquartile Range
ITIF	Information Technology and Innovation Foundation
LDCs	Least Developed Countries

LTA	Long-Term Arrangement
MFN	Most-Favored-Nation
MNEs	Multinational Enterprises
MPIA	Multi-Party Interim Appeal Arbitration
MTB	Market-To-Book
NBER	National Bureau of Economic Research
PPP	Purchasing Power Parity
R&D	Research and Development
RCEP	Regional Comprehensive Economic Partnership
ROW	Rest of the World
SDG	Sustainable Development Goal
SDT	Special and Differential Treatment
STA	Short-Term Arrangement
TPU	Trade Policy Uncertainty
TRIMs	Trade-Related Investment Measures
TRIPs	Trade-Related Aspects of Intellectual Property Rights
TVIS	Transaction Value of Identical or Similar merchandise
USITC	US International Trade Commission
USMCA	United States-Mexico-Canada Agreement
USTR	US Trade Representative
VAT	Value Added Tax
WTO	World Trade Organization

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INTRODUCTION

Is it really true that we are on the edge of a precipice, as authoritative international forums report (WEF, 2026)?

And if that were true, what would be the role of International Tax Law, namely that of tariff policies, particularly those of the United States in recent years? Are these obsolete tools or powerful weapons, as not only authoritative academics (Ripamonti, 2025) but eminent Heads of States now call them?¹

Nowadays, debt crises, historically typical of developing economies, are increasingly affecting advanced economies, which appear to be trapped in a pattern of persistent and structural indebtedness. Gross public debt as a share of GDP in advanced economies is approaching 110%, placing it close to historical highs. The primary risk, however, does not lie in insolvency itself, but rather in the loss of confidence from financial markets. This translates into higher interest rates and a further increase in debt servicing costs, triggering a vicious cycle that is difficult to reverse (IMF, 2024 and 2025, Financial Times, 2024, The Economist, 2025).

Can policies of dizzying tariff increases regain out-of-control slices of public spending, or do they spill over into the growth margins of the States that adopt them?

And do entrepreneurs, especially Italian ones, have legal and effective tools that can help defend themselves from all this?

The aim of this paper is trying to answer all these questions by presenting the solutions adopted on the ground by Italian entrepreneurs (*“tariff engineering”*), operating in various and qualifying sectors that characterize *“Made in Italy”* abroad, and who seem to have resisted the tariff threats coming from the various leaders who have lived in White House in recent years.

To this end, the survey is structured into three chapters: Chapter 1 provides a theoretical and empirical overview of the role and impact of tariffs on international trade; Chapter 2 focuses on U.S. - China trade policy and trade war; Chapter 3 examines the Italian case, drawing the attention to the strategies that enterprises may adopt to operate in a context characterized by increasing tariff uncertainty.

¹ Reference is made to the expression *“commercial bazooka”* used by the French President Michel Macron in January 2026, with reference to Anti-Coercion Instrument (ACI), an EU regulation that came into force at the end of 2023, designed to counter undue economic pressure from third countries.

CHAPTER 1 – THE ROLE OF TARIFFS IN INTERNATIONAL TRADE AND THEIR IMPACT IN GLOBAL DEVELOPMENT AND GROWTH

1.1. The role of tariffs in international trade: an obsolete tool or a powerful weapon?

1.1.1. *The role of tariffs in international trade*

1.1.1.1. *Principles and tools established by World Trade Organization*

With the latest increase in U.S. effective tariffs, 19.5% in August 2025, at levels not seen since the years of the Great Depression², the international trading system is facing a crisis, like never before. This crisis is a token of an objective structural failure of the international institutions, and it hides a feeling of rejection towards multilateral cooperation rules that have fixed the world economy since 1948 till today (OECD, 2025; Congressional Research Service, 2025).

In 1995, the architecture of the multilateral trading system was consolidated with the birth of the World Trade Organization (WTO), successor of the General Agreement on Tariffs and Trade (GATT). Dealing with an orthodox institution, its legal regime is composed of clear rules and procedures widely accepted by its members. It provides security and legal predictability to its members in exchange for a common effort to open markets.

WTO aims to be a highly legalized institution, with binding obligations and a dispute settlement system for its members (Aggarwal et al, 2023).

Others (Wolff, 2025) evoke “*appealing into the void*” as a ruse: since 2016, the appointment of Appellate Body judges by the USA is missing. The United States, in its defense, argues that the AP is unfair and it does not pursue the interests of its members. Although, in February 2019 David Walker, the New Zealand’s Ambassador to WTO, was appointed to resolve this problem, the legal structure of the AP still remains in limbo, preventing it from making judgments definitive and applicable (Buccarella, 2025; Geneva Trade Platform, 2026)³.

² During the years of the Great Depression, the Tariff Act of 1930, known as the Smoot-Hawley Tariff, raised U.S. tariffs to their highest level, since 1828. It was a U.S. protectionist law signed by President Herbert Hoover and designed to protect U.S. industry and agriculture during that period.

³ The boycott of WTO Dispute Settlement Body (DSB), carried out without interruption since 2016 till today, is a feature shared by the presidencies of Barack Obama, Donald Trump, Joe Biden, and the second Donald Trump Administration.

This is not the only one action by Donald Trump that departs from WTO orthodoxy (Aggarwal et al, 2023). The United States threatens the credibility of WTO by hitting three other pillars: the Non-Discrimination Rule, the Marginal Reciprocity, and the Consolidation Rule.

In the first case, we observe both a violation of the National Treatment principle, which requires equal treatment between domestic and imported products, and a violation of the Most-Favored-Nation (MFN) clause, which prohibits discrimination among trading partners and requires that any advantage granted to a product from one country be extended immediately and unconditionally to all like products from other members. The Donald Trump Administration violates this principle insofar as it introduced discriminatory tariffs based on the origin country of the imported goods.

In the second case, we have the predominance of Trump's concept of Absolute Reciprocity over the Marginal Reciprocity (or First-Difference reciprocity) required by WTO.

Rather than allowing for incremental, balanced tariff reductions, Trump imposed uniform tariff levels based on trade volumes. By contrast, WTO supports equality of trading opportunities, allowing states to negotiate tariff concessions at the margin without forcing tariffs to converge to a single absolute level.

In the third case, there is a failure to comply with certain tariff bindings agreed in past negotiations, for example with Articles II and XXVIII of GATT, according to which member states may not raise tariffs above agreed levels without negotiations and compensations. Trump disregarded these procedures by acting unilaterally (Buccarella, 2025; Baldwin and Navaretti, 2025; Congressional Research Service, 2025)⁴.

Trump's actions materialize the existing risk of switching from a system based on multilateral rules to a power-based system founded on the competition between great powers for a predominant position in global trade (Braghini, 2025).

The U.S. action appears to find partial justification in the dysfunction of WTO.

U.S. policymakers such as Peter Navarro⁵ and Robert Lighthizer⁶) argue that WTO has failed to effectively oversee China's industrial policies, including the use of subsidies, undisclosed lending, and dumping practices, as well as issues related to intellectual property theft and forced technology transfers (Aggarwal and Reddie, 2023; Braghini, 2025; Wolff, 2025).

⁴ The principle of Marginal Reciprocity, or First-Difference Reciprocity, has been most influentially theorized by Kyle Bagwell and Robert W. Staiger, who interpret WTO/GATT system as a mechanism based on reciprocal concessions at the margin, that is, on balanced and incremental tariff adjustments rather than on the equalization of absolute tariff levels across countries. Later, Chad P. Bown builds on this framework to explain what happens when states move away from this principle, as is the case with recent U.S. trade policy.

⁵ U.S. economist, senior counsellor for trade and manufacturing in Trump's administration.

⁶ U.S. attorney and government official who was the US Trade Representative in the Trump administration from 2017 to 2021.

Additionally, Trump Administration underestimates the role of WTO, and it argues that industrial issues plaguing global trade, such as overproduction, supply chain resilience and trade imbalances, are beyond the reach of WTO's capabilities (Wolff, 2025).

From his first administration, Trump has put forward proposals to reform WTO and world trade rules. He suggests limiting Special and Differential Treatment (SDT) to countries most in need, preventing large economies (that have significantly developed over the years) from still defining themselves "*developing countries*". In September 2025, China, following sustained pressure from United States and European Union, officially renounced its entitlement to SDT in future WTO negotiations, thereby assuming a more responsible role within the multilateral system (Xinhuanet, 2025).

Trump has also proposed eliminating the unanimity rule that allows a single country to block new agreements, advocating instead a return to the more pragmatic decision-making system of GATT (Wolff, 2025)⁷.

The proposals by the United States were followed by a proposal for reform by the European Commission in the early 2026. Among its primary goals, WTO was to constantly evolve through successive rounds of negotiations. But from the results of the diagnosis conducted by the European Commission, it was instead found that new rounds did not materialize, blocking the Rulebook in a balance of concessions reached 30 years ago. The Rulebook is therefore obsolete and ineffective for modern business challenges, such as digital trade, intellectual property, artificial intelligence and environmental sustainability (European Commission, 2026). Moreover, agreements such as the Trade-Related Investment Measures (TRIMs) and the Trade-Related Aspects of Intellectual Property Rights (TRIPs) are out of date with recent developments in these areas (Aggarwal and Reddie, 2021, 2023).

The European Commission's WTO reform proposal is based on three pillars: predictability, fairness, and flexibility. Predictability seeks to remedy the lack of international legal certainty, through the reinstatement of the AB, the updating of the Rulebook, and a greater transparency and monitoring of the member states' trade policies. Equity means rebalancing the rights and the obligations of members with a reform of SDT to limit aid to countries truly in need.

The need for flexibility comes from the negotiating stalemate due to the unanimous consensus required in rule-making processes, which has led to only two multilateral agreements being reached in the last 30 years. Additionally, the European Commission has urged a differentiation

⁷ Under the current decision-making system of WTO, new agreements generally require consensus among all members, allowing even non-participating countries to block their adoption. For a long time, this has been considered a source of institutional gridlock, as members not directly affected by a given agreement may still exercise the veto power. The U.S. proposal aims to address this limitation by preventing non-participants from obstructing agreements.

between the decision-making process reserved for daily activities and that instead for the adoption of new substantive rules (European Commission, 2026).

While waiting for the reforms of WTO system to have a practical side, alternative forms of cooperation have emerged to fill the gaps in the multilateral framework.

The Belt and Road Initiative (BRI) in China and the Build Back Better World (B3W) initiative in the U.S. propose themselves as pseudo-institutions. Traditional institutions, such as WTO and GATT, are based on multilateral and transparent rules and unanimous consensus; pseudo-institutions, such as BRI and B3W, have “*hub-and-spoke*” systems where if there is a lack of consensus among some members and if the rules are not clearly defined, the central country with its influence can intervene to its advantage. Furthermore, the memoranda, unlike WTO Agreements, are not binding, thus allowing China and the U.S. to act with greater flexibility. Consequently, there is a reduction in the accuracy and legal security of law for the participating countries. These pseudo-institutions enable major powers to use investment and infrastructure as weapons of power to achieve their interests and maintain their global leadership (Aggarwal et al, 2023).

To bypass the gridlock that plagues WTO Dispute Settlement Body (DSB) for years, a group of member countries founded the Multi-Party Interim Appeal Arbitration (MPIA) in March 2020.

This is a separate WTO trade dispute resolution appeals system, which can only be activated in the absence of a functioning and staffed WTO appeals body. Although provisional, the MPIA created under Article 25 of the Dispute Settlement Understanding (DSU) is strongly supported by China, the EU and Canada, and still active today (Geneva Trade Platform, 2026).

Aggarwal and Reddie (2021) give this new reality the name “*Economic Statecraft*” and explain that is possible to overcome the structural crisis of WTO through technical and sectoral agreements, which are more manageable to regulate modern areas not yet covered by WTO, such as Artificial Intelligence, telecommunications, or biotechnology.

Supporting this vision are the historic Short-Term Arrangement (STA) and Long-Term Arrangement (LTA) agreements regarding international trade in cotton textiles during the Eisenhower Administration⁸.

⁸ In the 50s, the massive increase in imports of cheap cotton from Japan and Hong Kong prompted the United States and Europe to impose unilateral restrictions and to conclude laborious bilateral agreements. The creation of sector-specific regimes such as STA and LTA agreements, nested within GATT, made it possible to overcome the chaos of failed bilateral and multilateral negotiations.

1.1.1.2. *An obsolete tool (additional revenue or free trade)?*

In 1800, tariffs were the only instrument available to nations to regulate trade.

In 1947, with the creation of GATT, it was decided to embrace a global trading system based on shared rules, to reduce tariff barriers and prevent trade wars. The tariffs were conceived as a technicality governed by GATT and then WTO rules, for the achievement of common well-being. Subsequently, to circumscribe their distorting effect, WTO intervened with appropriate provisions which aim to reduce tariffs (Buccarella, 2025).

From 1998 to 2012, years of operation of GATT and WTO, tariff barriers have increasingly lowered, even in the case of countries (such as South Asia, Middle East & North Africa, Sub-Saharan Africa, East Asia) that had very high tariff walls (See Figure 1, in the Appendix).

This has produced unprecedented world trade growth in human history, including developing countries. Indeed, the United States has often accepted as a “*benevolent hegemon*”, asymmetric conditions, to rebuild post-war Europe and integrate other developing countries, seeing free trade as a global public good (Wolff, 2025).

The nature of tariffs has always allowed nations to have more room for negotiation, compared to other instruments. During the negotiations, efforts were made to reduce margin tariffs; the goal was not to have identical tariffs in all countries, but to exchange equivalent concessions (e.g. “*marginal reciprocity*”) to progressively open markets (Baldwin and Navaretti, 2025). Tariffs, therefore, were initially conceived as a leverage to promote free trade and growth.

About two-thirds of current international trade takes place without tariffs, either because of reduction in the MFN rate or because of other inter-country trade agreements; this demonstrates the historic success of liberalization processes (UNCTAD, 2025).

Many countries see tariffs as revenue to support their fiscal targets. A tariff barrier is nothing more than a transfer of wealth from domestic consumers to government.

A theoretical model (Alessandria et al, 2025) highlights that tariffs guarantee immediate tax revenue in the short term because the replacement of imports with domestic products is minimal in the phase immediately following the imposition of tariffs. As suggested by Figure 2, in the Appendix, if tariffs are used with the proper considerations, they can strengthen domestic industry more effectively than traditional free trade models⁹.

⁹ The dynamics of tariff revenue are largely determined by the trade elasticity and the change in tariffs. In the short run, demand is relatively inelastic, so higher tariffs generate higher fiscal revenues because import volumes do not adjust significantly. However, in the long run, demand becomes more elastic as firms and consumers substitute away from foreign goods, reducing import volumes and therefore tariff revenues. High elasticities driven by supply chain adjustments and substitution effects reducing the tax base, lead to a non-linear relationship between tariffs and revenues (e.g. Laffer Curve). See Note on Figure 2 for a further explanation.

In the U.S. case, tariffs were historically the primary source of federal revenue until 1913, the year the income tax was introduced; however, their relevance has changed over the last century.

Figure 3 in the Appendix looks at the trend of the two curves from 1925 to the present. It is noted that the total federal revenues have grown exponentially, while tariff revenues are an almost flat line at the bottom of the graph.

From 1925 to 1945, the tariff revenue curve peaked positively due to the Smoot-Hawley duties, while overall taxation was very low. Continuing, the situation has reversed, because other types of taxes have taken over government revenues. The Congressional Research Service (CRS) documents that, despite massive increases under Trump Administration, tariffs have never represented much more than 2% of total federal revenues in the last 70 years (1.57% in fiscal year 2024) (Alessandria et al, 2025; Congressional Research Service, 2025).

Figure 4 in the Appendix shows that tariff revenues in 2025 helped cover only 9.8% of the \$1.865 trillion federal budget deficit.

The first part of the year 2026 also shows the same result. Debt in the U.S. currently exceeds GDP by more than 6% as an annual deficit, and it is growing due to unstoppable public spending, while any windfall (e.g. unexpected revenue) from Trump Administration's tariffs has already been spent (Cao et al, 2024; The Economist, 2025).

For the reasons expressed before, tariffs in advanced economies are an insufficient and obsolete tool for generating systemic revenue. They cannot offset and stabilize debt, despite Trump having repeatedly declared that tariffs are a “*necessary medicine*” to treat economic issues.

But for developing countries, with poorly organized and weak tax capacity, tariffs remain the most immediate and simple mean of taxing federal revenue. Africa imports face nowadays some of the highest import tariffs, averaging around 8%, as shown by Figure 5 in the Appendix (UNCTAD, 2025).

Currently, the world landscape is fundamentally characterized by trade wars, where great powers like United States want to maintain world leadership and high competitiveness, ignoring their international obligations.

This dramatic situation is associated with a redefinition of the role of the tariff, which is now used as a weapon of “*Economic Statecraft*” or “*Economic Warfare*”, marking the crumbling of the free trade system based on WTO multilateral rules (Baldwin, 1985; Wu, 1952)¹⁰.

¹⁰ The expressions “*Economic Statecraft*” and “*Economic Warfare*” have closely related meanings. “*Economic Statecraft*” refers to the use of economic instruments to influence the behavior of other States and was systematically theorized by Baldwin (1985). “*Economic Warfare*”, a term that emerged in the late nineteenth century during World War I, denotes the use of economic measures to weaken, damage, or destroy an adversary's economy; it was later defined by Wu (1952) as the use of international economic measures aimed at directly enhancing a country's relative

Since 2018, tariffs have been used massively by Trump in the trade war against China, which he accuses of unfair trade practices and intellectual property theft. They are thus used as a tool of coercion and security, to punish perceived violations in sectors where the U.S. does not hold a predominant position. But at the same time, policymakers and tax planners understood that this is not an effective strategy to preventing Chinese goods from entering U.S. territory; for this reason, Trump's sights then shifted towards countries “*connectors*” (Ripamonti, 2025).

To legally justify the massive imposition of tariff barriers, Trump invoked four laws of American jurisprudence: the 1974 Trade Act – Section 201, which allows him to impose tariffs if a sudden increase in imports causes a serious imbalance in domestic industry; the 1974 Trade Act – Section 301, which allows the United States to impose tariffs on China following investigations into unfair practices relating to intellectual property, technology transfer and innovation; the 1962 Trade Act – Section 232, which authorizes the president of U.S. to impose restrictions on imports for reasons of national security; and finally, the International Economic Emergency Powers Act (IEEPA) which serves as legal basis for the imposition of a generalized tariff and further reciprocal tariffs. Tariffs are also being used as an extreme threat tool, as in the case of Mexico, Canada, and the EU, to gain advantages in urgent bilateral negotiations, which the United States would never have achieved with more transparent methods. This political strategy used by Donald Trump is defined by “*unsheathed saber*” (Ripamonti, 2025).

1.1.1.3. A protectionist measure?

Tariffs are the most predominant and traditional form of import protection¹¹. They act as a tax on imported goods, creating a gap between foreign and domestic prices, such that consumers prefer domestic goods and services to imported ones.

Unlike other taxes, such as Value Added Tax (VAT), tariff is an aggressive and discriminatory barrier against imports because it represents a real and unrecoverable cost to the company, which passes it on to the final consumer.

power, particularly through long-term strategies of economic penetration and dependency. The expression has subsequently been used in the literature by Aggarwal (2021 and 2025) and Demarais and Newman (2025).

¹¹ Governments resort to the use of tariffs to protect domestic producers from foreign competition, to encourage the entry of new domestic producers into the market, and if necessary, to provide temporary shelter for nascent industries or sectors in difficulty. Similar protectionist measures are quotas, subsidies, administrative (non-tariff) barriers and the embargo. “*Import quotas*” consist of physical limitations on the quantity of a specific good that can be imported, creating shortages of foreign products and reducing competition. “*Subsidies*” are Government financial support (grants or tax breaks) to domestic firms, reducing their production costs and allowing them to sell at lower prices. “*Administrative barriers*” are strict regulations, such as complex paperwork, quality standards, or environmental/health rules, that make it difficult for foreign firms to sell in the local market. Finally, “*embargo*” consists of a complete ban on trade with a particular country, often for political reasons.

That's why scholars (*ex multis* Oats, 2023) define “*discriminatory*” tariffs in intent, as they are specifically designed to target foreign products upon their entry into the domestic market.

In the book “*A five-factor model of state intervention in high technology sectors*”¹² (See Figure 6, in the Appendix) the authors (Aggarwal and Reddie, 2025) observe that the ability to impose tariff barriers depends on the domestic structure of a State. More precisely, it depends on how strong or weak a State is compared to other market actors. A “*Strong State*” is not subjected to external pressure from interest groups and possesses independent institutions and bureaucracies in political practice. A “*Weak State*”, on the other hand, is one in which institutional fragmentation and external influence hinder decisive and coordinated action.

Among the economic policy interventions, cross-border measures are the most traditional. Measures behind the borders are indirect and often the least visible, but the most effective in promoting the competitiveness of domestic goods. They fall within the scope of “*murky protectionism*” (or “*backdoor protectionism*”), that is, a disguised or obscure protectionism that discriminates against foreign companies, workers and investors, without violating WTO rules. These measures often adhere to legitimate political objectives related to health, environment and protection of domestic industries, and thus, they are not legally persecuted (Baldwin and Evenett, 2009; Aggarwal and Evenett, 2017; Aggarwal and Reddie, 2023)¹³.

With Trump's tariff war, the era of market liberalization is now fading in favor of a return to protectionism and mercantilism. Several studies, in fact, use the tariff waves of 2018 and 2025 as emblematic cases of a return to protectionism on a global scale.

Although regimes such as GATT and WTO have historically limited tariffs and subsidies, many restrictions on foreign trade and investment, promoted during the Trump Administration, are justified in the name of “*national security*”, that is, by resorting to Article XXI of GATT, thus making it difficult to distinguish between self-defense and strategic protectionisms.

This is the case, for example, of tariffs imposed by Trump in 2018 on steel and aluminum: the official justification was to protect the American metal industry from excessive dependence on

¹² It is a model developed by Aggarwal and Reddie to explain the factors that influence government policies of a state. The model also describes three types of economic policy strategies, used in international trade and investment, with protectionist intent: measures at the border, measures behind the border, and measures beyond the border.

¹³ In the European Union, the Carbon Border Adjustment Mechanism (CBAM), introduced by Regulation (EU) 2023/956 of 10 May 2023, of the European Parliament and of the Council has similar characteristics and effects. Formally, it is aimed at EU companies and is a sort of environmental tax, intended to reduce GHG (Greenhouse Gas) emissions. It reduces imports of so-called “*energy-intensive*” products such as steel, aluminum, fertilizers, cement, electricity, and hydrogen, assigning EU importers a maximum quota and requiring them, as proof, a CBAM certificate. The objections raised in WTO by a group of countries producing the aforementioned “*energy-intensive*” products were rejected.

external suppliers; however, many analysts interpreted it as a strategic protection of domestic industry from cheap imports.

Another example concerns the technology sector. The United States, feeling threatened by China's high competitiveness, decided to impose tariffs on Chinese technology products: the official motivation was to protect U.S. intellectual property and defend against alleged unfair Chinese trade practices; actually, the tariffs were apparently used as a political leverage to rebalance trade relations between major powers.

In the specific case of developing countries, tariff barriers are used to support and protect nascent industries. By imposing tariffs on imports, the government is thus able to create a favorable environment in which nascent industries can grow and compete. Figure 7 in the Appendix shows that the use of this form of protection is widespread in sectors such as agriculture, textiles, light manufacturing, where developing countries have high potential but face competition from longer-established economic operators in the market (UNCTAD, 2025).

1.1.1.4. The protection of domestic industry from unfair competition

GATT and WTO, although tending towards trade liberalization, govern the constraints within which countries can impose tariff barriers on imported goods with a protectionist intent. Such discrimination on imports is therefore permitted, if it has a purely compensatory function in favor of the penalized country.

According to the principles of international taxation (Oats, 2023), protection from unfair competition through compensatory tools is based on the levelling the playing field between domestic and foreign companies.

In short, states can apply compensatory taxes on imported goods, but the aim must not be rather to prevent foreign products from benefiting unjustified price advantages over domestic ones than to penalize international trade. These advantages may arise for example from public subsidies or more favorable tax regimes in the country of origin. This is the case of electric vehicle prices in the EU, as shown in Figure 8 in the Appendix.

However, it is crucial to respect a limit of fairness: according to international rules, the amount of these tariffs must not exceed what would burden an equivalent domestic product. In this sense, such measures are not interpreted as a merely discriminatory protectionist barrier, but as a tool to neutralize artificial distortions created by competition.

Among various mechanisms used to protect the internal market from artificially low prices or oversupply, we have anti-dumping tariffs and safeguard measures. Anti-dumping tariffs affect

foreign products sold domestically at prices lower than their real cost of production; instead, safeguard measures are introduced to protect sectors in crisis. These are practices that are widely disseminated in intellectual-intensive sectors.

Compared to fixed tariffs, these measures offer contingent protection, since they activated only when certain market conditions or circumstances arise. They are often described as elusive, as they are less predictable than traditional tariffs. Instead, they depend on administrative investigations and specific allegations, making it difficult for exporters to gauge the level of protection that will ultimately be applied (Lartey, 2025).

Overall, there is a hidden layer of protectionism beyond traditional tariffs, consisting of complaints and special measures. To make these instruments analytically tractable, recent studies (Lartey, 2025) introduces two approaches, in the modelling strategy: the “*ad valorem equivalent*” method and the “*partitioning*”.

In the case of anti-dumping measures, often complex in nature, the former translates their effects into percentage terms, facilitating direct comparison with conventional tariffs.

The latter, by contrast, breaks down the overall level of protection applied to a product, distinguishing between the share attributable to standard tariffs and that arising from contingent protection linked to allegations of unfair practices.

In the U.S. context, the main legal reference for unfair competition is Section 301 of the Trade Act of 1974. This provision allows the imposition of tariffs when a trading partner violates agreements or engages in unreasonable practices that harm U.S. trade. This is particularly relevant in the technology and intellectual property sectors because the reliance of the United States on imports of advanced technological products is very strong, as shown in Figure 9 in the Appendix. Additionally, high tariffs are also applied on primary metals, machinery and energy products, that are sectors that need to be protected from low-cost foreign practices on inputs (Table 1, in the Appendix)

The Trump Administration justifies the tariffs as a response to non-reciprocal trading practices by partners, which are seen as the root cause of the U.S. government deficit.

The United States applied tariffs specifically against China, following investigations results obtained by the Office of the United States Trade Representative (USTR) which confirmed malpractices related to forced transfer of technology, intellectual property infringement and innovation.

The analysis conducted by the Information Technology & Innovation Foundation (ITIF) in December 2025, reveals that the China’s operational manual (e.g. “*Playbook*”) is fundamentally mercantilist, in nature. Chinese competition is considered unfair because it follows a state-

coordinated strategy structured in four main phases: first, attracting foreign investments; second, forcing technology transfer or appropriating intellectual property; third, providing massive subsidies to enable overproduction; and finally, dominating global markets by driving out foreign competitors.

Moreover, China has failed to comply with certain agreements and diplomatic commitments it had taken with the United States. As result, the United States has been allowed to invoke Section 301, imposing punitive tariffs on all manufactured goods that benefit from non-market strategy (ITIF, 2025; Lartey, 2025).

In this landscape of instability and uncertainty, a major concern of OECD (2025) is the further increase in bilateral import tariffs. This could happen if recent tariff increases by the U.S. and China were extended to a wider range of products, including those in the pharmaceutical and semiconductor sectors. Or it could happen if other countries take higher protectionist measures to defend their domestic industries from low-cost competition, especially in the case of trade flow diversions. This is the case of semiconductor and electric vehicle sectors.

In addition to direct effects, including rising costs and prices of final goods because of the reorganization of production and supply chain, indirect effects include growing uncertainty with negative consequences for investments and consumer confidence.

Countries such as Vietnam, Indonesia, Malaysia, Thailand, Mexico, Turkey, Brazil, and South Africa have responded to China's overproduction and online import flow by imposing tariffs on steel and electric vehicles to protect their retailers and domestic manufacturing industries from market saturation and unfair competition. In this case, this type of intervention led to the necessary redefinition of production and supply chains which proved to be far from simple (Tran, 2025).

A modern dimension of unfair competition concerns ecological standards. As already seen, European Union companies must incur higher costs to reduce GHG emissions, risking losing competitiveness against companies located in countries with lower environmental requirements, which therefore charge lower and more competitive prices for their products sold in EU countries (Ripamonti, 2025).

Baldwin (2025) argues that, in a world where globalization also strongly impacts production and supply chains, since factories depend on imported inputs, the renewed use of protectionism is leading to an "*industrial destructionism*".

1.1.2. The effects of import tariffs in large open economies

1.1.2.1. Effects of import tariffs and trade policy uncertainty

Import tariffs in large economies operate as multifaceted trade policy shocks that propagate through a range of transmission channels, affecting demand and supply sides, price dynamics, production structures, and agents' expectations.

To analyze these effects within a general equilibrium framework, some commentators (Boer and Rieth, 2024) have developed a two-country Dynamic Stochastic General Equilibrium (DSGE) Model that studies the dynamics in a large open economy¹⁴.

A key feature is the stochastic volatility applied to import tariffs, which allows for a clear distinction between two types of shocks that are often intertwined: tariff level shocks (e.g. first-moment shock of trade policy), reflecting the unexpected changes in tariff rates, and the Trade Policy Uncertainty (TPU) shocks (e.g. second-moment shock of trade policy), capturing changes in the unpredictability of future trade policy.

Figure 13, in the Appendix, shows the results: tariff increases on impact lead to a persistent rise in consumer prices, a contraction in imports, exports and investments, and a decline in output, while also affecting exchange rate dynamics and the terms of trade. International trade suffers most.

On the demand side, the introduction of import tariffs generates a set of cascading adjustment mechanisms, beginning with a contraction in the import volumes.

A tariff operates as a tax on foreign goods creating a wedge between the world price and the domestic price faced by consumers and firms in the importing country. As a result, imported goods become more expensive, reducing demand and lowering trade volumes (see Figure 10, in the Appendix). This prediction is consistent with the theoretical frameworks developed by Amiti et al (2019) and further discussed by Ossa (2025).

Empirical evidence from Trump Administration trade policy confirms a significant negative relationship between tariffs and import demand (e.g. import demand elasticity).

Estimates reported (Amiti et al, 2019) indicate that tariff increases are associated with substantial reductions in import volumes, as summarized in Table 2, in the Appendix¹⁵.

General equilibrium studies conducted by Boer and Rieth (2024) reach similar conclusions, although adjustment dynamics appear more gradual over time¹⁶.

¹⁴ Despite the general structure, the authors calibrate the model by interpreting “*Country 1*” as the United States over a horizon of 32 quarters. They use probability distribution typical of models estimated for the American economy, to ensure that the simulated responses are consistent with the historical reality of the United States from 1960 to date.

¹⁵ Table 2 reports the baseline estimates of Amiti et al (2019). A 1% increase in tariffs is associated with a reduction of approximately 1.3% in import volumes. When accounting for flows that are entirely eliminated following the imposition of tariffs, this effect rises to around 6%.

¹⁶ Boer and Rieth (2024) estimate a general equilibrium import elasticity of approximately -0.2 upon tariff impact, -0.4 after two years and -0.8 after six years, as it can be seen in Figure 14 in the Appendix.

Figure 11, in the Appendix, provides additional evidence that tariff increases were associated with a significant contraction in imports and a reallocation of demand across products and trading partners.

The import substitution is the second key mechanism, following the initial contraction in import volumes. As foreign goods become more expensive due to tariffs, domestic consumers and firms reallocate their demand and consumption away from imported products toward national production (Fajgelbaum et al, 2019). This reallocation operates both at the final consumption, since households substitute imported goods with domestic alternatives, and at production level, since firms adjust their sourcing of intermediate inputs. As a result, tariffs actually increase domestic demand and promote local industries production.

However, on the supply side this adjustment is not frictionless and depends critically on the structural characteristics of the economy. In a context of deep globalization, production processes are increasingly fragmented across borders, and consequently economies are characterized by strong input-output linkages and reliance on Global Value Chain (GVC). Under these conditions, domestic industries may not be fully equipped to replace foreign inputs, so there would be no import substitution, but rather inefficiencies in domestic production. Both firms and consumers experience a cost shock. For example, firms have high marginal costs for certain imported inputs, which they transfer to final prices. In the U.S. case, it is estimated that for a typical firm that imports 15% of its variable costs, a 10% increase in tariffs on inputs leads to a 2.9% increase in its prices (Amiti et al, 2019)¹⁷.

The magnitude of the substitution effect is further shaped by the substitution elasticity between imported and domestic goods.

Empirical evidence from Table 3, in the Appendix, suggests that tariffs induce substitution toward domestic production, although some adjustments remain incomplete (Fajgelbaum et al, 2019).

In this context, tariffs, often combined with domestic subsidies (e.g. reshoring), can offset the cost advantages of foreign producers, thereby reinforcing the shift toward domestic production.

Figure 8, in the Appendix, illustrates how tariffs combined with industrial policies in the EU electric vehicles sector may reinforce reshoring dynamics and domestic production (IMF, 2025)¹⁸.

¹⁷ Based on Amiti et al (2019), who estimate the impact of input tariffs on domestic producer prices using regressions of twelve-month changes in the Producer Price Index at the NAICS6 industry level on weighted input tariffs. The reported effect is derived by combining the estimated coefficient on input tariffs (1.9) with the average share of imported inputs in firms' variable costs (0.15) and the tariff increase (0.10), capturing the pass-through of higher input costs into domestic prices (2.9%).

¹⁸ The results in Figure 8 suggest that subsidies and cumulative learning effects can partially offset foreign cost advantages, increase domestic production and strengthen self-sufficiency in strategic sectors such as electric vehicles.

Finally, the contraction in import demand in a large economy has always generated a wide debate in the literature. This is because import tariffs exert significant effects also through the price channel, altering domestic and global price dynamics.

On the one hand, a growing body of empirical literature supports the tariff pass-through mechanism in large open economies, according to which the cost of protectionism is fully absorbed domestically¹⁹.

Figure 12, in the Appendix, provides evidence of a near-complete pass-through of tariffs to U.S. import prices (Amiti et al, 2019).²⁰

Similarly, others (Fajgelbaum et al, 2019), using an event-study framework, find complete pass-through of tariffs on U.S. consumer prices.

On the other hand, the remaining literature, thanks to both theoretical and quantitative trade models, provides a different perspective on tariff incidence. It argues that, when a large economy imposes tariffs, the resulting reduction in its import demand translates into a decline in global demand, exerting downward pressure on world prices (Ossa, 2025).

Foreign producers, in attempt to maintain access to these protected markets, may be forced to reduce their prices, thereby absorbing part of the tariff burden and contributing to an improvement in the terms of trade of the tariff-imposing country.

Recent study (Boer and Rieth, 2024)²¹ uphold that, historically, the pass-through to import prices, net of tariffs, is 0.1 at the impact and increases to approximately 0.5 in the medium run, meaning that foreign exporters gradually absorb part of the tariff burden by lowering their prices. As import prices decline more than export prices, the United States influence world prices, leading to an improvement in its terms of trade of about 0.5% in the first year after shock ²².

Moreover, such dynamics may trigger retaliatory responses from trading partners, further amplifying the uncertainty and the contraction in trade flows. For instance, in the case of United States, empirical evidence suggests that export performance is highly sensitive to increases in foreign retaliatory tariffs (see Table 4, in the Appendix).

¹⁹ In short, import tariffs tend to be almost entirely passed through to domestic prices, so tariffs act as a source of domestic price increases, directly affecting domestic firms and consumers.

²⁰ Amiti et al (2019) estimate a pass-through of tariffs to U.S. import prices close to 100%, implying that the full burden of tariff costs is absorbed by domestic firms and consumers rather than foreign exporters. The pass-through coefficient is at -0.01220 on foreign exporter prices, indicating that prices net of tariffs remained essentially unchanged. This further confirms that tariffs did not significantly affect world prices or foreign exporters.

²¹ Boer and Rieth, 2024 study U.S. dynamics using a Bayesian SVAR model based on 60 years of U.S. quarterly data (1960-2019) and a DSGE model with stochastic volatility.

²² Boer and Rieth (2024) contrast the findings reported by Amiti et al (2019), suggesting that the pass-through (relative to foreign producers) near zero observed in the 2018 U.S. episode may reflect episode-specific factors rather than a general pattern.

Beyond the effects of tariffs on prices, tariff shocks also propagate through the exchange rate channel, generating broader macroeconomic adjustments in large open economies.

In general equilibrium frameworks (Boer and Rieth, 2024), an increase in tariffs that raises the domestic price level tends to be associated with an appreciation of the nominal exchange rate (see Figure 13, in the Appendix)²³.

Others (Ossa, 2025) identify two main channels through which tariffs can affect the nominal exchange rate. The direct channel, whereby the contraction in import demand reduces the need for foreign currency, leading to an appreciation of the domestic currency. The indirect channel, operating through expectations: higher tariffs may generate inflationary pressures, inducing markets to anticipate tighter monetary policy, which in turn can further strengthen the domestic currency. More generally, the direction of exchange rate movements depends critically on the role of a country within a tariff conflict.

Recent theoretical contributions (Jeanne and Son, 2024)²⁴ highlight that countries imposing tariffs on imports tend to experience an appreciation of their currency, as reduced demand for foreign goods lowers the demand for foreign currency. Conversely, countries that are targeted by tariffs on their exports tend to face currency depreciation, as the decline in foreign demand for their goods reduces demand for their currency. In the context of reciprocal tariff measures, these opposing forces may offset each other, leading to more muted or even negligible net exchange rate movements over time.

However, empirical evidence suggests that these theoretical predictions may not always fully capture every kind of dynamic. Recent IMF findings (2025) point to episodes of exchange rate depreciation even in the presence of tariff increases, highlighting the role of additional factors beyond standard trade mechanisms.

Tariffs can disrupt global supply chains and act as negative productivity shocks, exerting downward pressure on the domestic currency. Moreover, increased policy uncertainty and

²³ This mechanism is primarily driven by expenditure-switching effects: as imported goods become more expensive, domestic agents substitute away from foreign goods toward domestic alternatives, reducing the demand for foreign currency and thereby exerting upward pressure on the domestic currency. Consistent with this mechanism, impulse response evidence shows a gradual appreciation of the nominal exchange rate over time, which may reach magnitudes of 0.8% in the medium term.

²⁴ Jeanne and Son (2024) focus exclusively on the period of the 2018-2019 U.S. – China trade war and therefore do not account for more recent developments. They notice a discrepancy between theoretical predictions and observed exchange rate movements during that specific period: their model predicts that the nominal effective exchange rate of the U.S. dollar would remain broadly stable, with a limited impact of approximately -0.3% (e.g. net appreciation). However, the data show an effective appreciation of about 4.2%, indicating a divergence from model-based expectations. The authors argue that this deviation was not primarily driven by tariff measures, but rather by current macroeconomic factors, such as increases in U.S. interest rates and a slowdown in Chinese economic growth. While their findings do not directly address the more recent anomalies highlighted by the IMF (2025), they support a broader interpretation whereby nominal exchange rate dynamics cannot be attributed solely to tariffs, but are instead shaped by a combination of trade, macroeconomic and financial factors.

deteriorating growth prospects may lead investors to reassess risk, triggering capital outflows and further contributing to currency depreciation.

As discussed above, TPU represents a distinct macroeconomic shock, whose effects extend beyond those associated with tariff increases.

TPU has risen to historically high levels (see Figure 45, in the Appendix).

TPU primarily operates as a negative demand shock, leading to a contraction in imports and investments, as heightened uncertainty discourages spending and reduces firms' willingness to undertake irreversible expenditures.

Figure 46, in the Appendix, illustrates both the sharp increase in TPU in recent years and the growing share of firms reporting uncertainty as a significant obstacle to investment.

At the same time, the transmission of TPU differs from that of tariff shocks. While tariffs tend to depress both imports and exports, TPU induces a rebalancing through exchange rate dynamics. As uncertainty rises, domestic agents increase precautionary savings, causing domestic demand to fall more than foreign demand. This leads to a depreciation of the nominal exchange rate, which supports exports and partially offsets the contraction in domestic activity.

As a result, although TPU has negative effects on trade and investment, its overall impact on output tends to be more moderate compared to direct tariff shocks.

In addition, TPU influences price dynamics: heightened uncertainty increases firms' incentives to raise markups in response to expected future cost risks, generating inflationary pressures. This mechanism is consistent with the interpretation proposed by the IMF (2025), which characterizes TPU as a "*news shock*", whereby expectations about future trade policy changes influence current economic behavior even in the absence of immediate policy adjustments.

More broadly uncertainty affects firms' investment decisions through the "*option value of waiting*", as highlighted some year before (Handley and Limao, 2017), according to which firms facing sunk costs may delay or cancel investment decisions until greater policy clarity is achieved. In this sense, TPU acts as an implicit barrier to economic activity, weakening business confidence and slowing growth even in the absence of realized policy changes.

Overall, while less directly disruptive than tariff shocks, TPU amplifies the broader economic consequences of protectionist trade policies.

1.1.2.2. The short-run impact of the return to protectionism at domestic level

According to Greus et al (2025), it is useful to distinguish between short term effects of import tariffs on key economic indicators and the medium-long term effects on economic growth, since adjustment mechanisms unfold gradually over time.

Focusing on the short run, economists generally expect tariffs to generate adverse effects across most macroeconomic indicators in large open economies such as the European Union.

Regarding economic growth, experts anticipate a negative impact on output, reflecting the contractionary effects of higher trade barriers on economic activity (see Figure 47, in the Appendix).

Regarding employment, tariffs are generally expected to worsen labor market conditions, although the magnitude of the effect varies across countries and sectors (see Figure 48, in the Appendix).

Regarding inflation, higher import costs due are expected to translate into upward pressure on consumer prices (see Figure 49, in the Appendix). The empirical literature on tariff pass-through (particularly Amiti et al, 2019) and Fajgelbaum, 2019), shows that import tariffs are largely transmitted into domestic prices, increasing costs for firms and consumers.

Regarding Foreign Direct Investment (FDI), tariffs and the associated increase in uncertainty are expected to discourage investment decisions and reduce FDI inflows (see Figure 50, in the Appendix).

Regarding government revenue, tariffs may generate additional customs revenues or substantial declines, depending on differences in trade structures, import dependencies, and assumptions about fiscal offset from reduced economic activity (see Figure 51, in the Appendix). The overall fiscal effects remain uncertain.

Regarding trade volumes, economists broadly anticipate a decline in international trade flows following the introduction of tariffs (see Figure 52, in the Appendix). Consistent with these findings, Fajgelbaum (2019) document a decline in import quantities following the introduction of U.S. tariffs, although part of the adjustment may initially be masked by front-loading behavior.

Indeed, the global economy demonstrated an unexpected degree of resilience in 2025 (OECD, 2025).

A first explanation lies in the phenomenon of frontloading. Recent evidence provided by IMF (2026) and OECD (2025) suggests that the tariff announcement has produced a temporary increased in trade. In anticipation of tightening trade restrictions, companies and economic operators tend to anticipate purchases and supplies, generating the “*front-loading*” phenomenon that artificially supports exports and imports in the very short term (e.g. *front-loading in imports*).

Businesses tend to speed up shipments to avoid additional costs, creating an artificial spike followed by a sharp drop.

1.2. The impact of tariffs on trade and welfare

1.2.1. Some empirical evidence

1.2.1.1. The impact of tariffs on trade and welfare

Some economists justify their stance in favor of free trade through theoretical models of comparative advantage and empirical evidence, predominantly microeconomic in nature, showing how protectionism can generate economic inefficiencies and a reduction in collective well-being. One of the most considerable impacts of tariffs concerns exports and imports, since generally increasing trade costs reduce trade intensity and change competitiveness between countries. The introduction of tariffs makes imported goods relatively more expensive, discouraging domestic demand; furthermore, any retaliatory measures by trading partners can discourage export volumes, especially in sectors most exposed to international trade.

The most relevant evidence to observe the effects of tariffs on import and exports is provided by BBVA Research (2025) (see Figure 15 and Figure 16, in the Appendix)²⁵. This research suggests that, although conceived as protectionist measures, in all scenarios, tariffs end up simultaneously compressing both imports and exports, reducing the overall intensity of international trade.

In Table 5, in the Appendix, it is estimated that global trade could decline by between 4.4% and 9.0% depending on the scenario, while the United States could experience a significantly higher contraction of between 12.0% and 31.3% in trade flows. However, in the Eurozone the estimated impact is more limited, but still negative. If tariffs were to reach or exceed the 60% threshold, trade flows would shrink to zero with a potential collapse of specific bilateral trade flows.

The dynamics observed in the current trade war between China and USA confirm these trends. Indeed, Fajgelbaum et al (2019) validate that tariffs significantly reduce imports of goods, while countermeasures taken by trading partners compromise U.S. exports, limiting the access to foreign markets for several American producers. In particular, U.S. imports of affected varieties decreased

²⁵ The tariff scenarios considered are four: *current scenario*, which reflects the tariff measures actually implemented up to May 13, 2025; *reference scenario*, considered the baseline scenario with limited tariff retaliation; *alternative scenario*, which assumes an intensification of trade restrictions; and *extreme scenario*, which assumes a more severe escalation of the trade war and a significant increase in tariffs between the main economic partners. The methodological approaches are three: *input-output tables* to estimate direct effects on Gross Value Added (GVA); *bilateral panel models* to measure the direct impact of tariffs on exports and imports between pairs of countries; *aggregate panel models* to estimate macroeconomic effects on global economic growth. Particular attention goes to the *reference scenario*, as it is considered the most realistic to assess the economic effects of the tariff war currently underway.

by 31.7%, while retaliatory exports decreased by 9.9%. All this underlines how effects of tariffs tend to propagate beyond the domestic market and alter the overall balance of trade.

But what does this strong reaction of imports and exports depend on?

The different intensity with which exports and imports react to tariff restrictions depends on trade elasticity, that is the degree of sensitivity of international trade to changes in trade costs. The greater the substitution capacity of imported goods or export destination markets, the more significant the response of trade flows to tariff increases tends to be.

In this regard, BBVA Research (2025) analyses the sensitivity of exports and imports to tariff increases through a local projections model based on impulse-response functions, simulating the effect of a 1% increase in tariffs on nominal and real exports and imports (see Figure 25, in the Appendix). The results show that in the short term, imports tend to decline more markedly than exports, suggesting relatively high levels of elasticity and generating a temporary improvement in the trade balance. In the medium term, exports and imports tend progressively to converge towards similar levels, eliminating previous temporary positive effects. Although tariffs are frequently justified as tools aimed at improving the national trade balance, empirical evidence suggests that these benefits tend to be temporary in nature. If in the short run the reduction in imports can help to sustain the trade balance, in the medium term the effect tends progressively to diminish because of the deterioration of exports, rising production costs and retaliatory measures introduced by trading partners.

Figures from 17 to 20, in the Appendix, show the expected cumulative impact of tariffs on total nominal exports and imports, respectively in each of the four scenarios considered by BBVA Research.

Surprisingly, however, the global economy demonstrated an unexpected degree of resilience in 2025 (OECD, 2025).

As illustrated in Figures 21 and 22, in the Appendix, GDP growth remained positive despite persistent uncertainties, and Figure 26 Panel A, in the Appendix, highlights a surprisingly robust performance of global trade volumes (goods and services) throughout 2025. Global trade volumes increased at an annualized rate of 8.1% in the first quarter of 2025, according to OECD (2025), up 0.9 percentage points, according to IMF (2025). In the second quarter, as shown, import volumes in the United States decreased at an annualized rate of 29.3%. However, the impact on overall global trade growth was partly offset by strong trade growth in India and continued robust trade growth in smaller emerging Asian economies (see Figure 26, Panel A and Panel B, in the Appendix).

Here comes another fundamental issue: which factors contributed to the resilience of global GDP and international trade volumes in 2025?

A first explanation lies in the phenomenon of frontloading, explained in Paragraph 1.1.2.2.

On the other hand, 2025 saw some macroeconomic elements that continued to support global aggregate demand. Among these, favorable financial conditions, supportive macroeconomic policies, rising real income, and growing investment demand related to the development of artificial intelligence, particularly in the United States, have temporarily mitigated the negative effects of the introduction of new tariff barriers and the political uncertainty.

OECD (2025) in the preliminary version of Economic Outlook No. 118 of December 2025 reports precisely that, the impact of the tariff increase had not yet shown its full manifestation in the U.S. economy. This due to a combination of factors, including firms using inventories and large profit margins to avoid or absorb the initial impact of the tariff increase, the delay between the announcement and the imposition of higher tariffs and the exemption of goods already in transit from the higher tariffs. Even in many emerging economies, GDP growth proved surprisingly resilient in 2025. Chinese production and demand were supported by strong advance purchasing activity in early 2025.

Once this initial phase (tariff introduction) is over, we see a deteriorating political environment that is holding back global growth. Indeed, future projections suggested by OECD (2025)²⁶ and UNCTAD (2026)²⁷ and shown in Figure 23 Panel A and Figure 24, in the Appendix, indicate a progressive slowdown in world GDP growth. This slowdown is expected to intensify in the second half of the period considered, mainly due to the exhaustion of temporary front-loading effects and the growing impact of the tariffs implemented, particularly in the United States and China.

IMF (2025) reports 0.6 percentage points lower in global trade volume for 2026, compared to 2025.

The outlook for 2027, on the other hand, appears relatively more favorable, thanks to the gradual easing of the effects of tariff restrictions, the maintenance of accommodative financial conditions, the support of macroeconomic policies and the progressive reduction of inflationary pressures. In this context, Asian emerging economies are likely to remain the main driver of global growth, as can be seen in Figure 23 Panel B, in the Appendix.

²⁶ According to OECD (2025) world GDP is expected to decrease from 3.3% in 2024, 3.2% in 2025, to 2.9% in 2026, and then there will be a moderate recovery of 3.1% in 2027.

²⁷ According to UNCTAD (2026), global growth should remain subdued at 2.6% in 2026 and 2026, despite the potential benefits from technological innovation. In developing economies (excluding China), growth is expected to slow slightly from 4.3% in 2025 to 4.2% in 2026, while the United States is expected to move from 1.8% to 1.5% and China from 5% to 4.6%. Overall demand in Europe will remain modest.

The effects of tariffs extend beyond the trade dimension. They have an impact on economic welfare as well.

A first area of concern is that of consumer well-being, negatively influenced by rising tariffs because the latter spreads through various channels, including rising consumer prices of goods, falling wages and the deterioration of household purchasing power (Kreuter and Riccaboni, 2023). The extent to which tariffs impact consumer price is, however, an empirical question (Ossa, 2025). Figure 27 Panel A, in the Appendix, shows that consumer sentiment suffered from tariff increases in 2025, with confidence remaining subdued by historical standards and below the level observed at the end of 2024, especially for OECD economies. This trend would appear to reflect the progressive transfer of higher trade costs to final goods prices, in addition to persistent economic and geopolitical uncertainty, which continues to impact household expectations and consumption decisions (OECD, 2025).

Others (Kreuter and Riccaboni, 2023) further suggest that the deterioration in consumer welfare depends significantly on the sectors affected, their centrality in production networks, the degree of substitutability between domestic and foreign goods and the ratio between their respective prices. Indeed, tariffs allow sectors that compete with tariffed imports to expand, taking resources (labor, capital and land) away from other sectors, including exporting ones. As a result, we have an increase in demand for workers, which drives up wages across the economy. Higher wages increase production costs for exporting firms, making them less competitive in international markets. Here, the welfare of producers is also affected by tariff restrictions. While some domestic firms may temporarily benefit from less foreign competition, rising production costs tend to limit their benefits in the medium term (Ossa, 2025).

At the same time, tariffs contribute to fueling inflationary pressures, although with different intensities between countries. The introduction of a tariff generally results in a one-off increase in the level of domestic prices, without necessarily generating a persistent inflationary process. The latter, however, could occur if the increase in prices triggers a wage-price spiral (supply shock) that could prolong inflationary pressures over time (Ossa, 2025).

OECD (2025) notes that in the median of OECD economies, goods inflation increased from 0.8% in the last quarter of 2024 to 1.8% in October 2025, while services inflation remained high (3.7%) (see Figure 28 Panel C, in the Appendix). In the United States, tariff increases also appear to have contributed directly to the increase in consumer goods prices above 2%, progressively compressing household purchasing power (see Figure 28 Panel D, in the Appendix).

1.2.1.2. *The impact of tariffs on international business and global trade dynamics*

In a context characterized by growing geopolitical uncertainty, trade tensions and frequent tariff policy changes, multinational enterprises (MNEs) are progressively being called upon to reconsider their procurement, investment and production location strategies, with effects propagating along the GCVs and global supply chains. This phenomenon takes on relevance considering that approximately two-thirds of world trade today takes place within GCVs (UNCTAD, 2026). The growing international fragmentation of production has in fact made economies and enterprises highly interdependent, amplifying the transmission of tariff shocks along production chains.

OECD (2025) underlines that increasing trade barriers, especially in strategic sectors and critical inputs, not only affects final goods, but tends to propagate along the entire value chain, influencing suppliers, producers and distributors located in different countries. And therefore, they can cause significant damage to supply chains and global production.

For example, the possible extension of U.S. and Chinese tariffs to a wider range of products such as semiconductors, pharmaceuticals and other intermediate goods, risks generating knock-on effects along international production networks, with significant consequences for both businesses and end consumers. European economies themselves are particularly exposed to such dynamics: Figure 30, in the Appendix, notes that U.S. demand for pharmaceutical products represents a significant share of value added incorporated in the exports of countries such as Ireland and Switzerland, highlighting the degree of interconnection of modern value chains²⁸; similarly, any restrictions in U.S. demand for computers and electronic products could generate significant effects in Southeast Asian economies (OECD, 2025; IMF, 2025).

To mitigate these risks, companies are progressively abandoning production models based exclusively on cost minimization and adopting more resilience-oriented strategies. A reconfiguration of the GVCs is therefore underway and is progressively redrawing the maps of international trade and investment.

Figure 29, in the Appendix, shows that some value chain production and logistic hubs are experiencing growth above the global average, while others are progressively losing centrality. According to UNCTAD (2026), this reconfiguration will characterize all of 2026. Current geopolitical tensions and growing regulatory instability have accelerated *supplier diversification*,

²⁸ U.S. demand for final and intermediate pharmaceuticals accounts for 12.2% of the domestic value added incorporated in Ireland's exports and 4.4% of that of Switzerland.

*nearshoring*²⁹, *friendshoring*, *reshoring* and *vertical integration*³⁰ in businesses. Companies are increasingly seeking alternative suppliers, relocating part of production to countries geographically closer to destination markets, or favoring partners considered politically reliable, reducing dependence on individual strategic areas.

UNCTAD (2026) reports a slowdown in the phenomenon of far shoring. As Figure 32, in the Appendix, shows, after decades characterized by a progressive geographical extension of value chains, trade between geographically close economies recorded more sustained growth in 2025 than that between more distant countries. While not yet a structural reversal of globalization, this trend confirms companies' growing focus on supply chain resilience and geographical risk mitigation.

A study on the washing machine sector, (Flaen et al, 2019), analyses the impact of the different protectionist measures adopted by the United States between 2012 and 2018, showing how multinational companies reacted to the tariffs by modifying the geography of production rather than fully passing on higher costs to final consumers. Following the introduction of anti-dumping tariffs against specific countries, production has been progressively relocated to economies not subjected to trade restrictions, generating phenomena of production relocation, trade diversion and so-called “*country hopping*”. In particular, after tariffs imposed on production located in Korea and Mexico in 2012, a significant share of production was transferred to China; subsequently, anti-dumping tariffs introduced against China in 2016 encouraged a further shift to Thailand and Vietnam, which became new export platforms to the U.S. market.

In parallel, flows of components and intermediate parts also followed such production shifts: Korean exports of washing machine components increased to Thailand and Vietnam as these countries assumed an increasing role within the U.S. GVC.

Empirical evidence also shows that the impact of tariffs on prices depends largely on the type of measure adopted. Anti-dumping tariffs targeting individual countries have produced limited effects on consumer prices due to the ability for companies to rapidly relocate production to other jurisdictions.

Conversely, the global tariffs introduced by the United States in 2018 significantly reduced the chances of circumventing the restrictions, resulting in a price increase for washing machines of approximately 12 % and inducing an increase in the prices of complementary goods, such as

²⁹ *Nearshoring* is a phenomenon of production transfer close to consumers; it represents one of the main patterns of the recent reconfiguration of GVCs. An UNCTAD study dating back to March 2025 “*The role of tariffs in international trade*” highlighted a decline in nearshoring in favor of “*far shoring*”, with reference to the year 2024 (see Figure 33, in the Appendix). But a recent study presented by UNCTAD in January 2026 “*Top trend redefining global trade in 2026*” highlights a growth in *nearshoring* phenomenon.

³⁰ *Vertical integration* is a phenomenon aimed at securing key inputs.

dryers, not directly subjected to the tariffs. The authors also estimate that the overall impact on consumer prices was more than 100% of the value of the tariff itself, highlighting how the effects of protectionist measures can propagate beyond goods directly affected.

Finally, the study highlights how tariffs can incentivize forms of “*tariff-jumping FDI*”, inducing companies to directly locate production in the market that applies trade restrictions, in order to maintain access to that market. In response to the 2018 global tariffs, Samsung and LG have opened new manufacturing plants in the United States, confirming how tariff policies can influence not only trade flows but also the investment and the localization strategies of multinational companies.

UNCTAD (2026) confirms what has just been said with further evidence. From Figure 31, in the Appendix, it can be seen that trade between the United States and Vietnam grew by 18.9% in 2024, while trade between the United States and South Korea recorded growth of 8.7%, higher than their respective long-term averages. In addition, intermediary economies such as Vietnam, Mexico and Turkey (e.g. “*connector economies*”), are assuming an increasingly relevant function as alternative bases and connecting nodes within GVCs.

IMF, UNCTAD and OECD are, however, sounding an alarm. The increase in geopolitical tensions, the increasing use of protectionist measures and the proliferation of tariff and non-tariff measures are indeed fueling phenomena of economic fragmentation, regionalization of trade and redefinition of global trade balances. We are transitioning to a more multipolar world. The main risk associated with such dynamics concerns the possible intensification of trade wars and retaliatory measures, unfortunately already underway (see Figure 31, in the Appendix)³¹.

To prevent the advance of trade fragmentation, OECD; IMF and UNCTAD converge in emphasizing the need to strengthen multilateral cooperation, reduce trade uncertainty and preserve an open and predictable international system, capable of reconciling economic security, resilience and sustainable growth.

1.3. The impact of tariffs on global development and growth

1.3.1. The impact on key sectors

The impact of tariffs in the various economic sectors depends not only on the extent of the measures taken, but also for example on the position occupied by individual sectors within the international trading system. Sectors that are more integrated into GVCs are generally more

³¹ Since 2020, approximately 18,000 new discriminatory trade measures have been registered globally.

exposed to the propagation effects of tariff shocks, while sectors characterized by high strategic or political relevance tend to suffer protectionist measures and retaliation more frequently.

From this perspective, BBVA Research (2025) in a study finds that, based on the role played in the value creation process for a given country, each sector contributes to different degrees to economic losses due to tariffs. Figure 38, in the Appendix, shows, for the same tariff shock, the sectoral decomposition of tariff trade costs for each country³².

Empirical evidence also confirms this heterogeneity in the distribution of the effects of tariff measures. Figure 34, in the Appendix, indeed shows that recent tariff changes have affected almost all economic sectors, but have generated heterogeneous effects as a function of different levels of exposure and vulnerability to trade shocks. Figure 36, in the Appendix, shows that manufacturing is the sector that experienced the greatest tariff escalation between 2024 and 2025. As UNCTAD (2026) highlights, the impact of protectionist measures depends not only on the size of tariff increases, but also on the relevance of the U.S. market for each sector and the degree of integration of the related production chains. In this sense, Figure 35, in the Appendix, highlights the uneven global repercussions (e.g. *spillovers*) of tariff changes across sectors. For example, in the coffee, tea and spice sectors the effects appear relatively limited³³, while in the automotive and transport equipment sectors the combination of the high weight of United States in world imports of the sector (about 20%) and tariff increases close to 20 percentage points determines a significantly higher exposure, with potential repercussions on value chains and international trade flows (UNCTAD, 2026).

Regarding the automotive sector, OECD (2025) and the European Parliament (2025) highlight how countries such as Mexico, Japan, Korea, Germany and the Slovak Republic are particularly exposed to recent U.S. tariff measures, since a significant share of their exports to the United States are made up of motor vehicles and components. This exposure was further accentuated by the introduction, in 2025, of additional 25% tariffs on cars and spare parts.

The case of the Slovak Republic is particularly significant: according to OECD (2025), the automotive sector and its related activities represent approximately 10% of national added value and over 80% of direct exports of goods to United States come from the automotive supply chain. The same source also highlights how Slovakia's deep integration into the European automotive value chain can amplify the effects of a potential slowdown in foreign demand, rapidly transmitting them to suppliers located in other European countries.

³² It is a representation of sectoral decomposition of tariff trade costs, assuming same tariffs across all sectors, constant elasticity at 0.8 and no retaliation between countries.

³³ In the coffee, tea and spice sectors, global effects appear relatively small probably due to the limited domestic production alternatives and their modest global impact.

For its part, Europe is also poised to suffer a substantial impact, given the strong trade imbalance between industries in the United States and the EU. Major automakers, including Stellantis, Mercedes-Benz and Volvo, have suspended profit forecasts due to tariff uncertainty (European Parliament, 2025)³⁴.

Companies of this sector have reacted by adopting strategies aimed at preserving their international competitiveness: OECD (2025) notes that in 2025 the export prices of standard Japanese cars destined for the U.S. market reduced, in an attempt to absorb part of the costs deriving from new tariffs and maintain their market shares³⁵.

The industrial machinery and equipment sector is also particularly sensitive to trade restrictions. According to the European Parliament (2025), EU exports of machinery and transport equipment to the U.S. amounted to approximately 157.7 billion euros in 2023. The strong elasticity of demand for these products means that, even relatively, small tariff increases can translate into significant reductions in trade.³⁶

Given the centrality of the sector, protectionist measures risk affecting not only final producers, but also the whole of industrial activities that depend on the use of capital goods and machinery within their production chains.

The base metals sectors, which occupies a strategic position within global production chains as a supplier of essential inputs to numerous manufacturing activities, also deserves particular attention.³⁷ Larney (2025) argues that U.S. imports of base metals would be 44 times higher, in the absence of tariff measures. Furthermore, he argues that the effects of the tariffs on base metals have been progressively transmitted to downstream user sectors, causing an increase in domestic prices for intermediate and final products.

The agricultural and food sectors have different but no less relevant characteristics. Despite the progress resulting from trade liberalization and preferential regional agreements, it continues to be one of the most internationally protected sectors (see Figure 37, in the Appendix).

With trade wars, the agricultural sector represents one of the main targets of retaliatory measures. Tran (2025) highlights that retaliatory measures adopted by China have affected strategic products

³⁴ The motivation is that it is an industry that faces significant double-digit negative impacts at the level of earnings before interests and taxes (European Parliament, 2025).

³⁵ The United States, Japan's main export destination, has imposed tariffs on steel and aluminum products, automobiles, and car components, as well as an additional 10% fixed tariff starting in mid-April 2025. The impact of the Japanese economy is direct, since for example car exports to the United States are 6% of total exports, and indirect through greater uncertainty and lower global growth. Imports and inventories grew significantly in the first quarter of 2025, reflecting precautionary behavior.

³⁶ Trade elasticities for mechanical products are particularly high (around 8 according to studies cited in Botazzi et al, 2025), indicating that a 10% tariff could lead to a 53% decrease in export demand.

³⁷ This is the so-called "*cost-push*" phenomenon, that is the increase in production costs.

such as chicken, corn, cotton and wheat with a tariff of 15%, and fish products, beef, pork, dairy products, soybeans with a tariff of 19%, generating significant effects in rural areas most dependent on this type of export (Fajgelbaum, 2019).

1.3.2. The impact on least developed countries

The effects of recent tariff increases are particularly relevant for Least Developed Countries (LDCs), economies that generally exhibit lower export diversification, higher sectoral concentration (see Figure 42, in the Appendix), and a limited capacity to rapidly reallocate trade flows (UNCTAD, 2025; UNCTAD, 2026).

According to UNCTAD (2026), although the U.S. market accounts for a smaller share of total LDC exports than many developing countries, these economies are among those that have experienced the highest tariff increases, so the effects of tariffs could be very significant.

Indeed, as highlighted in Figure 39, in the Appendix, between February 2024 and February 2026, LDCs recorded average tariff increases of approximately 18 percentage points, compared to 16 percentage points in developing economies and 10 percentage points in developed economies.

The increase in tariffs inevitably translates into effects on the relative competitiveness of the LDCs. Figure 40, in the Appendix, shows how recent tariff changes by the United States have strengthened the competitive position of developed economies, while developing economies and LDCs have experienced a deterioration in their relative competitiveness. Before the introduction of the new measures, LDCs were in a largely neutral position; however, in February 2026, they were at a disadvantage of approximately two percentage points compared to their main international competitors. UNCTAD (2026) points out that the renewal of the African Growth and Opportunity Act (AGOA) has only partially helped mitigate these effects for some African countries.

However, the effects of the new tariffs are not uniform across all countries. As highlighted by Figure 41, in the Appendix, differentiated tariff variations can generate different impacts across and within country groups, and can alter the relative competitiveness of U.S. trading partners in a heterogeneous manner. UNCTAD (2026) estimates that most developing economies and LDCs are experiencing deterioration.

The heterogeneity of the effects emerges clearly when observing the different production sectors. Table 6, in the Appendix, shows that changes in the LDCs competitiveness differ from sector to sector, within the U.S. market. In general, LDCs tend to perform relatively better in natural resource-related sectors and in several agricultural products, while they suffer larger losses in

several manufacturing sectors. Reductions in relative competitiveness are observed in chemicals, electrical equipment, machinery, plastics and rubber, and precision instruments, while more favorable results emerge in minerals, base metals and some agricultural categories (UNCTAD, 2026). The same report also highlights how sectors such as machinery and textiles are among those most exposed to supply reallocation, with clear effects on suppliers in the U.S. market, especially in favor of exporters from developed economies.

This evidence is consistent with the UNCTAD report “*Tariff Disruption: The Impact on Least Developed Countries*”. The paper highlights how LDCs are exposed to higher tariff levels than advanced economies, although they account for only about 1.1% of world exports (see Figure 43 and 44, in the Appendix). Particularly vulnerable are the light manufacturing sectors, especially textiles and clothing, which constitute a significant share of exports of numerous LDCs to the United States (see Figure 42, in the Appendix). Raising tariffs in such sectors therefore risks limiting opportunities for export growth, slowing down industrialization processes and reducing the contribution of manufacturing to economic development.

Despite the critical issues highlighted, the effects of recent tariff changes are not exclusively negative. Indeed, Table 7, in the Appendix, shows how different intensity on tariff increases can create specific opportunities for some LDC exporters. When direct competitors experience larger tariff increases, U.S. importers can be incentivized to redirect supplies to less penalized suppliers. There are several examples of possible gains in competitiveness, including tobacco from Mozambique, cotton from Benin, shellfish from Senegal, jute from Bangladesh and rice from Cambodia. Although such opportunities are generally limited to specific products and market niches, they demonstrate how trade diversion can offer new market access opportunities even to some less developed economies.

Overall, available evidence suggests that recent tariff increases tend to accentuate the structural vulnerabilities that characterize many LDCs. While there are some opportunities arising from trade reallocation, there remains a reduction in competitiveness in many manufacturing sectors, due to higher trade costs and less favorable U.S. market access conditions. In this context, UNCTAD (2025; 2026) emphasizes the importance of promoting export diversification, strengthening productive capacities and maintaining preferential access regimes to international markets, in order to support the integration of LDCs into world trade.

CHAPTER 2: THE US TARIFF CHALLENGE

2.1. The U.S. – China “Trade War” and its effects (Trump Administration – First Term)

2.1.1. *The Announcement Effects of the increase in Tariffs Rates*

2.1.1.1. *The effects of U.S.- China Tariff Announcements on key sectors and firms*

Several contributions (*ex multis*, Egger and Zhu, 2019; Huang et al, 2022) have been found in the literature, highlighting how tariff announcements introduced in 2018 produced highly heterogeneous effects, depending on the type of activity and the degree of integration into GVCs; effects that also represent different levels of exposure to trade policy shocks.

In the initial phase of the trade conflict, many productive sectors are not yet directly exposed to tariff-related risks. As a result, many listed companies continue to regard the U.S. market as the main destination for their exports, particularly in sectors such as food, beverage, industrial equipment and transport part and components (Ando et al, 2025).

This sentiment reflects a substantial difference between the first and the second Trump administrations. During the first term, the tariff conflict has a predominantly bilateral nature, focusing almost exclusively on the United States and China.

Although indirect effects also spread through third-party economies through GVCs, many international productive sectors are excluded from the direct impact of the protectionist measures. In this context, the relative price stability in non-tariffed sectors suggests that the price variations observed in the affected sectors are mainly attributable to the introduction of tariffs.

In particular, throughout 2018, U.S. sectors affected by tariffs experience significant increases in the prices of both domestically produced intermediate goods and final goods compared to non-affected sectors (Amiti et al, 2019).

By contrast, during the second Trump administration, the prospect of extending tariff measures to additional trade partners, such as Japan, Mexico, Canada and Europe, significantly broadens the level of uncertainty, involving a much higher number of sectors and businesses on a global scale (Ando et al, 2025; Hayakawa K., 2025).

During the first term, the EU is the second largest exporter to both China and the United States, a position that potentially allows it to benefit from the reallocation of market shares previously held by U.S. and Chinese companies (Garcia-Herrero, 2019).

As to the most exposed sectors (to the effects of tariff announcements) between 2018 and 2019, some analysts (Egger and Zhu, 2019)³⁸ conduct an empirical analysis, identifying two main lines of evidence.

The first one shows that tariff announcements generate negative effects not only on foreign firms directly targeted, as expected, but also on domestic listed firms operating within the same productive sectors. In short, tariffs introduced by the United States penalize not only Chinese firms but also U.S. firms themselves, in some cases even more severely in the domestic market (see Table 8, in the Appendix).

The second finding concerns the indirect transmission of tariff shocks along GVC. Although these effects are, on average, less intense than direct ones, they also involve third countries formally external to the trade conflict. Moreover, the nature of these impacts can vary, assuming positive or negative outcomes depending on the position occupied by each sector and country within international production network. This seems to confirm that, in a highly integrated production system, tariff shocks tend to spread far beyond the borders of the countries directly involved.

The just mentioned findings (Huang et al, 2022) further reinforce the perspective offered by others (Egger and Zhu, 2019), highlighting how the effects of tariff announcements are unevenly distributed across firms and sectors, depending on their degree of direct and indirect exposure to trade shocks.

In particular, the authors find that, within the three-day window following the tariff announcement of March 22nd 2018, U.S. firms more heavily dependent on exports to China or imports of Chinese inputs experience a significantly greater decline in stock value and a higher increase in default risk compared to non-exposed firms. More specifically, a 10% increase in the share of revenues derived from the Chinese market is associated with a 0.5% reduction in cumulative returns, while firms directly dependent on imported Chinese inputs experience an average decline of 0.6%.

The surveys further show that the impact of tariffs depends not only on the intensity of trade flows but also on supply chain structures and firms' productive characteristics.

On the export side, companies with higher Research and Development (R&D) propensity display lower vulnerability to tariff shocks, thanks to the greater diversification of their products and the higher substitution costs faced by Chinese buyers. Conversely, on the import side, firms relying on highly differentiated inputs from China are more penalized, as replacing alternative suppliers involves higher costs.

³⁸ As to listed firms, Egger and Zhu (2019) for their analysis use a sample composed of the two countries directly involved in the trade war, the United States and China, and in addition 38 third-party economies, thus allowing to observe not only the direct effects of tariffs, but also the indirect ones transmitted through GVC.

Finally, some (Huang et al, 2022) also confirm that indirect exposure through domestic supply chain amplifies the negative effects of tariff announcements. Firms linked to suppliers or customers heavily dependent on trade with China are indeed experiencing significant reductions in stock returns, confirming that tariff shocks tend to spread throughout the entire production network, even affecting companies without direct trade exposure.

2.1.1.2. The effects on Investment Growth

Tariff announcements during the U.S.-China trade produce effects far more complex and broader than the primary objectives initially pursued. Most investors report being surprised by timing, magnitude and scope of the tariffs announced by President Donald Trump in 2018 (Huang et al, 2022).

In this context, some authors (Egger and Zhu, 2019; Amiti et al, 2020) identify two key findings. First, tariff measures adopted by both the United States and China exert negative effects on stock prices not only in the countries directly targeted by tariffs, but also in their domestic markets, with stronger effects as tariff rates increases. Second, tariff shocks are directly transmitted through GVC. Although these indirect effects are on average less intense than direct ones, they still affect stock returns not only in the United States and China, but also in third-party economies formally external to trade conflict. Furthermore, the nature of these effects varies depending on the degree of complementary or substitutability of each country's productive structure compared to those of the United States and China: economies with more complementary outputs could benefit from less negative, or even positive, indirect effects, while economies with substitutive outputs tend to experience more severe negative impacts on stock prices.

With reference to the U.S.-China trade war, some authors (Amiti et al, 2020) propose an innovative methodology based on a stock-market event study³⁹, aimed at measuring the impact of trade policy

³⁹ This approach represents an important advancement compared to traditional Difference-In-Differences (DID or DD) methodologies, which only allow the identification of the differential effect (e.g. the specific effect) between treated and untreated firms; in other words, the extent to which firms exposed to tariff announcements perform worse than non-exposed firms. They therefore fail to capture the general effect (e.g. the common effect) that is transmitted across the entire market through macroeconomic channels, and which represents a significant effect since a possible tariff war can create uncertainty and a slowdown in growth.

However, the methodology used by Amiti et al (2020) also has two important limitations: listed U.S. companies are considered exclusively, thus excluding both private and agricultural companies; furthermore, only U.S. companies are considered, and not for example foreign multinationals operating in the United States that may have suffered significant effects on investments.

announcements both on aggregate stock market performance⁴⁰ and on the returns of listed U.S. firms, distinguishing between firms directly exposed to China and non-exposed firms⁴¹.

The overall impact of a tariff announcement can be decomposed into two main components: the “*common effect*”, which captures the generalized impact on the entire economic system and affects all firms, including those not directly exposed to China; and the “*differential effect*”, which represents the additional impact borne by treated firms. The sum of these two components constitutes the total effect generated by the tariff announcement (see Figure 53, in the Appendix). With reference to the first announcements in March 2018, Amiti et al (2020) estimate an overall reduction in aggregate equity prices of 6%, corresponding to a total market value loss of approximately \$1.7 trillion for the sample of firms analyzed⁴². Of the 6% overall reduction, 3.4% is attributable to the common effect, indicating that more than half of the overall impact derives from general macroeconomic factors, while the remaining 2.6%, that is less than half, is attributable to the differential effect, namely the specific exposure of firms to China. This evidence confirms that the announced tariff war affects not only companies exposed to China, but the entire economic system. There is a similar trend in 2019.

Here, Tobin’s q-theory of investment comes into play.

James Tobin argues that a firm’s investment decision depends on the relationship between the market value of existing capital and its replacement cost. In shorts, the firm invests when the market places a value on capital that exceed the cost required to acquire or reproduce it.

Starting from this premise, new researches published by NBER (Amiti et al, 2020) employ the following formula to examine the effects of U.S. - China trade war on investment growth:

$$\frac{I_{fs}}{K} = \rho_f - \frac{p_s}{\psi} + \frac{q_{fs}}{\psi}$$

The first term is composed of the investment level of firm f in period s, in the numerator, and the initial capital stock of the company, in the denominator; so, the left side of the formula represents the investment rate that is the speed with which the company is expanding the capital. The second term is the firm-specific depreciation rate. The third term is composed of the cost of investment goods in the period considered, in the numerator, and the parameter that measures the magnitude

⁴⁰ This is because the market immediately incorporates new information, such as tariff announcements. As a result, tariff announcements force investors to revise their expectations about future profits, and stock prices provide an immediate measure of such adjustments, in line with the “*Efficient-Market Hypothesis (EHM)*” by Eugene Fama (1970).

⁴¹ “*Unexposed companies*” (or “*untreated companies*”) are those without direct commercial exposure to China, that is the country that first suffered the tariff attack from the USA. “*Exposed companies*” (or “*treated companies*”) are those in a position expressly exposed to China, as companies importing from China, or companies exporting to China, or businesses selling in China (Amiti et al, 2020).

⁴² Survey carries out on a sample of 3,000 listed U.S. companies in the COMPUSTAT database.

of capital adjustment costs, in the denominator. The fourth term is composed of the shadow value of capital (e.g. the expected return on capital or the marginal value of capital), in the numerator, and the parameter that measures the magnitude of capital adjustment costs, in the denominator.

The equation shows that the investment rate increases as the expected value of capital (e.g. the fourth term) increases and it decreases as the investment cost and the adjustment costs (e.g. the third term) increases.

Consequently, a reduction in equity prices, reflecting lower expectations about future profits, reduces the expected value of capital (e.g. the return on capital) that is directly linked to the firm's market value. As a result, both q and the Market-To-Book (MTB) ratio decrease, reducing the incentive to invest and ultimately slowing down investment growth.

The estimates developed by the authors confirm this dynamic (Amiti et al, 2020).

The first U.S. tariff announcement dating back to March 2018 primarily reduces returns for companies most exposed to China. In the fourth quarter of 2019⁴³, the investment growth rate of listed companies is 0.3 percentage point lower (see Figure 53, in the Appendix). Subsequently, by the fourth quarter of 2020, in light of all 2019 tariff announcements, there is an additional reduction of 1.6 percentage points. Overall, the cumulative impact of the U.S.-China trade results in a contraction in investments growth of 1.9 percentage points by the end of 2020.

2.1.1.3. The effects on Trade Policy Uncertainty (TPU)

During the U.S.-China trade war, the progressive escalation of tariff announcements contributes to a sharp rise in uncertainty in both economies, USA and China, as firms face increasing ambiguity regarding future production costs, supply chain stability and access to foreign markets. A substantial part of the empirical evidence on the relationship between tariff announcements and TPU discussed in this section relies on the study “*Corporate Investment Amid Trade Policy Uncertainty: Past Lessons, Future Presidency*” by Keshav V. (2025). The author suggests that, between 2016 and 2019, U.S. TPU increases by a factor of 20. In particular, TPU remains relatively stable until the last quarter of 2017, after which it increases exponentially due to the first U.S. tariff announcements, marking the beginning of the so-called “*trade war period*” in the literature (see Figure 56, in the Appendix).

⁴³ This delayed effect is explained by the fact that the MTB ratio is calibrated with a four-quarter lag. Therefore, the reduction in stock prices translates into a significant decline in firms' investment rates approximately four quarters later.

The bilateral nature of the conflict is further reflected in the strong correlation between U.S. and Chinese TPU, which reaches 0.89. This suggests that uncertainty generated by tariff announcements in one country rapidly transmits to the other through trade linkages, supply chains and expectations of retaliation. In this sense, tariff announcements operate not only as direct policy interventions but also as signals of future instability.

A further relevant dimension emerges through political communication (e.g. the presidential communication), considered an increasingly influential factor in shaping market expectations. Figure 57, in the Appendix, compares the U.S. TPU index with the Trump Twitter Index and reports a correlation of 0.78, suggesting that informal political communication is an additional channel through which uncertainty can be transmitted to firms and financial markets, even before official tariff measures are implemented.

A similar perspective is offered by Caldara et al (2019), who argue that TPU is not only driven by implemented tariff changes, but also by future expectations. Their findings show that TPU rises sharply during the trade war, while the share of listed firms discussing TPU in earning conference calls increases from 2.8% to 12.9% between 2017 and 2018, confirming the fact that tariff announcements function as informal shocks.

2.1.2. The effect on China exports to U.S.A.

2.1.2.1. The Effects on Demand, Supply and Pricing

To analyze the effects of the trade war on Chinese exports to the United States, particularly regard to supply, demand and pricing dynamics, the study conducted by Jiao et al (2022) represents a particularly relevant contribution. By relying on proprietary firm-level data covering approximately 20,000 Chinese exporting firms located in prefecture-level city in Eastern China over the period from January 2013 to April 2019, the authors offer a detailed empirical framework for understanding how U.S. tariff increases affect not only export volumes, but also firms' ability to reallocate supply, adjust prices and preserve profitability.

From the demand side perspective, the findings show that U.S. tariff hikes significantly reduce Chinese exports to U.S. market. The authors estimate that a 1% increase in export prices inclusive of tariffs leads, on average, to a 4.16% decline in exports to the United States. At the same time, exports directed toward non-U.S. foreign markets increase moderately by 0.97%, indicating a limited capacity of trade diversion. Overall, total Chinese exports decline by 0.83%, domestic sales barely change, and total sales decrease by 0.63%, suggesting that the contraction in foreign demand is not fully compensated by the domestic market. Furthermore, a more detailed breakdown of

export destinations shows that the European Union absorbs part of the trade diversion generated by the U.S. tariffs. Chinese exports to the EU increase moderately, likely because the European market is sufficiently large and presents demand characteristics similar to those of the United States. However, even this increase is not sufficient to fully offset the losses experienced in the U.S. market.

From the supply side perspective, the study highlights significant rigidities that limit firms' ability to rapidly reallocate exports toward alternative destinations. Chinese exporters face substantial adjustment costs and several structural constraints when attempting to diversify their sales. Survey evidence⁴⁴ collected from firm managers indicates that 59.3% identify the absence of established sales channels and sales networks as the main obstacle to redirecting exports to non-U.S. markets. Additional constraints include product standardization and specifications differences (22.9%), weak brand recognition (25.3%), insufficient guarantees in payment collection for pre-sold merchandise (25%) and the limited size of alternative markets (25.3%).

When managers are specifically asked about the possibility of redirecting unsold goods to the domestic Chinese market, 46.6% identify the lack of established domestic sales channels and distribution networks as the primary obstacle⁴⁵.

These results suggest that supply-side frictions play a crucial role in amplifying the negative effects of tariff shocks.

Regarding pricing behavior, the evidence shows that Chinese exporters do not significantly adjust their net export prices in response to the tariff increases. As illustrated in Figure 54, in the Appendix, the export price per unit, excluding tariffs, remains relatively stable before and after the tariff announcements. This finding supports the argument that the tariff burden is largely passes through to U.S. importers and domestic consumers rather than absorbed by Chinese producers through lower prices (Amiti et al, 2019 and 2020).

This pricing rigidity has also relevant consequences on the operational flexibility and profitability of Chinese exporting firms. According to Jiao et al (2022) analysis, on average, a 1% increase in tariff-inclusive export prices is associated with a reduction of 0.35 percentage points in profit margins for Chinese exporting firms. Across the sample period, firms report an average negative profit margin of -0.06 (e.g. -6 percentage points), reflecting a deterioration in financial

⁴⁴ The analysis relies on a survey of 600 Chinese exporting firms. Managers are asked to identify the main constraints preventing the reallocation of Chinese exports toward alternative foreign markets after the U.S. tariff increases. Since respondents can select more than one option, the total percentage of responses exceeds 100%.

⁴⁵ Within the same survey indicated in Note 44, managers are also asked to identify the main obstacles preventing the reallocation of Chinese unsold export goods to the domestic market. Since respondents can select multiple options, the reported percentages do not sum to 100%.

performance. Survey evidence⁴⁶ further suggests that 72.2% of managers consider already narrow profit margins as the main factor preventing further price reductions, while 21.1% report contractual obligations as an additional constraint. Another 3.8% are unwilling to lower prices due to anti-dumping sanctions imposed by U.S. customs. Finally, 2.8% of respondents do not find it necessary to reduce prices in response to U.S. tariff surges, as they control the pricing power in their market.

2.1.2.2. The Effects on Chinese Export value growth

Following China's accession to the WTO in 2001, Chinese exports, particularly toward the United States, experience substantial and sustained growth, consolidating China's role as a central player in global trade. However, the protectionist turn initiated during the first Trump administration marks a significant disruption to this trajectory, with China becoming the primary target of U.S. tariff measures (Huang et al, 2022).

Evidence provided by Jiao et al (2022), shows that U.S. tariff increases generate a measurable contraction in Chinese export performance, as already explained. In particular, a 1% increase in tariff-inclusive export prices leads, on average, to a 4.16% decline in Chinese exports to the United States. Although exports to non-U.S. destinations increase by 0.97%, suggesting the existence of trade diversion, this adjustment remains insufficient to fully offset the losses in the U.S. market. As a result, total Chinese exports decline by 0.83%, indicating an overall weakening in export value growth.

These findings are further supported by Freund et al (2023), who document a broader restructuring of U.S. import patterns between 2017 and 2022. Over this period, China's share in total U.S. imports falls from 21.6% to 16.3% returning to pre-2007 financial crisis levels. More specifically, for tariffed products, U.S. imports from China decline by 14% relative to 2017, while imports of the same products from the Rest of the World (ROW) increase by 48% (see Figure 55, in the Appendix).

This dynamic is also evident in the strategic high-technology sectors. Between 2017 and 2022, China's share in U.S. sewing machine imports declines by 23 percentage points, while Vietnam's share increases by 17 percentage points. Similar patterns emerge for advanced technology products, such as laser printers and input/output units, where China's market share falls sharply,

⁴⁶ The analysis relies on a survey of 600 Chinese exporting firms. Managers are asked to identify the main factor preventing Chinese firms from adjusting export prices following U.S. tariff hikes. The percentages reported reflect the distribution of responses across the alternative explanations provided.

being replaced by suppliers from Mexico and Vietnam. These developments suggests that the reorganization of U.S. supply chains does not reflect a complete relocation of production, but rather a diversification strategy consistent with the so-called “*China+1*” model.

2.2. The new “Trade War” and its effects (Trump Administration – Second Term)

2.2.1. The “Tax the guy behind the tree” motto

As observed in a commentary published by the Center for Strategic and International Studies (Reinsch, 2019) tax policy has never been a neutral exercise, because any fiscal intervention inevitably produces asymmetric effects across sectors, regions, firms and individuals, even when policymakers attempt to minimize distortions. In recent years governments have progressively moved away from the principle of tax neutrality, employing fiscal policy as a competitive and strategic instrument: on the one hand, as an incentive to attract firms and capital into domestic territory; on the other hand, as a punitive weapon against targeted sectors and foreign economies. This new interpretation is particularly useful for understanding the evolution of U.S. tariff policy between the first and the second Trump administrations, cause the economic logic pursued by Trump changes.

The first Trump administration is politically framed around the official campaign slogan “*Make America Great Again*” (MAGA) that emphasizes domestic economic recovery, industrial revitalization and the correction of external trade imbalances.

Indeed, as previously discussed, tariffs against China are mainly implemented as a corrective measure to specific trade grievances, including intellectual property violations, forced technology transfers and broader unfair trade practices by China (Aggarwal and Reddie, 2023; Braghini, 2025; Wolff, 2025; ITIF, 2025). In this phase, the conflict therefore remains largely centered on the bilateral U.S.-China relationship.

The second Trump administration develops under significantly different institutional and geopolitical conditions, shifting to the new doctrine of “*America First*” and Trump’s own narrative of a “*New Golden Age of America*”.

As highlighted by some academics (Avi-Yonah and Narotzki, 2024, tariffs represent the “*cornerstone*” of Trump’s second term, to point out that Trump explicitly refers to himself as “*Tariff Man*” and describes tariffs as “*the most beautiful world in the dictionary*”, revealing the centrality of protectionism not merely as an economic measure, but as a political identity and electoral instrument.

On the other hand, Italian Academia (Boeri, 2025), Trump 2.0, compared to Trump 1.0, operates in a more fragmented international environment, characterized by multiple geopolitical conflicts, weaker multilateral organizations, post-pandemic disruptions and increasingly polarized economic blocs. But, at the same time, Trump returns to office benefiting from a more compliant institutional framework, partly shaped by the appointments and political restructuring carried out during his first presidency, and thank to the fact that the Biden administration preserves the line of action adopted during Trump's first presidency with regard to tariff architecture^{47, 48} (Boeri, 2025; Avi-Yonah and Narotzki, 2024; Baldwin, 2025). As a result, Trump acts in the belief that he has no limits.

This institutional consolidation is further reinforced by evidence from the analysis reported in the "*The Washington Post*" (2025) which identifies one of the main differences between Trump 1.0 and Trump 2.0 in the greater internal stability and lower turnover among senior officials, allowing for a more coherent and less constrained decision-making process, with less internal opposition and chaos.

According to "*The Hill*" (2025), the first 100 days of Trump 2.0 are characterized by a significantly faster and more aggressive use of executive power, through 30 executive orders, with trade and tariff policy immediately returning to the center of the presidency's agenda to achieve his goals. Under Trump 2.0 the role of tariffs increases. They no longer appear limited to correcting a specific bilateral imbalance, but function as instruments of broader economic pressure directed toward multiple external players beyond China, including the allies.

Across the ocean (Baldwin, 2025), the 2 April Executive Order by Donald Trump represents the main attempt to "*stop the steal*", reindustrialize America and restore the dignity of the middle class. Trump announces a new wave of tariffs on imports from all major trade partners, marking a decisive shift from bilateral trade conflict to a more extensive one.

In this sense, the new tariff policy pursued by Trump reflects the logic described by many (Reinsch, 2019; Ripamonti, 2025; Braghini, 2025; Baldwin, 2025): taxation ceases to be merely a fiscal instrument and becomes a powerful weapon of economic competition and political pressure, transforming U.S.- China conflict into a non-conventional trade war.

It is especially during the second term of Trump administration that the well-known motto attributed to Senator Russell B. Long, former chairman of the U.S. Senate Finance Committee,

⁴⁷ See Note 3

⁴⁸ Biden administration largely builds upon the tariff architecture introduced under Trump 1.0. Indeed, Biden maintains a significant share of the tariffs imposed during the first Trump administration, while introducing additional and more targeted tariff measures on strategic Chinese sectors such as electric vehicles, semiconductors and critical minerals (Avi-Yonah and Narotzki, 2024).

becomes highly relevant to the current economic and political dynamics: “*Tax the guy behind the tree*”. Although the motto has been originally formulated in the context of domestic tax reform (e.g. personal income tax), the principle reflects the attempt to externalize the economic costs onto less visible and politically distant actors.

As recalled by Dunkelberg (2024) in “*Forbes Magazine*”, the underlying idea is that public revenue and economic adjustments are always easier to justify when their visible burden appears to fall on “*someone else*” rather than on domestic taxpayers.

Furthermore, many contributions (Avi-Yonah and Narotzki, 2024; Oats, 2023) underline that tariffs remain politically attractive because they are easy to impose and easy to justify to domestic voters, offering the illusion that the burden falls externally rather than internally. Actually, they represent a real and unrecoverable cost for companies, which pass it on to the final consumer.

During the second term of the Trump administration, tariffs are framed as measures designed to shift economic costs onto foreign economies and producers, thereby strengthening domestic consensus around economic nationalism and industrial protection. In this context, the “*guy behind the tree*” is therefore represented by geographically distant and politically external actors (most notably China).

Yet the empirical evidence examined throughout this thesis challenges this narrative. Many contributions to the literature (Amiti et al, 2019; Avi-Yonah and Narotzki, 2024) demonstrate that tariffs imposed during 2018 generate significant increases in the prices of imported goods within affected U.S. sectors. Subsequently, others (Egger and Zhu, 2019; Amiti et al, 2020) further estimate that the first tariff announcements reduce aggregate U.S. stock prices, with a corresponding loss in market value, and with effects that in some cases appear stronger than those observed in China. Fajgelbaum et al (2020) confirm that the welfare burden of tariffs falls predominantly on U.S. consumers and importers. Several analyses (Amiti et al, 2019; Fajgelbaum et al, 2019) confirm a substantial pass-through of tariff costs into domestic prices, at the expense of domestic consumers.

Taken together, these findings reveal the central contradiction of Trump’s tariff strategy. The political rhetoric presents tariffs as a mechanism through which foreign economies pay for U.S. economic revival. However, the economic incidence of tariffs shows that a substantial share of these costs returns to domestic firms and households through higher prices, higher production costs, lower stock valuations, reduced investment and increased TPU (Amiti et al, 2019; Fajgelbaum et al, 2019; Amiti et al, 2020; Caldara et al, 2019). Therefore, “*the guy behind the tree*” is not primarily the foreign producer, or in general the foreign economy, but instead, it

represents the domestic economic system that absorbs much of the tariff burden. In this way, the most accurate political illusion at the core of the contemporary protectionism is revealed.

2.2.2. The “Grievance Doctrine” and the Great Trade Hack. The retaliation of trade partners

Trump’s 2025 tariff escalation cannot be fully understood through a traditional economic framework alone. As Baldwin (2025) argues that the rationale behind this protectionist turn is rooted in what he defines as the “*Grievance Doctrine*”, an ideological and political framework built on victimhood, betrayal and retaliation. Within this doctrine, the United States is portrayed as a country that played by international rules only to be exploited by foreign competitors and betrayed by domestic elites, while its middle class absorbed the social and economic costs of deindustrialization.

Baldwin (2025) links this middle-class grievance to structural transformations triggered by globalization, and the cumulative effect of automation, offshoring and import competition, which progressively dismantled traditional manufacturing ecosystems, from 1970s, especially across the Rust Belt, eroding both economic security and social stability.

This doctrine reframes trade policy through an emotional rather than economic logic. Baldwin (2025) describes it as a form of “*institutionalised indignation*”, where trade deficits are no longer interpreted as a macroeconomic outcome, but as evidence of theft, humiliation and systemic betrayal. In this context, as already said, tariffs cease to function merely as fiscal instruments and instead become political and emotional punishments designed to restore national pride.

Baldwin (2025) conceptualizes this strategy as the “*Great Trade Hack*”, from which one of his most significant recent publications takes its name. He uses the metaphor of “*cyber hacking*” to explain the Trump attempt to bypass and short-circuit the global trade rules system (e.g. “*hack*”) rather than reform or rebuild it. Unlike traditional trade policy based on negotiation, reciprocity and institutional predictability, the Great Trade Hack relies on unilateral disruption. Its purpose is to break the logic of multilateralism by replacing cooperation with coercion and transactional leverage. In this sense, the objective of Trump is not to preserve the system, but to exploit its vulnerabilities while maximizing U.S. bargaining power and reaching the top of the hierarchy.

Tariffs become the “*all-purpose weapon*” of the U.S.- China trade war. They are used by Trump to punish foreign competitors, pressure allies (defined “*freeloaders*”) and force concessions, with simultaneously reinforcing domestic political narrative that America is finally “*standing up*” for its middle class (Baldwin, 2025).

Yet Baldwin (2025) argues that at the heart of U.S. trade policy today lies a contradiction: tariffs cannot structurally resolve the root causes of middle-class malaise; at best, they provide temporary relief to workers in goods-producing sectors, which today represent less than 9% of middle-class employment, while the majority of middle-class workers remain concentrated in services-sector jobs, so they lack of economic effectiveness.

Rotunno and Ruta (2025) try to identify three possible strategic responses by U.S. trading partners following Trump's tariff escalation: tit-for-tat retaliatory tariffs, reallocation of subsidies towards the most affected sectors, and deeper economic integration through alternative trade agreements. Their simulations shows that these responses produce significantly different outcomes. Tit-for-tat retaliation generates a 49% reduction in U.S. exports compared to a baseline scenario without U.S. tariffs, while subsidy-based strategies strengthen production and exports, particularly in China, although at the cost of fiscal distortions and welfare losses. By contrast, deeper economic integration emerges as the only strategy capable of increasing welfare, allowing countries to compensate for the lost access to the U.S. market though stronger alternative trade linkages.

Avi-Yonah and Narotzki (2024) agree by stating that tariff escalation inevitably generates retaliation, with a spiral of countermeasures capable of directly harming U.S. producers and workers, while further aggravating supply chain disruption. The mischaracterization that Trump's tariff war is a conventional war creates the illusion that the conflict can be won by a single party. This is a dangerous illusion because it is not a zero-sum game, where one party's gain corresponds exactly to the other part's loss. Baldwin (2025) highlights that the U.S.-China tariff escalation of April 2025 is a clear example: China's retaliatory measures quickly matched American tariffs, producing an escalating cycle of countermeasures that increased trade policy uncertainty, market instability and GVCs disruptions. For these reasons, the Great Trade Hack represents a structural challenge to global trade order.

2.2.3. The Short-Term effect of the tariff policy: Domestic vs Imported Goods

The short-term effects of 2025 U.S. tariff policy reveal that the burden of tariffs extends well beyond imported goods, producing immediate spillovers on domestic markets.

Using high-frequency retail price data from the online store of five major U.S. multichannel retailers, Cavallo et al (2025) provide empirical evidence that tariff announcements generate rapid price adjustments across both imported and domestically produced goods, although with different magnitudes. Their dataset combines daily product-level prices, country-of-origin information and tariff classifications based on the 10-digit level of the Harmonized System (HS) codes, allowing

for a granular distinction between imported and domestic goods. The granular view can reveal which goods are affected, how quickly prices adjust and whether the impact change by country⁴⁹. Their findings show that after the tariff implementation of March 4th 2025, when the United States imposed a 25% tariff on imports from Canada and Mexico, alongside an additional 10% tariff on Chinese goods, retail prices of imported goods increased immediately by approximately 2 percentage points, while domestic goods rose by around one percentage point (Cavallo et al, 2025). Following the broader tariff escalation of April 2nd 2025 (e.g. “*Liberation Day*”), which introduced a baseline 10% tariff on goods from all countries and further increased tariffs on Chinese products up to 125% 10 as trade tensions escalated, imported goods experienced an additional acceleration in price growth, while domestic goods continued to rise at a slower but still significant pace (Cavallo et al, 2025).

Figure 58, in the Appendix, shows in detail each new tariff measures introduce by USA and China government, with its impact on the price indices of imported goods and domestic goods, from the perspective of the United States.

Since early March till early September 2025, the cumulative effects were substantial: imported goods registered an average price increase of approximately 4%, while domestic goods increased by around 2%. When measured against pre-tariff trend estimates, these increases rose to 5.4% for imported goods and 2.6% for domestic goods (Cavallo et al, 2025).

This evidence demonstrates that tariffs operate not merely as border taxes, but as transmission mechanisms of inflationary pressures across the entire domestic market.

The increase in domestic prices can be explained by two interconnected mechanisms. First, many U.S.-produced goods depend on imported intermediate inputs (including components, packaging and raw materials), which become more expensive once tariffs are imposed. This increases production costs even for goods assembled domestically. Second, tariffs alter competitive pricing dynamics: as imported substitutes become more expensive, domestic firms anticipate a reallocation of consumer demand toward local alternatives and strategically increase their domestic prices to preserve margins or exploit reduced foreign competition (Cavallo et al, 2025). This mechanism becomes even more evident when distinguishing between domestic goods in tariff-affected and non-affected categories. The same survey (Cavallo et al, 2025) shows that domestic goods that belong to affected sectors (e.g. furnishings and household equipment) recorded price increases almost identical to imported goods during the first phase of tariff implementation, diverging only in subsequent months.

⁴⁹ These are insights not captured in conventional statistics.

By contrast, domestic goods in unaffected sectors experienced significantly lower and more gradual price increases (see Figure 59, in the Appendix).

This suggests that the short-term transmission of tariffs depends strongly on sectoral exposure and the import intensity of supply chains.

Although the price response was rapid, its magnitude remained lower than the announced nominal tariff rates, which in some cases exceeded 100% (e.g. China case). Cavallo et al (2025) attribute this partial pass-through to several mitigating factors, such as retailers' margin compression, inventory front-loading before tariff implementation, trade diversion toward alternative suppliers and uncertainty regarding the duration and the scope of tariff measures. However, even if the immediate pass-through remained incomplete, the distributive burden on consumer was substantial (Cavallo et al, 2025).

According to York and Durante (2025), Trump's tariffs represented the largest U.S. tax increase since 1933, reducing market income by 1.4 percent in 2026 and increasing the average tax burden by approximately \$1,300 per household in 2025 and \$1,600 in 2026, primarily through higher prices on imported goods and their domestic substitutes.

From a broader perspective, Baldwin (2025) argues that these price increases directly reduce the purchasing power of U.S. consumers, particularly middle-class households whose real income is disproportionately affected by rising costs of essential and substitutable goods. In this sense, the short-term effects of tariff policy reveal a structural contradiction: while tariffs are publicly framed as instruments to protect domestic production and restore middle-class prosperity, their immediate effect is often to increase consumer prices and erode real purchasing power.

2.2.4. The EU Retaliation and the U.S. – EU Joint Agreement on “Reciprocal, Fair and Balanced Trade”

The European Union was among the first major trade partners to react against the reintroduction of Trump's tariffs in 2025. Following the reinstatement of the 25% tariffs on steel and aluminum on March 12th 2025, the European Commission announced retaliatory measures targeting approximately €26 billion worth of U.S. exports, including steel, aluminum, textiles, home appliances and agricultural products. Also, items such as motorcycles, bourbon, peanut butter and jeans have been affected (Illieva, 2025).

The first phase of these countermeasures revived tariffs previously imposed during the 2018-2020 trade disputes and deliberately targeted emblematic American products such as bourbon whiskey,

Harley-Davidson motorcycles, jeans and agricultural food, selected for their political sensitivity in key Republican states (e.g. Kentucky and Wisconsin) (Illieva, 2025).

At the same time, the EU avoided a purely confrontational approach by proposing a diplomatic “zero-for-zero” tariff arrangement on industrial goods, particularly in sectors such as automotive, machinery and pharmaceuticals, signaling its preference for preserving a rules-based multilateral order rather than escalating unilateral protectionism (Illieva, 2025).

However, the continued expansion of U.S. reciprocal tariffs throughout spring and summer 2025 progressively intensified tensions. As reported by York and Durante (2025), the tariff rate initially announced at 20% for EU imports on April 2nd was later raised to 30% by August 1st, before being partially reduced following bilateral negotiations.

This process culminated in the Joint Statement on a United States-European Union Framework on an Agreement on Reciprocal, Fair and Balanced Trade, signed on August 21st 2025. Under this framework, the European Union committed to eliminate tariffs on all U.S. industrial goods and to grant preferential access to several agricultural and seafood products, while the United States committed to apply the higher of either the U.S. Most Favored Nation (MFN) tariff rate or a tariff rate of 15 percent, comprised of the MFN tariff and a reciprocal tariff, on originating goods of the European Union (White House, 2025).

The agreement also introduced tariffs caps of 15% on strategic sectors such as automobiles, pharmaceuticals and semiconductors, alongside broader cooperation on energy security, artificial intelligence chips and technical standards (White House, 2025).

This agreement represents a temporary de-escalation rather than a restoration of the previous liberal trade order. While it reduced immediate trade uncertainty, it also formalized a bilateral framework shaped by reciprocity, strategic bargaining and managed market access.

2.2.5. The Trade Strategy of non-EU countries. Do they have a plan B?

2.2.5.1. The case of Vietnam

A particularly emblematic case in the U.S.-China trade war is represented by Vietnam, which occupies a dual and highly strategic position in the trade war. On the one hand, Vietnam emerged as one of the main beneficiaries of the U.S.-China decoupling, absorbing a significant share of production and trade flows previously concentrated in China. On the other hand, it became a critical hub for tariff circumvention through the phenomenon of trade rerouting, namely the practice of redirecting Chinese goods through third economies in order to evade U.S. tariffs.

Iyoha et al (2025) demonstrate that approximately 8.8% of the \$52.8 billion in Vietnamese exports to the United States between 2018 and 2021 can be directly attributed to rerouting activities rather than genuine domestic value-added production, confirming Vietnam's central role in this mechanism.

These dynamics generated a new source of friction with Washington. As reported by York and Durante (2025), the Trump administration responded by announcing, on July 2nd 2025, a bilateral arrangement under which Vietnamese exports remained subject to 20% baseline tariff, while goods identified as transshipments became subject to an additional 40% tariff, explicitly targeting disguised Chinese exports.

This measure illustrates how tariff policy progressively evolves from a conventional protective instrument into a broader enforcement mechanism aimed at policing supply-chain origin limiting indirect market access.

At the same time, Vietnam pursued a parallel strategy of structural resilience by deepening its integration into regional trade blocs such as the CPTPP and the Regional Comprehensive Economic Partnership (RCEP), thereby reducing its long-term dependence on U.S. market and reconfiguring its trade architecture in response to the conflict (Baldwin, 2025).

2.2.5.2. The case of Canada

Canada represents one of the most paradoxical cases within the 2025 trade escalation. Despite being one of the United States closest historical trade partners under the United States-Mexico-Canada Agreement (USMCA), it became one of the most exposed economies to Trump's tariff strategy, particularly in energy, steel, aluminum and automotive sectors.

Rotunno and Ruta (2025) identify Canada as one of the most vulnerable countries to reduced access to the U.S. market, given its structural dependence on American demand and the high level of integration within North America supply chains.

In the initial phase of the conflict, Canada responded through a classic tit-for-tat retaliation strategy, imposing counter-tariffs on a broad range of U.S. products. According to York and Durante (2025), these retaliatory measures formed part of the wider international response that, by September 2025, covered approximately \$223 billion of U.S. exports, generating an additional reduction of 0.2% in U.S. GDP.

However, Canada progressively shifted toward a de-escalation strategy: on September 1st 2025, it withdrew most retaliatory tariffs, maintaining them only on steel, aluminum and automobiles in

an attempt to facilitate negotiations, even after the United States had imposed a new 35% tariff on Canadian exports on August 1st 2025 (York and Durante, 2025).

Beyond retaliation, Canada also adopted a broader diversification strategy. Rotunno and Ruta (2025) argue that deeper economic integration with alternative partners represents the most efficient response to U.S. tariffs, as it reduces distortions and creates new market opportunities.

In this framework, Canada intensified trade negotiations with countries such as India and Mercosur while reinforcing its commitment to CPTPP, pursuing what Baldwin (2025) defines as a process of “*re-globalization without America*”, in which rule-based trade coalitions (e.g. “*leadership herds*”) progressively compensate for the erosion of U.S. trade leadership.

CHAPTER 3: THE ITALIAN TARIFF ENGINEERING

3.1. Strategies for resilience

3.1.1. Creative ways to skirt higher customs duties

Throughout the history of international trade, tariff increases have consistently encouraged firms to adopt creative and lawful strategies to reduce customs exposure while preserving access to foreign markets. Rather than absorbing the full cost of higher import tariffs, many companies have adjusted, for example, product design, material composition, shipping routes, or customs valuation methods in order to qualify for more favorable tariff treatment (Armella and Salvi, 2025). These practices have become increasingly relevant in the context of the 2025 Trump tariff escalation, where firms have sought flexible solutions to mitigate rising trade costs.

The effectiveness of these strategies largely depends on how goods are legally classified at the border. Two elements determine the applicable tariff rate: the product classification code and the rules of origin.

Under international customs law, each imported product is assigned a specific tariff classification code under the Harmonized System (HS), implemented in the United States through the Harmonized Tariff Schedule (HTS). Each code corresponds to a particular product category. As a result, even minor physical, functional or compositional differences may shift a product into a different tariff heading, often leading to significantly more favorable customs treatment.

In addition, rules of origin further influence the applicable tariff regime, particularly where preferential trade agreements or country-specific restrictions apply.

Several examples illustrate how such strategies operate across different industries.

In the footwear sector, the American lifestyle brand Converse, strategically added a fuzzy-felt fabric to the outsoles of its iconic “*All Star sneakers*”. Although visually negligible and functionally marginal, this modification allowed the shoes to be classified under U.S. customs rules as slippers rather than athletic footwear, significantly reducing the applicable tariff burden. Depending on the specific tariff heading, this reclassification lowered tariffs from rates that could reach up to 20% to approximately 6% (Bao, 2025; NPR, 2025).

A similar strategy emerged in the apparel industry. The U.S. Columbia Sportswear modified women’s shirts by adding small zippered pockets below the waistline, a seemingly insignificant design detail often referred to as the “*chapstick pocket*”. Although commercially presented as a functional feature, its legal relevance was far more significant: under U.S. customs classification

rules, the presence of this pocket allowed the garment to qualify under a different tariff provision, reducing the applicable tariff from 26.9% to 16% (Bao, 2025; NPR, 2025; Marketplace, 2019).

Another illustrative example concerns decorative lapel pins. A famous manufacturer inserted small cubic rather elements into festive-design pins, allowing customs authorities to classify them as jewelry rather than festive articles. This seemingly minor modification enabled the company to avoid an additional 14% tariff (Bao, 2025).

In the same entrepreneurial master plan, it fits “*Snuggies*”, the soft blanket-with-sleeves product largely imported from China. The company successfully challenged U.S. customs authorities in court, obtaining in 2017 a reclassification of the product as a blanket rather than as apparel.

Despite its sleeves, the court recognized that its essential character remained that of a blanket, allowing the importer to almost halve the applicable tariff burden, from 14.9% to 8.5% (Bao, 2025; NPR, 2025).

In the aviation industry, Delta Air Lines adopted a different strategy during the recent tariff escalation. Instead of importing fully assembled Airbus aircraft from Europe and paying the 10% of tariff imposed on European-made planes, the company removed U.S.-manufactured Pratt & Whitney engines and imported them separately, avoiding the tariff burden on the complete aircraft (CH-Aviation, 2025).

Similar adjustments have also emerged in the wine sector, where some producers altered the alcohol content stated on labels to exceed the 14% ABV threshold, thereby escaping tariff categories specifically targeting lower-alcohol wines (Flaaen et al, 2025).

However, customs law imposes clear limits. These modifications must reflect a genuine commercial reality and cannot constitute a mere artificial disguise designed solely to evade tariffs. This distinction became evident in the Ford Transit Connect case, where from April 2009 through August 2013 the company imported cargo vans fitted with temporary rear seats from Turkey to United States in order to classify them as passenger vehicles, paying a 2.5% tariff instead of the 25% “*chicken tax*” applicable to cargo vans. U.S. authorities ultimately rejected this strategy, ruling that the seats (later described as “*sham rear seats*”) were never intended for actual passenger use and therefore represented an unlawful artifice rather than a legitimate product feature. The legal relevance of the case was further reinforced in 2024, when Ford agreed to pay \$365 million to settle civil customs penalty claims, including not only misclassification but also allegations of customs undervaluation, confirming that customs authorities assess not only the formal structure of imported goods but also their underlying economic substance (Bao, 2025; NPR, 2025; U.S. Department of Justice, 2024).

Taken together, these examples demonstrate that customs burdens often reshape not only pricing decisions but also product architecture, manufacturing choices and supply-chain strategies, making legal adaptation a central dimension of global trade resilience for businesses.

Beyond these practical examples, U.S. customs law also provides a formal mechanism through which importers may seek legal certainty in advance. The U.S. Customs and Border Protection (CBP) provide a binding ruling system, that is the Customs Rulings Online Search System (CROSS), allowing firms to obtain official determinations on product classification and HTS codes before importation. This mechanism offers an “*official blessing*” from customs authorities, enabling companies to structure products and supply chains with greater predictability (Bao, 2025).

However, an unfavorable ruling may become constraining, since once issued it binds the importer to that classification and removes the possibility of relying on less visible interpretative flexibility.

3.1.2. The tariff impact assessment

The economic magnitude of tariff exposure can be substantial. Simulations cited by Armella and Salvi show that a 15% tariff on Italian exports to the United States could reduce exports by 22.6 billion euros, equal to more than one-third of their current value, while also producing a contraction of approximately 0.5 percentage points of GDP.

For these reasons, before implementing any adaptive strategy, firms should first evaluate the actual economic impact of tariffs on their supply chains, cost structures and long-term production strategies, since tariff exposure may alter sourcing decisions, production geography and competitive positioning.

Harvard Business Review (Kuepper et al, 2025) has recently presented the concept of “*tariff tipping point*”, defined as the tariff rate at which the present value of relocating production exceeds the cost of continuing to import and absorb tariffs.

In short, it represents the threshold beyond which localization becomes economically preferable to maintaining cross-border imports. However, this threshold is not fixed; it varies depending on three interrelated factors: the cost structure of the product, the country pair involved and the firm’s ability to pass tariff costs on to consumers.

The first variable concerns the composition of product costs. According to afore mentioned, products with high capital intensity and lower labor dependence, such as battery cells, may justify reshoring at tariff levels as low as 10-15%, whereas labor-intensive sectors like smartphone assembly require tariffs of 30-35% before localization becomes financially sustainable.

The second variable is the country pair involved, since the cost differential between the current manufacturing location and the potential destination directly affects the localization penalty. For instance, from the perspective of the European market, relocating battery cell production from South Korea to Hungary, with more competitive factor costs, may become feasible with tariffs below 5%, while shifting the same production from South Korea to Germany would require tariffs between 20% and 25% due to higher labor and energy costs.

The third variable concerns the firm's ability to pass tariff costs on to consumers, which largely depends on pricing power and competitive intensity. In highly differentiated sectors, such as medical equipment or industrial machinery, firms may partially absorb tariffs through higher prices without significant losses in demand. By contrast, in highly substitutable industries such as furniture, even relatively low tariffs may rapidly erode profit margins, making trade economically unsustainable.

Firms must absolutely conduct a detailed internal assessment of tariff exposure at the product level. A critical element is "*customs due diligence*". As Armella and Salvi (2025) explain, firms should carefully verify not only the primary HS classification of goods, but also secondary classifications linked to rules of origin, since these determine whether additional tariffs apply depending on where substantial transformation occurred. This is particularly relevant under the stricter U.S. "*melted and poured*" rule for steel and aluminum, where origin is determined by the country in which the metal was originally smelted.

As observed (Shapiro, 2025), understanding the impact of U.S. tariffs can become a real game-changer for an U.S. company and a company that wants to export to the United States, because even small classification adjustments can significantly affect profit margins and cost structures. An effective tariff impact assessment requires a meticulous examination of the product's material composition, technical characteristics and intended use, in order to identify the most favorable and compliant tariff classification. At the same time, misclassification carries substantial risks, including unexpected customs liabilities, financial penalties, shipment delays and formal customs audit. For this reason, tariff exposure analysis requires coordination between product designers, legal advisor and supply-chain specialists.

3.1.3. Alternative sourcing strategies: USMCA-compliant components and Reshoring

When tariff exposure becomes structurally unsustainable, rather than relying exclusively on product redesign or customs optimization, many companies pursue broader supply-chain restructuring strategies, such as reshoring, nearshoring and origin-based sourcing diversification.

The following strategies show that alternative sourcing is no longer a simple logistic adjustment, but a strategic combination of trade law, industrial planning and geopolitical risk management.

A first option is reshoring, namely relocating production back to the United States or to geographically proximate countries.

However, as already noted (Kuepper et al, 2025), reshoring rarely eliminates the total costs coming from tariff exposure, since firms usually face another cost that they define as a “*localization penalty*”: it refers to labor, energy and operational costs that are higher if compared to traditional low-cost manufacturing hubs such as China.

But, in recent times, automation can offset reshoring disadvantages. Indeed, the so-called “*factory of the future*”, defined as the art-of-the-possible in manufacturing design, based on most efficient layouts, AI production systems and advanced robotics, can significantly reduce labor dependency and, in some countries, almost neutralize the cost penalty of domestic production.

However, the impact of the factory of the future varies by industry, depending on factors like labor and energy intensity, automation potential, and customer proximity. For example, in bicycle frame manufacturing (with a higher automation potential), automation may reduce the reshoring cost gap from 22% to nearly zero, making domestic production economically viable.

On the other hand, in smartphone assembly (with a lower automation potential in some production stages), localizing production from China back to the U.S. can reduce the penalty from 31% to 25%, but not fully eliminate it.

That’s why firms, instead of reshoring, often adopt alternative sourcing strategies by relocating production to countries benefiting from preferential trade agreements (Shapiro, 2025).

In fact, many importers affected by Section 301 tariffs, which can reach 25% on Chinese goods, shift production to countries such as Mexico and Canada, taking advantage of the USMCA.

This alternative strategy allows companies to maintain cost efficiency while reducing tariff exposure.

A practical example of this diversification logic is provided by Apple: the MNE has progressively shifted part of its iPhone production from China to India, not as reshoring strategy, but as a geopolitical and tariff diversification strategy, without returning production to the domestic market, but instead creating an alternative low-cost manufacturing network (Kuepper et al, 2025). Likewise, origin-based strategies have become increasingly complex due to stricter customs scrutiny. Some (*ex multis* Mariani, 2025) explains that many firms attempt to alter the official

country of origin (COO) by reorganizing production stages so that the last substantial transformation occurs in a lower-tariff jurisdiction⁵⁰.

Nevertheless, customs authorities have progressively tightened origin rules to prevent simple triangulation practices. It has been reported (Armella and Salvi, 2025) that sectors such as steel and aluminum are now subject to stricter origin standards, such as the U.S. “*melted and poured*” rule, which identifies origin based on the country where the metal was originally smelted and cast.

3.1.4. *The First Sale Rule*

Beyond product classification and origin-based strategies, U.S. customs law also offers technical mechanisms to reduce tariff exposure by acting directly on the customs value of imported goods. One of the most relevant tools is the “*First Sale Rule*”, which allows importers to calculate customs duties not on the final resale price of the imported goods, but on the lower price paid in the first transaction of the supply chain, typically between the manufacturer and an intermediary exporter. This rule becomes particularly advantageous in multi-tier international transactions, where the final import price often includes intermediary mark-ups, commissions and additional commercial margins. By relying on the original manufacturer’s selling price as the customs valuation basis, firms can significantly reduce the taxable amount on which ad valorem tariffs are calculated. As it was explained by the already quoted Armella and Salvi (2025), this mechanism can substantially lower customs burden, especially in periods of elevated tariff rates, such as those introduced by Trump.

From a strategic perspective, the First Sale Rule is especially relevant because it does not require modifying the product, relocating production or changing origin. Instead, it optimizes the valuation process, making it one of the most technically efficient and legally secure instruments available for tariff mitigation. However, its application requires full documentary transparency and clear evidence that the first transaction represents a bona fide sale intended for export to the United States.

3.1.5. *The Free Trade Zones (FTZ)*

⁵⁰ Under U.S. customs law, the principle of substantial transformation is used to determine the COO of goods produced in multiple jurisdictions. A product is considered to originate in the country where it undergoes its last fundamental transformation, that is a process that changes its name, character or use in a commercially significant way. The principle is crucial because the tariff rate depend on the country of origin, especially in the context of preferential trade agreements or country-specific trade restrictions.

In addition to product redesign, origin optimization and customs valuation strategies, firms may also reduce tariff pressure by managing the timing and the cash-flow impact of tariffs (e.g. financial flexibility), without eliminating tariff obligations.

In this context, U.S. customs law provides several logistical instruments that allow importers to defer, suspend or recover tariff payments under specific conditions.

One of the most relevant mechanisms is the use of U.S. FTZs, special customs areas where imported goods can enter U.S. territory without the immediate payment of tariffs. As Armella and Salvi (2025) explain, goods can remain within these zones for up to 5 years, without being stored, manipulated or processed. This mechanism allows firms to postpone customs liabilities while waiting for more favorable developments in trade policy or market conditions. This temporal flexibility is particularly valuable during periods of tariff instability, such as during U.S.-China trade war.

A similar function is performed by bonded warehouses, where goods can be stored, manipulated or processed under customs supervision without triggering immediate tariff payments, provided that they are not released for domestic consumption. As highlighted by Singha (2025), these facilities have become increasingly attractive during recent tariff escalations, especially for importers of Chinese goods, as they effectively allow firms to “freeze” the applicable tariff exposure and strategically decide when to clear goods through customs. In practice, importers only pay the tariff rate in force at the moment of withdrawal, turning storage into a bet on future tariff reductions.

A third relevant mechanism is the duty drawback regime, which allows firms to recover tariffs already paid if the imported goods are subsequently re-exported within 5 years. This system is particularly useful for businesses operating in international redistribution chains, where goods can transit through the United States without being destined for final domestic consumption (Armella and Salvi, 2025).

3.1.6. The transaction value of identical or similar goods

Another relevant instrument for mitigating tariff exposure concerns the determination of the customs value itself. Under U.S. customs law, import tariffs are generally calculated on the basis of the transaction value, namely the price actually paid or payable for the imported goods. However, where the primary transaction value cannot be reliably applied or where specific adjustments are required, alternative valuation methods may become available.

Among these, the Transaction Value of Identical or Similar merchandise (TVIS) represents a particularly useful mechanism. As highlighted by Armella and Salvi (2025), this method allows importers to determine the dutiable previously accepted for identical or similar goods imported under comparable conditions.

According to the authors, the correct application of this mechanism can reduce the declared customs value by up to 38% with a corresponding reduction in the tariff burden at the border.

The strategic relevance of this mechanism lies in its ability to align customs valuation more closely with market benchmarks, preventing excessive overvaluation that would artificially inflate tariff liabilities. In this respect, TVIS complements other valuation strategies, such as the clear separation of non-dutiable costs, such as international freight, insurance, post-import installation and maintenance costs, which, under U.S. customs rules (unlike European rules), must not be included in the taxable base (Armella and Salvi, 2025).

3.2. The concept, the cost and the benefit of tariff engineering

3.2.1. What is and how does it work? A legal strategy to lower costs

Tariff engineering is generally defined as the legal practice of modifying a product's design, materials, composition or manufacturing process in order to classify it under a different HTS code obtaining a lower tariff rate. As Stile (2025) explains, it is not a mechanism of unlawful tariff avoidance, but a legitimate strategy grounded in product classification rules and customs law. Similarly, Shapiro (2025) describes it as a strategic method aimed at reducing tariff costs while preserving full compliance with trade regulations.

Its functioning depends on the structure of the HTS system itself. Tariffs are applied according to product classification, and even minor variations in product characteristics may produce different tariff outcomes. The most common interventions concern the product's material composition, physical characteristics, design features or stage of completion, to fit more favorable tariff categories, especially after the 2025 tariff escalation (Stile, 2025; Bao, 2025; Stile, 2025).

This process may involve several forms of adaptation. Stile (2025) highlights that replacing one material with another may alter classification, while modifying product features or importing unfinished goods instead of finished ones may also lead to lower tariffs. These adjustments are based on the detailed interpretation of tariff schedules and on the technical criteria established under the General Rules of Interpretation (GRIs).

However, as some authors emphasize (Kennemer, 2025), these modifications are lawful only when they reflect a genuine commercial reality. Product changes must be permanent, commercially

meaningful and integral to the imported good itself. If the alteration is merely artificial and has no real economic or functional purpose beyond lowering tariffs, customs authorities may reject the classification and impose penalties.

The legal foundation of this practice is deeply rooted in U.S. customs jurisprudence.

In “*Merritt v Welsh*, 104 U.S. 694 (1881)”, the U.S. Supreme Court established that an importer has the right to manufacture goods in the form most favorable for tariff purposes, provided that the goods are honestly presented and no fraud is committed. This principle was later reaffirmed in “*United States v. Citroen*, 223 U.S. 407 (1912)”, where the Court clarified that imported goods must be classified according to their condition at the time of importation. Together, these cases form the legal bases of modern tariff engineering.

3.2.2. *Tariff engineering and Trade Compliance*

Although tariff engineering aims at reducing tariff costs, its effectiveness depends entirely on strict compliance with international trade law and customs regulations. As Shapiro (2025) notes, product reclassification is not merely a cost-saving exercise, but a compliance-sensitive strategy requiring precise legal and technical assessment. Incorrect classifications may expose importers not only to unexpected tariff liabilities, but also to audits, shipment delays and significant penalties. In this sense, tariff engineering and trade compliance are structurally interconnected.

A central legal boundary concerns what customs authorities define as commercial reality.

As emphasized by Kennemer (2025) and confirmed in “*CBP Headquarters Ruling HQ 965751 (2002)*”, modifications aimed at obtaining a lower tariff rate are admissible only if they correspond to a genuine and functional product characteristic, rather than an artificial disguise created solely for customs purposes.

In the Converse footwear example, U.S. Customs accepted the application of a thin textile layer on the sole as legitimate tariff engineering, explicitly recognizing that it did not constitute fraud or artifice, even though it significantly reduced the applicable tariff rate.

The opposite outcome emerged in the Forde Transit Connect case. As discussed by Mariani (2025) and reinforced by the U.S. Department of Justice (2024) settlement, Ford imported cargo vans fitted with temporary rear seats in order to classify them as passenger vehicles, thus paying the 2.5% tariff rate instead of the 25% “*chicken tax*”. Authorities found that the seats were systematically removed immediately after customs clearance, demonstrating that they had no real commercial purpose. This transformed what appeared to be tariff engineering into an unlawful circumvention mechanism.

Risk management therefore becomes essential. According to Bao (2025) and Shapiro (2025), companies engaging in tariff engineering must maintain highly detailed product specifications, origin documentation, material breakdowns and internal classification analyses to justify their choices during customs audits. This process often requires cross-functional cooperation between sourcing teams, engineers, customs lawyers and compliance officers.

To reduce uncertainty, U.S. customs law offers a preventive compliance instrument: the Binding Ruling system, administered by Customs and Border Protection (CBP) through the Customs Rulings Online Search System (CROSS). As explained by Bao (2025), this mechanism allows importers to obtain an official classification ruling before shipment, providing legal certainty and reducing litigation risks. However, as practitioners observe, a negative ruling may also constrain future flexibility, since importers become formally bound by that classification.

Ultimately, tariff engineering remains viable only when integrated into a broader compliance framework. As the “*U.S. Supreme Court: Heartland By-products, Inc., v. United States (2001)*” demonstrates, courts may protect engineered products when the modification reflects an authentic production process and a legitimate commercial purpose, reaffirming that legality depends not on the intention to reduce tariffs, but on the economic substance of the product itself.

3.2.3. *A New Playbook for Global Manufacturing*

This increasing volatility of tariff policy and the broader geopolitical fragmentation of trade have altered the traditional logic of global manufacturing. As Kuepper et al (2025) observe, tariffs can no longer be treated as stable background variables but have re-emerged as highly unpredictable factors capable of rapidly eroding the cost advantages of traditional low-cost countries. Manufacturing decisions that were once primarily based on labor costs, logistics and scale efficiency must now incorporate political risk and trade uncertainty as central strategic variables. This framework has pushed firms to abandon static cost analysis in favor of scenario-based planning. According to Kuepper et al (2025), manufacturers increasingly model different tariff scenarios, commonly 5%, 15% and 25%, to test whether localization strategies remain viable under changing policy conditions. This sensitivity analysis allows firms to assess which manufacturing footprints can withstand sudden geopolitical shocks and which remain excessively dependent on short-term trade stability.

A decisive factor in this new playbook is the introduction of the concept of the “*tariff tipping point*” and the rise of the “*factory of the future*”, previously explained.

This transformation has therefore produced a new strategic manufacturing model in which forms must continuously balance tariff exposure, automation potential and broader external conditions such as labor availability. As Mariani (2025) similarly notes, firms are increasingly treating supply chain design as a dynamic and adaptive process rather than a fixed cost-optimization exercise, reflecting the emergence of a new industrial playbook shaped by resilience rather than efficiency alone.

3.2.4. *“Made in Italy” and tariff challenge: the risk of less competitiveness? The affected sectors*

The renewed U.S. tariff escalation during the second administration of Donald Trump has created significant pressure on the Italian export system, directly affecting some of the country’s most strategic sectors. According to Armella and Salvi (2025), generalized tariffs of 15% on Italian exports to the United States could reduce exports by approximately 22.6 billion euros, as already noticed, equal to more than one-third of their current value, and generate a contraction of around 0.5% of Italy’s GDP. These estimates confirm the macroeconomic relevance of tariff barriers for an export-oriented economy such as Italy.

This vulnerability is particularly significant because the United States has become one of Italy’s most important trade partners. Official ISTAT data, reported by Reuters (2026), confirm that Italian exports to the U.S. reached a historical peak of 69.6 billion euros in 2025, up 7.2% from the year earlier, accounting for approximately 10.8% of total Italian exports, and generating a trade surplus exceeding 34.2 billion euros. This strong performance also allowed Italy to surpass Japan and become the world’s fourth-largest exporting country, according to OECD data (2025). However, subsequent analysis by Reuters (2026) showed that this apparent resilience was partially distorted by temporary factors such as pharmaceutical front-loading and extraordinary transport orders. Once these exceptional dynamics were included, Italian exports to the U.S. actually declined by 1.6% and by 5.7% under broader adjusted calculations relative to March 2026, suggesting that the strength of Italian exports may be more fragile than aggregate figures initially indicate.

The agri-food sector remains one of the most exposed. Italian exports in this sector amount to approximately 7.8 billion euros, with wine and dairy products representing a substantial share. Already in the immediate aftermath of Trump’s tariff announcement in April 2025, Reuters (2025) reported that Italian wine producers estimated annual losses of approximately 323 million euros, with expected reductions in U.S. demand ranging between 25% and 35%. U.S. tariffs on European Union food products would cause *"billions of dollars of damage"* for Italy's prized agricultural

exports including Parma ham and Prosecco wine, according to an Italian farmers' lobby interviewed.

According to the most important Italian newspaper (*Il Sole 24 Ore*, 2025), tariff levels of 17% have been described by industry representatives as economically “*unsustainable*”, particularly for premium products such as wine and cheese. Higher retail prices risk reducing accessibility for American consumers while simultaneously reinforcing the phenomenon of Italian sounding, whereby imitation products gain competitiveness due to lower prices. This effect became increasingly visible in the first quarter of 2026, when “*Wine News*” (2026) recorded, despite a share of 1.7 billion euros, an overall 8.2% contraction in Italian wine exports, with sharper regional declines of 9.7% in Veneto, 8.3% in Tuscany and a little increase of 0.5% in Piedmont.

However, the effects are not uniform across industries. In instrumental mechanics, Italy exports approximately 13 billion euros annually to the U.S. making it the largest Italian industrial sector in that market. Although tariffs compress already narrow profit margins, Orlando (2025) notes that Italian machinery often benefits from high technological specialization and low substitutability, which partially protects it from price-based competition. In this sector, competitiveness remains strongly linked to technical know-how, industrial reputation and product quality rather than price alone.

The pharmaceutical sector represents another highly exposed strategic industry. With exports exceeding 14 billion euros, it remains among the sectors most affected by tariff measures. According to estimates reported by Orlando (2025), even a 10% tariff could generate revenue losses of between 1 billion euros and 1.5 billion euros. At the same time, the sector displays strong structural resilience, since reshoring pharmaceutical production is extremely slow and complex. The construction of new production facilities typically requires four to five years, making short-term relocation impractical. This explains why several major Italian pharmaceutical groups have preferred direct investments in the United States rather than rapid supply-chain restructuring.

Other sectors such as furniture, luxury goods, fashion and automotive components are also significantly exposed. The furniture sector alone accounts for approximately 2.2 billion euros in exports, while automotive sector accounts for approximately 1.2 billion euros in exports and its exposure extends beyond direct exports through integration into broader European supply chains (especially Germany) (Orlando, 2025).

According to some experts (Pinzuti and Di Rosa, 2025), these sectors are particularly vulnerable because tariff increases combine with higher logistics costs, supply-chain instability and contractual uncertainty, often forcing firms to renegotiate international agreements and activate hardship clauses.

An additional pressure factor is the simultaneous depreciation of the U.S. dollar, which reduces the effective purchasing power of American buyers and further compresses exporters' margins. As observed by many journals (Sky TG24, 2026; Repubblica, 2026), the combined effect of tariffs and exchange-rate volatility creates a double burden, particularly for Italian SMEs. In this regard, according to the most diffused Italian newspaper (Corriere della Sera, 2025), approximately 40% of Italian SMEs feared they would be unable to replace the U.S. market volumes lost due to tariff increases, highlighting greater vulnerability among smaller exporters.

From a broader European perspective, the simulations of Bouet et al (2025) indicate that Italian exports to the U.S. could decline by 13.1% by 2040 under persistent tariff scenarios. However, the same study also shows that a large part of tariff burden is ultimately transferred to U.S. consumers through higher retail prices, reducing the long-term effectiveness of protectionist measures. This confirms that, while tariffs may weaken Italian competitiveness in the short term, they do not necessarily undermine the structural strength of the Made in Italy model.

As emphasized by some newspapers (Corriere della Sera, 2025; Il Sole 24 Ore, 2025), many Italian firms continue to preserve their market position by relying on product quality, technological specialization, brand reputation and long-established commercial relationships. In this sense, tariffs represent a significant challenge, but not a structural defeat for Italian industry.

3.2.5. Managing tariff engineering: a viable option for Italian Industry

As already discussed in the previous sections, Italian firms have access to several technical and legal instrument capable of mitigating tariff exposure, including origin optimization strategies, contractual safeguards, FTZs, bonded warehouses and valuation mechanisms such as the First Sale Rule.

According to the afore mentioned Armella and Salvi (2025), one of the most relevant tools remains the optimization of the COO, particularly where firms can reorganize production phases so that the last substantial transformation occurs in jurisdictions benefiting from lower tariff treatment. As already shown, this logic has become increasingly important in sectors with strict origin requirements, such as steel and agri-food.

At the same time, as emphasized by Pinzuti and Di Rosa (2025), tariff management can no longer be separated from contractual governance. The increasing volatility of international trade has made hardship clauses and Material Adverse Change (MAC) clauses essential instruments for preserving contractual equilibrium and managing unexpected tariff escalation.

In addition, sectoral evidence confirms that even limited product adaptations may generate relevant tariff advantages.

As already noted in the case of wine, others (Flaen et al, 2025) show how changes in alcohol content allowed certain exporters to avoid specific tariff thresholds, demonstrating how tariff engineering can strategically operate through minimal but legally significant product modifications. In a context of persistent trade uncertainty, its practical viability lies in the combination of customs expertise, supply-chain flexibility and legal foresight.

3.3. Tariff Mitigation Strategies: some U.S./EU judicial precedents

3.3.1. The U.S. Supreme Court and the USCBP Rulings

In the U.S. Legal System, rooted in the *common law* tradition, case law plays a central role in both the creation and the interpretation of legal rules. This feature is grounded in the doctrine of “*stare decisis*” (i.e. “*to stand by things decided*”), according to which judges are required to follow previous judicial decisions whenever the case before them presents substantially similar factual and legal circumstances. In this sense, judicial precedent does not merely perform an interpretative function, but constitutes an autonomous source of law, progressively shaping the legal order itself. By contrast, in *civil law* systems, statutory law remains the primary source of law, and judicial decisions generally produce effects only between the parties involved (i.e. “*inter partes*”), without formally extending their binding force “*erga omnes*”.

This does not mean, however, that precedents are irrelevant. Within continental legal systems, previous judgments maintain significant persuasive and interpretative value and may serve as important guidance in subsequent analogous disputes. Nevertheless, unlike in common law systems, judges are not strictly bound by prior decisions and may depart from them either in the presence of new legislative developments or where a superior legal principle, not previously considered, is deemed to prevail over the reasoning adopted in earlier cases.

This distinction explains why, in U.S. customs law, decisions dating back to the late nineteenth century continue to represent operative and authoritative references in tariff disputes. Customs law is indeed one of the fields in which the binding force of precedent is particularly evident, especially in matters concerning tariff classification and the development of tariff engineering strategies.

Within this framework, “*tariff engineering*” may be defined as the set of lawful strategies adopted by economic operators to modify the characteristics, composition or presentation of imported goods in order to obtain more favorable tariff treatment at the time of importation.

U.S. jurisprudence, through several judicial and administrative decisions, has played a decisive role in establishing the legal boundaries between legitimate tariff planning and unlawful or fraudulent practices.

Only for the sake of completeness, it should be noted that, at the time this paper is being written, the United States Supreme Court issued its decision in “*Learning Resources, Inc. v. Trump*”, concerning the legitimacy of tariffs imposed under the *International Emergency Economic Powers Act* (IEEPA).

In particular, the Court clarifies that, outside conditions of war and in presence of existing trade agreements and treaty obligations with foreign countries, the President does not possess unlimited authority to impose unilateral tariff measures, since such powers primarily belong to Congress. The ruling represents a significant reaffirmation of the constitutional principle of separation of powers and places an important limit on the expansion of executive authority in trade regulation. The practical implications of this decision have been immediate and substantial.

The ruling triggered a significant number of refund claims by U.S. importers for tariffs already paid under the IEEPA framework, giving rise to one of the most complex customs recovery processes in recent years. From an operational perspective, such refunds may be pursued through several administrative instruments, including the review of *unliquidated entries, Post Summary Corrections (PSC)* and, in cases where liquidation has already occurred, formal protests before U.S. CBP.

However, the management of tariff refunds presents considerable practical difficulties. In international commercial practice, the economic burden of tariffs is sometimes contractually distributed between importers and exporters (by choice of the parties) in order to mitigate the economic impact of tariff measures. This contractual allocation complicates the identification of the party that effectively suffered the tariff burden and, consequently, the party legitimately entitled to request reimbursement.

The review that follows is therefore devoted to a selection of already decided and consolidated cases falling within the broader strategy of tariff engineering, which have contributed to shaping its legal boundaries within U.S. customs jurisprudence.

3.3.1.1. Case 1: U.S. Supreme Court: *Merritt v. Welsh*, 104 U.S. 694 (1881)

The dispute in *Meritt v. Welsh* arose between Welsh, acting as importer, and Meritt, the Collector of the Port of New York, who represented the customs authority responsible for assessing import tariffs on sugar entering the United States.

The controversy concerned the tariff classification of imported sugar under the customs legislation then in force. At that time, U.S. tariff law adopted the so-called “*Dutch standard of color*” as the statutory criterion for determining the applicable customs tariff. Under this system, sugar was classified according to its visible external color, with darker or lighter shades corresponding to different tariff rates.

Welsh, the plaintiffs, challenged the customs assessment made by Meritt, the defendant, arguing that the imported sugar had been artificially colored in a way that altered its outward appearance and therefore distorted its tariff classification. According to the importer, the visible color of the sugar did not accurately reflect its true saccharine quality and internal composition. On this basis, Welsh argued that relying exclusively on color produced an unfair and economically inaccurate customs burden.

Meritt, by contrast, defended the assessment by maintaining that customs authorities were legally required to apply the criterion expressly established by Congress, namely the visible color of the product, regardless of whether the sugar had been chemically altered or artificially manipulated during production.

At the factual level, the dispute therefore concerned whether tariff classification should follow the objective statutory criterion expressly provided by Congress or whether additional qualitative assessments could be introduced to better reflect the “*real*” nature of the product.

The legal issue before the Supreme Court concerned the interpretation of the tariff statute and, more specifically, whether customs authorities and courts could move beyond the explicit legislative standard established by Congress. The statute clearly adopted color as the sole legal criterion for classifying sugar and determining the corresponding tariff rate.

The importer argued that such a rigid criterion could be manipulated through manufacturing artifices, allowing importers to strategically alter product’s appearance and potentially circumvent the intended tariff burden⁵¹. However, the Court held that where Congress has clearly established a specific classification standard, neither customs authorities nor courts may replace that standard with alternative criteria.

The Supreme Court affirmed that lower court’s decision in favor of Meritt, holding that the tariff classification had to be determined strictly according to the color-based statutory standard adopted

⁵¹ This argument indirectly anticipated the modern logic of tariff engineering: modifying a product in order to fit within a more favorable tariff category.

Although the case did not directly concern tariff engineering in its modern sense, it laid one of the earliest doctrinal foundations for it. By confirming that customs tariffs depend on the objective condition of the imported product as defined by the statute, *Meritt v. Welsh* became an important historical precedent for later cases involving strategic product modification aimed at obtaining lower tariff treatment.

by Congress. The Court rejected Welsh request to introduce additional tests relating to the sugar's saccharine strength or internal composition.

The decision established a fundamental principal of U.S. customs law: where the legislature has provided a clear and objective criterion for tariff classification, that criterion must be strictly applied without extending or modifying its content.

3.3.1.2. Case 2: U.S. Supreme Court: *United States v. Citroen*, 223 U.S. 407 (1912)

Bernard Citroen, acting as importer, challenged before the U.S. customs authorities the tariff classification imposed by the Collector of Customs on thirty-seven drilled pearls imported into the United States on June 11 1906. The pearls were imported loose, unset and unstrung, divided into five separate lots.

The Collector classified the imported goods under paragraph 434 of the Tariff Act of 1897 as “*peals set or strung, or jewelry*”, imposing a tariff rate of 60% “*ad valorem*”. Citroen contested this classification, arguing that the pearls, at the moment of importation, were neither set nor strung and therefore they should fall under paragraph 436, which provided for a significantly lower tariff rate of 10% *ad valorem*.

The dispute originated because the pearls had previously been temporarily strung abroad for display purposes and were clearly intended for being assembling into a necklace after importation. For this reason, the customs authority considered that their economic function and practical destination justified the higher tariff classification.

Citroen brought the action claiming that the customs decision was incorrect and inconsistent with the actual physical condition of the goods at the time of importation.

The legal issue before the Supreme Court concerned the interpretation of paragraphs 434 and 436 of the Tariff Act of 1897 and, specifically, whether tariff classification should be based on the condition of the goods at importation or on their intended future use.

The government argued that the pearls should be treated as jewelry because they had been selected, matched and temporarily strung abroad to form a necklace, thus showing their commercial function.

Citroen argued that the law clearly distinguished between pearls “*set or strung*” and pearls “*not strung or set*”, and that the Court had to look only at the objective condition of the product at the moment it entered U.S. territory.

In deciding the case, the Supreme Court expressly recalled earlier precedents, including *Meritt v. Welsh*, reaffirming that tariff classification must be based on the objective statutory description of

the imported article. The Court also clarified an important principle: a prescribed rate of tariff cannot be avoided through fraud, disguise or artificial deception, but where the imported product genuinely falls under a lower tariff category, the importer is entitled to benefit from that lower tariff rate.

The Supreme Court ruled in favor of Citroen and affirmed the lower appellate decision, holding that the pearls were dutiable under paragraph 436 at the lower rate of 10% ad valorem, because at the time of importation they were physically unset and unstrung.

The Court established that tariff classification must depend on the condition of the article when imported, not on its previous use or intended future use.

For the judges of the Supreme Court the lawful preparation of goods for the purpose of obtaining a lower tariff does not constitute fraud, provided that no deception is practiced and the goods are honestly presented to customs authorities.

3.3.1.3. Case 3: U.S. Supreme Court: Heartland By-products, Inc. v. United States, 264 F.3d 1126 (Fed. Cir. 2001)

Heartland By-Products, Inc. was a U.S. company importing sugar syrup from Canada. The product was created by mixing raw sugar with molasses and water, producing a syrup composed of approximately 93.5% of sugar cane and/or beet origin and approximately 6.5% of soluble non-sugar solids of cane and/or beet origin.

In 1995, Heartland requested an advance tariff ruling from U.S. Customs. Customs classified the syrup under HTSUS 1702.90.40, a tariff provision that was not subject to the Tariff Rate Quota (TRQ), allowing Heartland to import the product without quota restrictions. Based on this ruling, Heartland built its business model around this import structure.

Later, domestic sugar industry associations challenged the classification, arguing that Heartland was artificially adding molasses only to increase the non-sugar solids above the 6% threshold and avoid quota restrictions.

In 1999, Customs revoked its earlier ruling and reclassified the syrup under HTSUS 1702.90.10/20, making it subject to the quota system and higher tariffs. Heartland challenged this revocation before the Court of International Trade.

The legal issue was whether Heartland's manufacturing process constituted a legitimate form of tariff engineering or an unlawful artifice/disguise to evade quota restrictions.

Heartland relied on the traditional principle from *United States v. Citroen (1912)*: tariff classification depends on the condition of the goods as imported, and importers are generally free to structure their goods to obtain lower tariffs.

Customs argued that this principle has limits: when modifications have no real commercial purpose and are only made to avoid quotas, Customs may look beyond the physical condition of the goods.

A second legal issue concerned judicial deference. Following *United States v. Mead Corp. (2001)*, Customs classification rulings are not entitled to full Chevron deference, but may still receive Skidmore deference, meaning courts defer to them if their reasoning is persuasive. The Federal Circuit explicitly applied this standard.

The Federal Circuit reversed the lower court and rules in favor of the United States.

The court held that Customs' reinterpretation deserved Skidmore deference because it was thorough, reasoned and persuasive.

It accepted Customs' view that the added molasses was a foreign substance for tariff purposes and had to be excluded from the calculation of non-sugar solids. Once excluded, the syrup contained less than 6% non-sugar solids and therefore fell under the quota category.

Mostly important, the Court limited the scope of tariff engineering by clarifying that lawful tariff planning is allowed when modification has “*genuine commercial substance*”. Where the alteration is merely artificial and serves no real economic purpose other than tariff avoidance, Customs may disregard it⁵².

3.3.1.4. Case 4: U.S. Supreme Court: *United States of America v. Harley Davidson, Inc. et al (2020)*

The United States brought an action against Harley-Davidson, Inc. before the United States District Court for the District of Columbia, alleging violations of the Clean Air Act.

The federal government claimed that Harley-Davidson had committed three main violations: first, it manufactured and sold 12,682 motorcycles without the Certificate of Conformity required by the Environmental Protection Agency (EPA) ; second, it sold over 339,392 “*Super Tuners*”, electronic devices designed to modify motorcycles engines; and third, the sale and the installation of those devices resulted in unlawful tampering with certified emission systems.

⁵² This is a principle (Anti-abuse Rule) also affirmed by European Union law. See Article 6 of the EU Council Directive 2016/1164.

Harley-Davidson's Super Tuners allowed customers to increase engine power and performance by altering factory emission settings. According to the government, these devices operated as "*defeat devices*" because they bypassed environmental compliance mechanisms established by federal law.

The United States therefore challenged Harley-Davidson's commercial practices as unlawful modifications designed to circumvent environmental regulation.

The legal issue concerned the application of the Clean Air Act (CAA), particularly the provisions prohibiting the manufacture and sale of uncertified vehicles and devices that defeat emission control systems.

The government argued that Harley-Davidson's conduct violated three distinct legal obligations: the obligation to obtain EPA certification before introducing motorcycles into commerce; the prohibition on manufacturing or selling defeat devices; the prohibition on tampering with emission control systems.

Harley-Davidson negotiated with federal authorities to resolve the dispute through a consent decree, rather than proceeding to full litigation.

The Court's role was therefore not to determine liability in a traditional adversarial judgement, but to assess whether the proposed settlement was fair, reasonable and consistent with the public interest.

The District Court approved the consent decree.

Under the agreement, Harley-Davidson was required to cease the production and sale of illegal tuning products, but back unsold Super Tuners from dealers, implement compliance monitoring systems and pay a civil penalty of 12 million dollars.

3.3.2. The Case-Law of the Court of Justice of the European Union

The cases presented below are not strictly related to the "tariff engineering" strategy. However, they are worth mentioning because they are related, more generally, to the correct application of the Community Customs Regulation.

3.3.2.1. Case 1: Polish Tax Authority v. Energy Company (Case C-266/23, 2024)

The case originated from a dispute between a Polish energy-intensive company (A.S.A.) and the Director of the Tax administration Chamber in Poland (Dyrektor Izby Administracji Skarbowej w

Bydgoszczy), that is the Polish tax authority concerning the reimbursement of excise duty paid on electricity used in industrial activities.

In 2016, the company has already benefited from an excise duty exemption for electricity used in electrolytic processes, as provided under Polish law. However, it later claimed an additional partial refund under the separate regime applicable to energy-intensive businesses, arguing that the calculation of the “*actual cost of energy purchased*” should include not only the purchase price of electricity itself, but also distribution tariffs and mandatory charges related to certificates of origin. The Polish authority rejected the request, maintaining that distribution charges were not part of the “*actual cost*” of energy and the company could not simultaneously benefit from two different tax relief regimes concerning the same electricity.

The dispute was eventually referred to the Court of Justice of the European Union for a preliminary ruling.

The legal issue concerned the interpretation of Article 17(1)(a) of Directive 2003/96/EC, which allows Member States to grant tax reductions to energy-intensive businesses.

The Court had to determine two main questions: first, whether the “*actual cost of energy purchased*” includes mandatory distribution tariffs; second, whether national law may exclude cumulative tax exemptions for the same energy use.

The broader legal context was the EU framework on energy taxation, which aims at harmonizing minimum taxation levels while allowing Member States discretion in granting exemptions and reductions.

The Court ruled on two points. First, it held that the concept of “*actual cost of energy purchased*” must be interpreted broadly, including not only the market price of electricity but also all compulsory charges necessarily linked to its purchase, such as distribution tariffs. The Court emphasized that these costs are inseparable from access to electricity and therefore form part of the real economic burden borne by the undertaking. Second, the Court confirmed that Member States may lawfully prohibit the cumulative application of different excise exemptions concerning the same electricity, provided that such restrictions comply with the principle of equal treatment and are not discriminatory.

Finally, since the proceedings constituted a preliminary ruling procedure under Article 267 TFEU, the Court did not make a final order as to costs. It stated that the allocation of costs remains a matter for the referring national court.

3.3.2.2. Case 2: *BYD Auto v. European Commission* (Case T-26/25, 2025)

The case was brought by several companies belonging to the BYD Group against the European Commission, challenging Commission Implementing Regulation (EU) 2024/2754 of 29 October 2024.

The contested regulation imposed definitive countervailing tariffs on imports of new battery electric vehicles originating in the People's Republic of China.

BYD challenged the Commission's decision, arguing that the European institutions had wrongly assessed the existence and the total of subsidies allegedly granted by the Chinese government. In particular, the applicants contested the treatment of related-party transactions, credit lines, bank acceptances, bill discounting mechanisms and fiscal subsidy schemes.

BYD claimed that the Commission's findings were inaccurate and that the tariffs imposed were unjustified.

The legal dispute concerned the interpretation and application of Regulation (EU) 2016/1037, which governs the protection of the European Union against subsidies imports from non-EU countries.

The applicants argued that the Commission committed several manifest errors of assessment, particularly: first, in defining financial contributions by the Chinese government; second, in determining whether those measures conferred an actual economic benefit; third, in calculating the amount of the alleged subsidy; fourth, in establishing whether the subsidies were “*specific*” under EU anti-subsidy law.

The case therefore concerns the legal boundaries of EU trade defense instruments and the evidentiary standards required for imposing countervailing tariffs.

At the time of writing, the case is still pending before the General Court of European Union, and no final judgment has yet been delivered.

The applicants seek the annulment of the Commission Implementing Regulation and request that the European Commission bear the costs of the proceedings.

3.3.2.3. Case 3: *CCCME v. European Commission* (Case T-254/18, 2021)

The case was brought before the General Court of the European Union by the China Chamber of Commerce for Import and Export of Machinery and Electronic Products (CCCME).

The dispute concerned Commission Implementing Regulation (EU) 2018/140, through which the Commission imposed definitive anti-dumping tariffs on imports of certain cast iron articles

originating in China. the products concerned were cast iron covers and access systems used in underground infrastructures, such as manhole covers and related equipment.

The anti-dumping investigation had been initiated in 2016 following a complaint lodged by several EU producers, who claimed that Chinese exporters were selling those products in the European market at unfairly low prices, causing injury to the Union industry.

CCCME and the Chinese producers challenged the regulation, arguing that the Commission's methodology for calculating dumping margins and assessing injury was flawed.

The legal dispute concerned the application of Regulation (EU) 2016/1036 on protection against dumped imports.

The applicant argued that the Commission had infringed several procedural and substantive rules, particularly regarding: the determination of injury suffered by EU producers; the calculation of import volumes; the methodology used to compare products; the determination of production costs and profit margins; the access to confidential information and procedural rights of defense.

A preliminary issue also concerned the admissibility of the action itself, because the Commission questioned whether the CCCME had legal standing to act on behalf of its members.

The Court therefore had to assess both procedural legitimacy and substantive legality.

The General Court first confirmed that the CCCME had standing to bring the action both in its own name and on behalf of its members, recognizing its procedural rights during the anti-dumping investigation.

On the merits, however, the Court largely upheld the Commission's anti-dumping measures, confirming that the European institutions enjoy broad discretion in complex trade defense investigation, provided that their methodology is based on sufficient evidence and follows procedural safeguards.

Consequently, the applicants' action was dismissed and they were ordered to bear their own legal costs and to pay those incurred by the European Commission and the intervening parties.

3.3.2.4. Case 4: Euranimi v. European Commission (Case C-772/23 P, 2024)

The case was brought by the European Association of Non-Integrated Metal Importers & Distributors (Euranimi) against the European Commission, challenging the extension of safeguard measures on imports of certain steel products into the European Union.

The dispute originated after the Commission adopted Implementing Regulation (EU) 2021/1029, which extended for an additional three years the safeguard measures previously imposed on steel imports under Regulation (EU) 2019/159. These measures had introduced

tariff-rate quotas and a 25% out-of-quota tariff on certain steel products, with the objective of protecting the EU steel industry from serious injury caused by increased imports.

Euranimi challenged the legality of this extension, arguing that the conditions required by EU law for prolonging safeguard measures were not met and that the continuation of those measures harmed importers and users of steel products within the internal market.

After the General Court dismissed the action in first instance, Euranimi brought an appeal before the Court of Justice.

The legal issue concerned the interpretation of Article 19(2) of Regulation (EU) 2015/478, which allows the extension of safeguard measures only where two conditions are met: first, the safeguard measure remains necessary to prevent or remedy serious injury; second, there is evidence that Union producers are adjusting.

Euranimi argued that the General Court had wrongly assessed the market data, especially considering the exceptional market conditions created by the COVID-19 pandemic, and had failed to consider WTO safeguard principles.

The Commission defended the legality of the extension, maintaining that the Union steel industry remained vulnerable and that continued safeguards were necessary to avoid renewed injury.

The Court therefore had to assess whether the General Court had committed errors of law in upholding the Commission's economic and legal assessment.

The Court of Justice dismissed the appeal in its entirety. It confirmed that the General Court had correctly interpreted the legal conditions for extending safeguard measures and that the Commission had not committed any manifest error in its assessment of the necessity of prolonging the measures. The Court also rejected Euranimi's arguments based on WTO law and confirmed the broad discretionary powers of the Commission in complex trade defense matters.

As regards costs, the Court ordered Euranimi to bear its own costs and to pay those incurred by the European Commission.

CONCLUSION

The warning raised by Daron Acemoglu finds strong confirmation in the analysis developed throughout this thesis.

The broad range of academic contributions examined, together with empirical data, judicial precedents and administrative rulings, show that tariffs are, in many respects, a bad deal, often even for those who impose them. Their economic effects are concrete: they distort trade flows, increase uncertainty, disrupt supply chains and generate costs not only for foreign exporters, but also for domestic producers and consumers.

As Ripamonti (2025) pointed out, tariffs have increasingly become a “*powerful weapon*”. Their original historical function, that was generating public revenues and protecting domestic industries, has gradually lost centrality. Today, tariffs are mainly used as instruments of economic pressure, political leverage and strategic confrontation. Furthermore, the country affected by tariffs remains no longer passive, but often responds with equivalent countermeasures, creating a spiral of escalation whose consequences are hard to control.

This paper has tried to reconstruct this transformation by starting from the broader geopolitical and legal framework. It has questioned the current effectiveness of multilateral institutions such as the WTO and the resilience of international trade law. It then moved to the macroeconomic consequences of tariff escalation, before finally addressing the practical implications for Italian firms operating in the U.S. market.

How this global tariff confrontation will ultimately evolve remains uncertain. It can be argued, however, that much will depend on the capacity of negotiation between different players involved at different levels and, on their ability to manage international law, international trade law and international tax law as instruments of mutual understanding rather than source of conflict.

Within this uncertain environment, the main purpose of this project has been to understand how an Italian entrepreneur, despite rising tariff barriers, may concretely operate, survive and possibly grow in the U.S. market.

For Italian firms operating in strategic “*Made in Italy*” sectors, competitiveness can no longer rely solely on product quality, specialization or brand reputation.

That’s why “*tariff engineering*” could actually represent a credible pathway forward.

“*Tariff engineering*” is not merely a theoretical concept, but a structured set of tools and strategies capable of mitigating tariff exposure through lawful mechanisms such as product redesign, origin optimization, customs valuation strategies and supply-chain restructuring. Most importantly, this work seems to prove that these strategies are fully legitimate and have already produced tangible results, as confirmed by export data from key “*Made in Italy*” key-sectors reported by major national newspapers and media (Corriere della Sera, 2025, 2026; Il Sole 24 Ore, 2025; Sky TG24, 2026; Repubblica, 2026).

Whether tariff engineering will remain the most effective pathway in the future is still uncertain and, on the other hand, it cannot be the only instrument of resilience in a framework of tariff war.

However, based on evidence presented in this paper, it appears that even the single enterprise may find an exit strategy if it places trust in its mission at the core of its everyday business.

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Table 1 - Tariff Changes for Targeted Import Varieties and Export Products

Sector (1)	NAICS-3 (2)	Imports				Exports		
		# Varieties (3)	# HS10 (4)	Δ Statutory τ		# HS10 (7)	Δ Retaliatory τ	
				Mean (5)	STD (6)		Mean (8)	STD (9)
Crop and Animal Production	111-2	111	111	0.10	0.01	83	0.23	0.06
Forestry and Logging	113	14	14	0.10	0.00	11	0.20	0.07
Fishing, Hunting and Trapping	114	145	145	0.10	0.00	75	0.25	0.00
Oil and Gas Extraction	211	4	4	0.10	0.00	3	0.25	0.00
Mining (except Oil and Gas)	212	47	47	0.10	0.00	5	0.20	0.08
Food	311	363	363	0.10	0.01	176	0.22	0.06
Beverage and Tobacco Product	312	10	10	0.09	0.03	31	0.25	0.04
Textile Mills	313	916	916	0.10	0.00	6	0.25	0.00
Textile Product Mills	314	146	146	0.10	0.02	10	0.23	0.05
Apparel	315	91	91	0.10	0.00	42	0.25	0.00
Leather and Allied Product	316	134	134	0.10	0.00	17	0.23	0.05
Wood Product	321	259	259	0.10	0.00	35	0.11	0.03
Paper	322	207	207	0.11	0.04	69	0.16	0.07
Printing and Related Activities	323	14	14	0.10	0.00	19	0.18	0.08
Petroleum and Coal Products	324	24	24	0.14	0.07	32	0.24	0.04
Chemical	325	1,167	1,167	0.11	0.04	289	0.17	0.08
Plastics and Rubber Products	326	236	236	0.15	0.07	40	0.15	0.09
Nonmetallic Mineral Product	327	314	314	0.10	0.03	26	0.25	0.03
Primary Metal	331	6,607	987	0.22	0.06	245	0.23	0.04
Fabricated Metal Product	332	728	567	0.12	0.06	84	0.25	0.05
Machinery	333	1,112	1,112	0.20	0.07	198	0.14	0.08
Computer and Electronic Product	334	717	535	0.21	0.07	149	0.12	0.05
Electrical Equipment and Appliances	335	488	386	0.19	0.10	57	0.21	0.06
Transportation Equipment	336	272	272	0.14	0.07	117	0.21	0.07
Furniture and Related Product	337	144	144	0.10	0.01	15	0.23	0.05
Miscellaneous	339	96	96	0.12	0.05	43	0.21	0.07

Source: Fajgelbaum P. D., Goldberg P. K., Kennedy P. J., Khandelwal A. K., *The Return to protectionism*, NBER 2019.

Note: Table shows the mean and standard deviation of tariff rate increases for all tariff measures across 3-digit NAICS sectors. A 0.10 means 10% change. Sectors with the same number of targeted varieties and products in Columns 3 and 4 reflect tariffs solely targeting Chinese imports.

Import tariffs constructed from USITC documents, and retaliatory tariffs constructed using official documents from foreign finance and trade ministries.

Table 2 - Impact of US Tariffs on Importing

	<i>log change foreign exporter prices (1)</i>	<i>log change import quantities (2)</i>	<i>log change import quantities (3)</i>	<i>log change import values (4)</i>	<i>log change import values (5)</i>
	$\Delta \ln(p_{ijt})$	$\Delta \ln(m_{ijt})$	$\Delta \ln(m_{ijt})$	$\Delta \ln(p_{ijt} \times m_{ijt})$	$\Delta \ln(p_{ijt} \times m_{ijt})$
log change tariff $\Delta \ln(1 + \text{Tariff}_{ijt})$	-0.012 (0.023)	-1.310*** (0.090)	-5.890*** (0.590)	-1.424*** (0.086)	-6.364*** (0.773)
<i>N</i>	1,647,617	1,647,617	3,318,912	2,487,370	4,461,376
<i>R</i> ²	0.021	0.024	0.099	0.012	0.102

Source: Amiti M., Redding S. J., Weinstein D. E., The impact of the 2018 tariffs on prices and welfare, 2019. Data from US Census Bureau, US Trade Representative (USTR), US International Trade Commission (USITC), authors' calculations.

Note: Based on Amiti et al (2019), who estimate the impact of U.S. tariffs using HTS10 product-country-month data for the period January 2017- December 2018.

The analysis relies on regressions of twelve-month log changes in import quantities on tariff changes, including product and country-month fixed effects, and treats tariffs as exogenous policy shocks. The higher elasticity obtained in alternative specifications reflects the inclusion of trade flows that fall to zero following prohibitive tariffs, which are excluded in standard log-linear models; this is addressed using an inverse hyperbolic sine transformation.

Table 3 - Sector Elasticity κ

	(1)	(2)	(3)
	$\Delta \ln\left(\frac{P_{Mst} M_{st}}{P_{Dst} D_{st}}\right)$	$\Delta \ln\left(\frac{P_{Mst}}{p_{st}}\right)$	$\Delta \ln\left(\frac{P_{Mst} M_{st}}{P_{Dst} D_{st}}\right)$
$\Delta \ln Z_{Mst}$	0.30 (0.36)	-1.59 (3.49)	
$\Delta \ln\left(\frac{P_{Mst}}{p_{st}}\right)$			-0.19 (0.49)
Sector FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
1st-Stage F			0.2
$\hat{\kappa}$ (se[$\hat{\kappa}$])			1.19 (0.49)
Bootstrap CI			[0.89,1.71]
R2	0.24	0.67	.
N	2,041	2,041	2,041

Source: Fajgelbaum P. D., Goldberg P. K., Kennedy P. J., Khandelwal A. K., *The Return to protectionism*, NBER 2019.

Note: Table reports the sector-level import responses to import tariffs. The sample is at the sector time level from 2017:1 to 2019:4. (to be continued in the following page)

U.S. elasticity of approximately 1.19 within sectors, indicating that both consumers and firms are willing to substitute away from foreign goods when their prices increase. Higher import prices therefore reallocate demand toward domestic production without eliminating reliance on foreign inputs.

Table 4 - Impact of Foreign Tariffs on US Exporting

	<i>log change US export prices (1)</i>	<i>log change foreign import quantities (2)</i>	<i>log change foreign import quantities (3)</i>	<i>log change foreign import values (4)</i>	<i>log change foreign import values (5)</i>
	$\Delta \ln(p_{ijt}^{US})$	$\Delta \ln(x_{ijt}^{US})$	$\Delta \ln(x_{ijt}^{US})$	$\Delta \ln(p_{ijt}^{US} \times x_{ijt}^{US})$	$\Delta \ln(p_{ijt}^{US} \times x_{ijt}^{US})$
log change tariff $\Delta \ln(1 + \text{Tariff}_{ijt})$	0.077** (0.034)	-1.233*** (0.146)	-3.498*** (0.710)	-1.134*** (0.130)	-3.942*** (0.827)
<i>N</i>	1,320,495	1,320,495	2,784,226	2,191,243	3,930,620
<i>R</i> ²	0.014	0.011	0.076	0.013	0.072

Source: Amiti M., Redding S. J., Weinstein D. E., *The impact of the 2018 tariffs on prices and welfare*, 2019.

Note: Observations are at the HTS10-country-month level for the period January 2017 to December 2018. Variables are in twelve-month log change. All columns include HTS10 product fixed effects and country-year fixed effects. Amiti et al (2019) estimates that a 1% rise in foreign tariffs is associated with a decline of approximately 3.9% in the value of U.S. exports (e.g. elasticity of U.S. export values). This reflects the high sensitivity of export performance to retaliatory measures. And also, this underlines the fact that U.S. companies are forced to find new export markets or move production abroad to avoid paying tariffs.

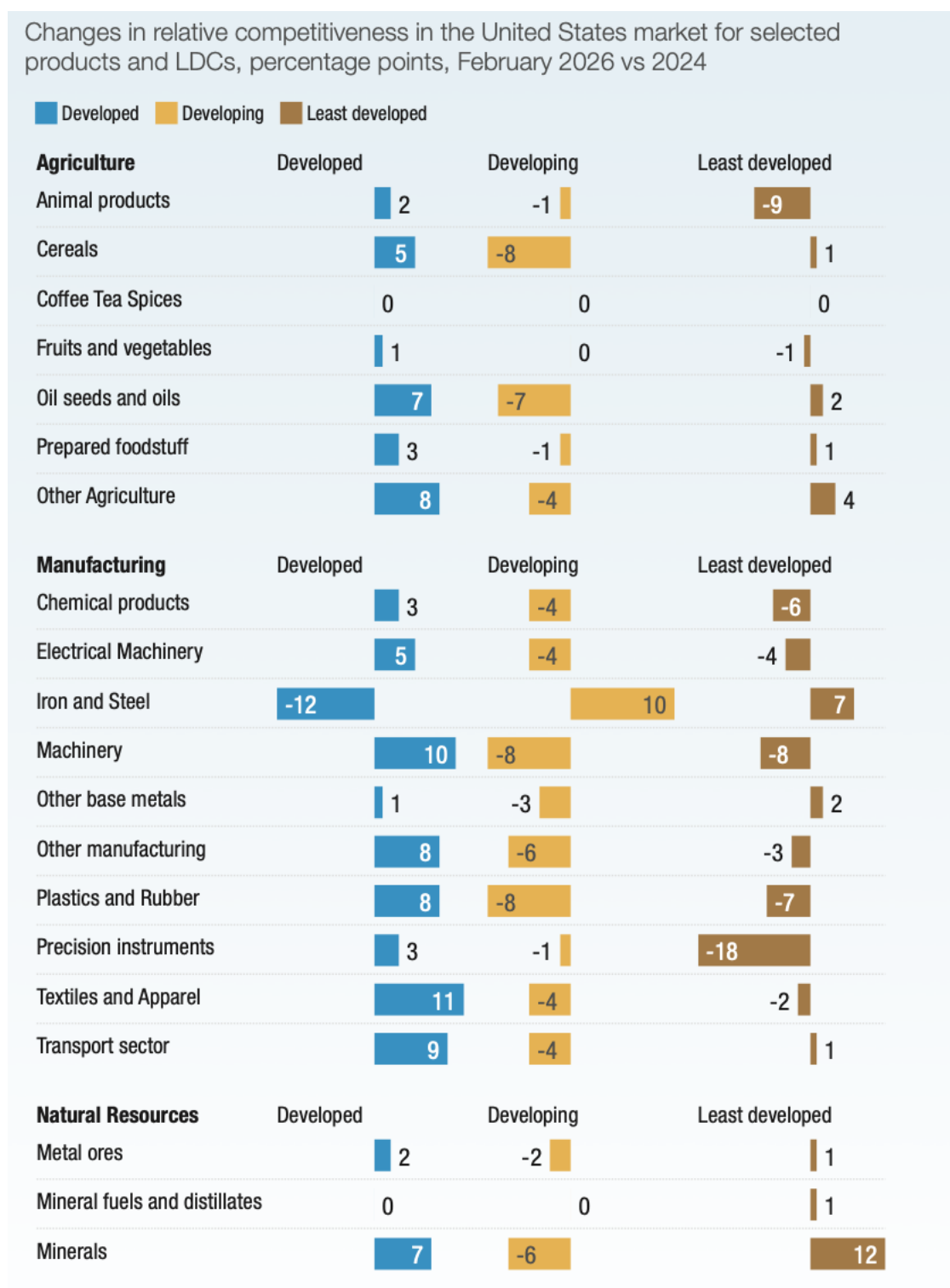
Table 5 - Impact of tariffs on total trade flows: a bilateral panel model analysis

Bilateral panel model (linear model): impact in total trade flows: 2026, pp				
	Current Scenario ^(*)	Reference Scenario	Alternative Scenario	Extreme Scenario
World	-4.4	-5.0	-5.9	-9.0
US	-12.0	-14.3	-18.6	-31.3
China	-4.7	-8.4	-10.0	-14.8
Eurozone	-0.8	-1.0	-1.1	-1.7
Asia (ex-China) ^(*)	-3.5	-3.3	-4.0	-6.3
Mexico/Canada ^(*)	-9.8	-5.0	-7.7	-15.1
South America ^(*)	-1.6	-1.6	-1.6	-2.8

Source: BBVA Research, *The impact of trade tariffs on the global economy*, June 2025.

Note: Through the *bilateral panel model* applied to global trade flows, the data show the estimated impact of tariffs on total trade flows in 2026, expressed in percentage points, relative to the four scenarios assumed (*current, reference, alternative and extreme scenario*). As the intensity of the tariff scenario increases, the reduction in trade flows for each actor tends to progressively accentuate.

Table 6 - Developing economies and LDCs saw declining competitiveness in most sectors



Source: UNCTAD, *Global Trade Update: Who wins when trade policies shift? New rules are reshaping global export competition and determining which countries gain ground.*, Policy Insights, Geneva, February 2026.

UNCTAD estimates based on United States national statistics.

Note: Changes in relative competitiveness in the United States market between February 2024 and February 2026 across selected sectors and product categories. Results are reported separately for developed, developing and least developed economies. The rows are grouped into three sectors: agriculture, manufacturing and natural resources.

(To be continued in the following page)

The values indicate changes in relative competitiveness expressed in percentage points. Relative competitiveness is measured using the “relative preferential margins”, which measure how much better or worse a country’s exports are treated tariff-wise relative to its competitors. This measure is calculated at the HS 8-digit level and then averaged across groups using trade weights. A negative change reflects a deterioration in relative tariff conditions, while a positive change indicates an improvement.

Table 7 - Uneven tariff changes can offer sector-specific opportunities for many LDCs

Changes in relative competitiveness in the United States market for selected products and LDCs, percentage points, February 2026 vs 2024

Exporter	Product	Competitiveness gain
Mozambique	Tobacco	+13
Benin	Cotton	+13
Senegal	Mollusks	+12
Bangladesh	Jute	+10
Gambia (the)	Dried fruit	+10
Mauritania	Frozen Fish	+10
Sierra Leone	Palm oil	+9
Liberia	Copra	+9
Haiti	Men's shirts	+9
Rwanda	Women's coats	+9
Cambodia	Rice	+4
Madagascar	Agar-Agar	+4

Source: UNCTAD, *Global Trade Update: Who wins when trade policies shift? New rules are reshaping global export competition and determining which countries gain ground.*, Policy Insights, Geneva, February 2026.

UNCTAD estimates based on United States national statistics.

Note: Changes in relative competitiveness in the United States market between February 2024 and February 2026 for selected products exported by LDCs. the first column identifies the exporting country, the second column indicates the product category, and the third column indicates the corresponding competitiveness gain, expressed in percentage points. Relative competitiveness is measured using the “*relative preferential margins*”, which measure how much better or worse a country’s exports are treated tariff-wise relative to its competitors. This measure is calculated at the HS 8-digit level and then averaged across groups using trade weights. A negative change reflects a deterioration in relative tariff conditions (a loss in competitiveness), while a positive change indicates an improvement (a gain in competitiveness).

Table 8 – Direct and indirect effects of U.S. – China tariff announcements on CARs

Variables	(0,0)	(-1,+1)	(-1,+3)	(-1,+5)	(-1,+7)	(-1,+10)
DirectTariff _{USA,USA}	-0.0270 (0.154)	-0.3334 (0.205)	-1.1926*** (0.343)	-1.7827*** (0.393)	-2.1502*** (0.559)	-3.0041*** (0.642)
DirectTariff _{USA,CHN}	0.0015 (0.005)	-0.0070 (0.005)	-0.0187** (0.009)	-0.0472*** (0.011)	-0.0233* (0.012)	-0.0423*** (0.015)
DirectTariff _{CHN,CHN}	-0.0069*** (0.001)	-0.0011 (0.002)	-0.0023 (0.004)	-0.0379*** (0.006)	-0.0532*** (0.008)	-0.0672*** (0.011)
DirectTariff _{CHN,USA}	0.1072 (0.216)	-0.6454* (0.351)	-0.7797 (0.539)	-1.7267** (0.765)	-1.7226 (1.027)	-1.9416 (1.187)
IndirectTariff _{USA}	0.0016 (0.005)	-0.0227 (0.015)	-0.0497* (0.028)	-0.0772 (0.048)	-0.0811* (0.045)	-0.1169* (0.065)
IndirectTariff _{CHN}	-0.00001 (0.0002)	0.0005* (0.0002)	0.0003 (0.0002)	0.0008*** (0.0003)	0.0010*** (0.0003)	0.0010 (0.001)
MarketCap	0.0001** (0.0001)	0.0007*** (0.0001)	0.0011*** (0.0002)	0.0012*** (0.0003)	0.0014*** (0.0003)	0.0016*** (0.001)
Constant	-0.0014* (0.001)	-0.0194*** (0.001)	-0.0316*** (0.002)	-0.0393*** (0.003)	-0.0517*** (0.005)	-0.0616*** (0.007)
Other tariff controls	Yes	Yes	Yes	Yes	Yes	Yes
Sector-event-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Country-event-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	543,403	543,403	543,403	543,403	543,403	543,403
R-squared	0.039	0.036	0.034	0.031	0.028	0.029

Source: Egger P., Zhu J., *The US-Chinese Trade War: An Event Study of Stock-Market Responses.*, 70th Economic Policy Panel Meeting, Economic Policy, 10-11 October 2019, Helsinki, Hosted by Bank of Finland.

Note:

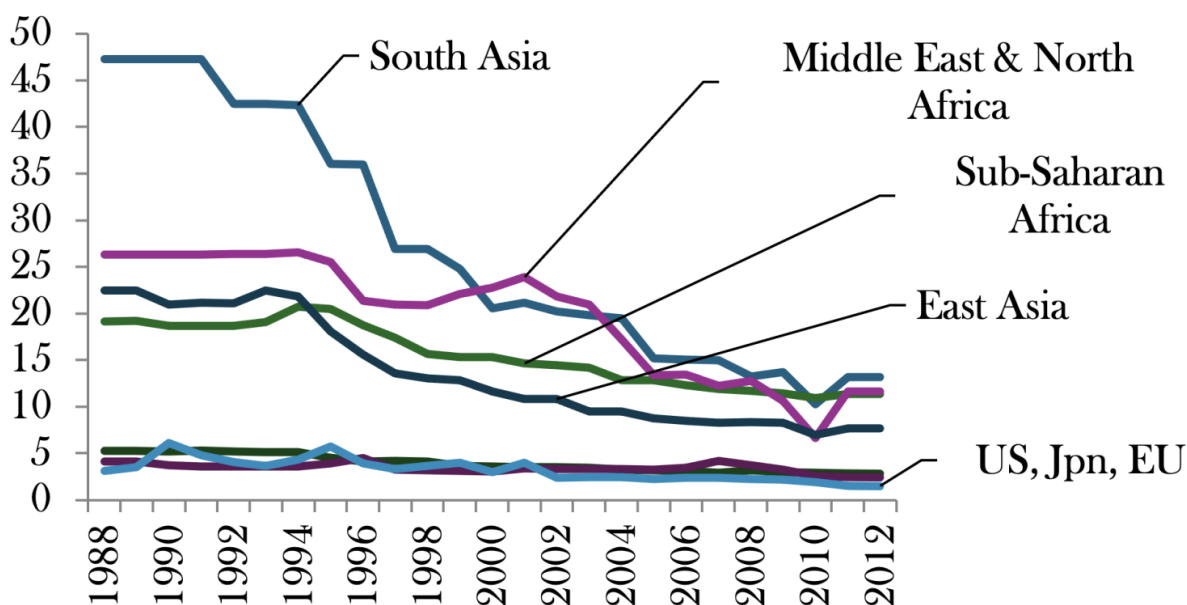
The estimation results of the second-step model from Egger and Zhu empirical analysis, aimed at measuring the Cumulative Abnormal Return (CAR) of firms following tariff announcements in the context of the U.S.-China trade war. The coefficients are observed in different time windows, from the day of the event up to ten subsequent days, allowing to evaluate both immediate and progressive effects.

The direct effects of tariff announcements are predominately negative. In particular, the coefficients associated with “Direct Tariff USA, USA” (e.g. the unintended effect on domestic shocks) and “Direct Tariff USA, CHN” (e.g. the intended effect on Chinese firms) become negative and statistically significant from the third day following the announcement. This means that the tariffs imposed by the United States harm not only the Chinese companies directly affected, but also U.S. companies in the same production sectors. The negative effect on U.S. domestic businesses is quantitatively higher than that on Chinese businesses, suggesting that the market incorporates expectations regarding potential tariff retaliation, cross-border value chain integration, etc.

Retaliatory tariffs introduced by China also show negative effects. The “Direct Tariff CHN, USA” coefficients highlight a more marked impact on U.S. companies than on Chinese ones (e.g. “Direct Tariff CHN, CHN”), confirming how trade conflict produces unfavorable effects on both economies involved.

Regarding indirect effects, represented by the variables “IndirectTariff USA” and “IndirectTariff CHN”, the results indicate that these are generally less intense in absolute value than direct effects, but still significant.

Figure 1 - Average tariff rates by region, all goods, 1988 to 2012, %.

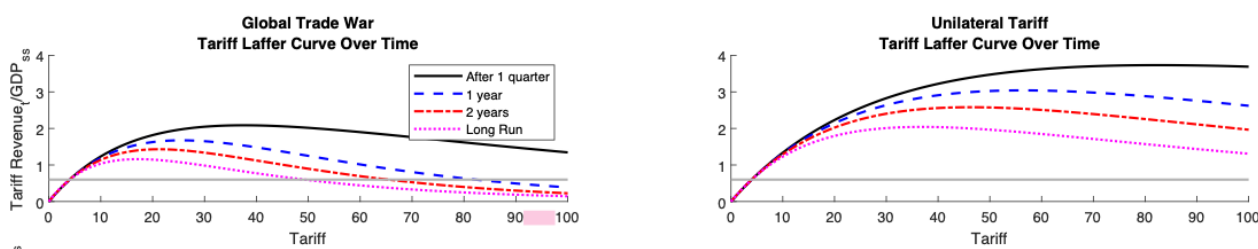


Source: Baldwin R., *Trumpian tariffs are import substitution industrialisation 2.0*, August 28 2025, in VOXEU Column, CEPR.

Note: Based on World Bank data that the author used in his 2016 book, *The Great Convergence*.

The horizontal axis (x-axis) represents the years, while the vertical axis (y-axis) presents the values in percentage points.

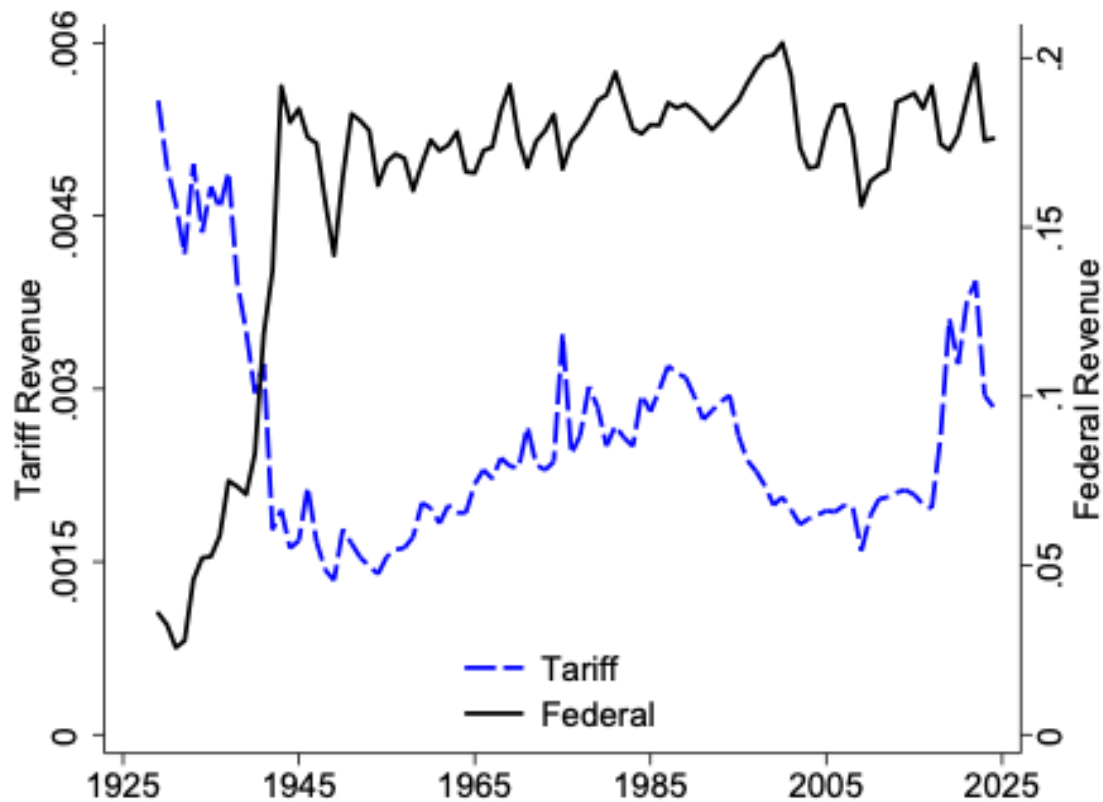
Figure 2 – Tariff Laffer Curves



Source: Alessandria G. A., Ding J., Khan S. Y., Mix C. B., *The Tariff Tax Cut: Tariffs as Revenue*, Working Paper n. 33784, NBER, May 2025.

Note: The panel includes two figures about the Tariff Laffer Curves. The figures compare the evolution over time of tariff revenues under two different scenarios: a global trade war (left) and a unilateral tariff (right); in both cases, revenues follow a Laffer-type pattern, initially increasing with higher tariffs (short run-inelasticity) and subsequently declining as import volumes contract due to substitution and supply chain adjustments (long run-higher elasticity). Moreover, revenues are systematically lower in the global trade war scenario, reflecting stronger disruptions to international trade and reduction in trade flows. On the other hand, in the unilateral tariff case, revenues are higher, reflecting weaker trade contraction in the absence of retaliation.

Figure 3 – Tariff and Federal Revenue



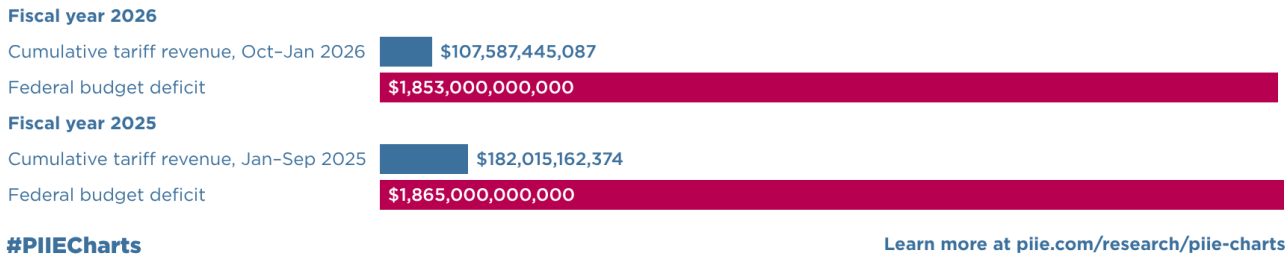
Source: Alessandria G. A., Ding J., Khan S. Y., Mix C. B., *The Tariff Tax Cut: Tariffs as Revenue*, Working Paper n. 33784, NBER, May 2025.

Note: U.S. data on tariff revenues and total federal revenues (as a share of GDP).

The horizontal axis (x-axis) represents the years, while the vertical axis (y-axis) presents the Tariff Revenue and the Federal Revenue.

It highlights the declining importance of tariffs as a source of government revenue over time, particularly after World War II. While tariff rates and revenues were relatively high in earlier decades, their contribution becomes marginal compared to other federal revenues in recent times, reflecting both trade liberalization and the expansion of alternative sources of taxation.

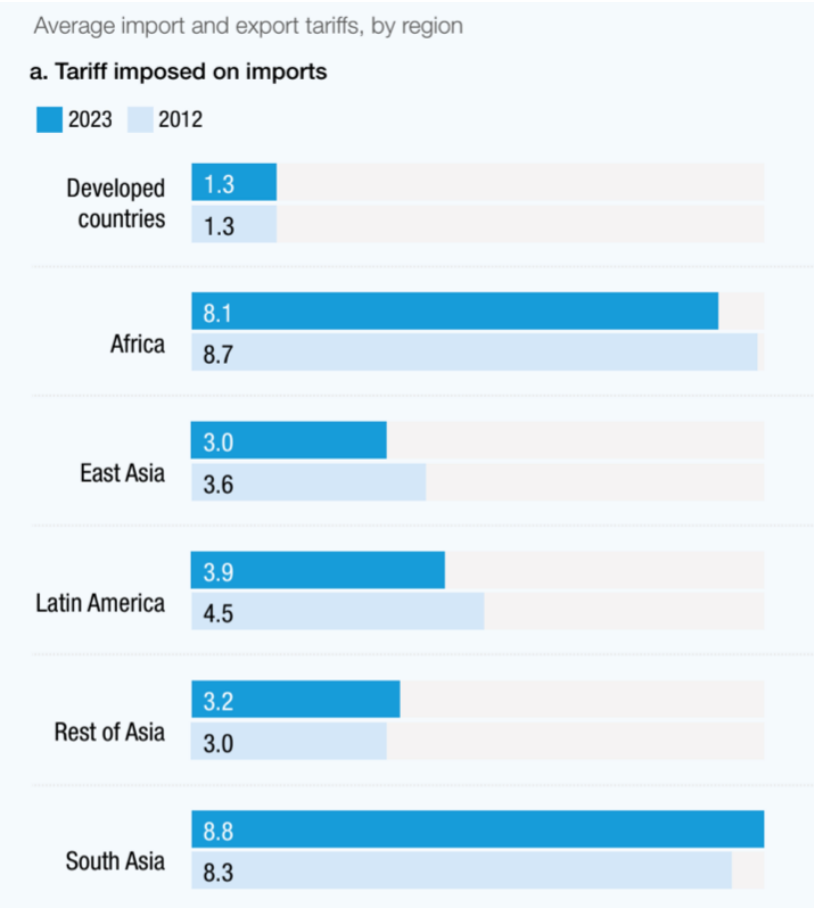
Figure 4 – Can Trump’s tariff revenues help pay for the federal budget deficit?



Source: Hufbauer G. C., Zhang Y., *Trump’s tariff revenue tracker: How much is the US collecting? Which imports are hit?* Peterson Institute for International Economics (PIIE), in PIIE Charts, December 15 2025. Data processed by Congressional Budget Office, FY 2025 and Congressional Budget Office, FY 2026.

Note: Cumulative tariff revenue is the total of monthly calculated tariffs estimated by USITC since January 2025.

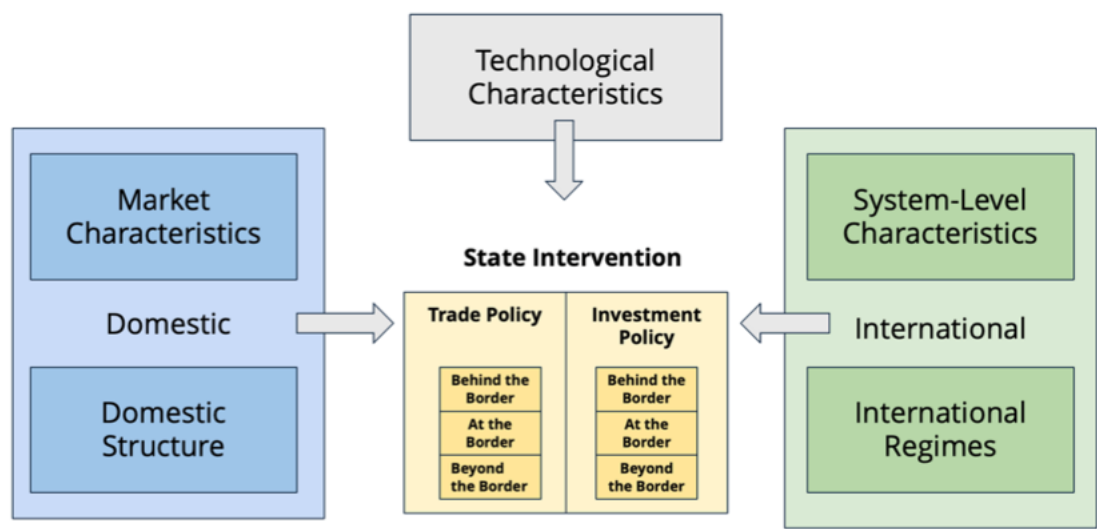
Figure 5 – Tariff imposed on imports of many developing regions can be substantial



Source: UNCTAD, *Global Trade Updated. The role of tariffs in international trade*, Geneva, March 2025. UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

Note: Average import and export tariffs, by region.

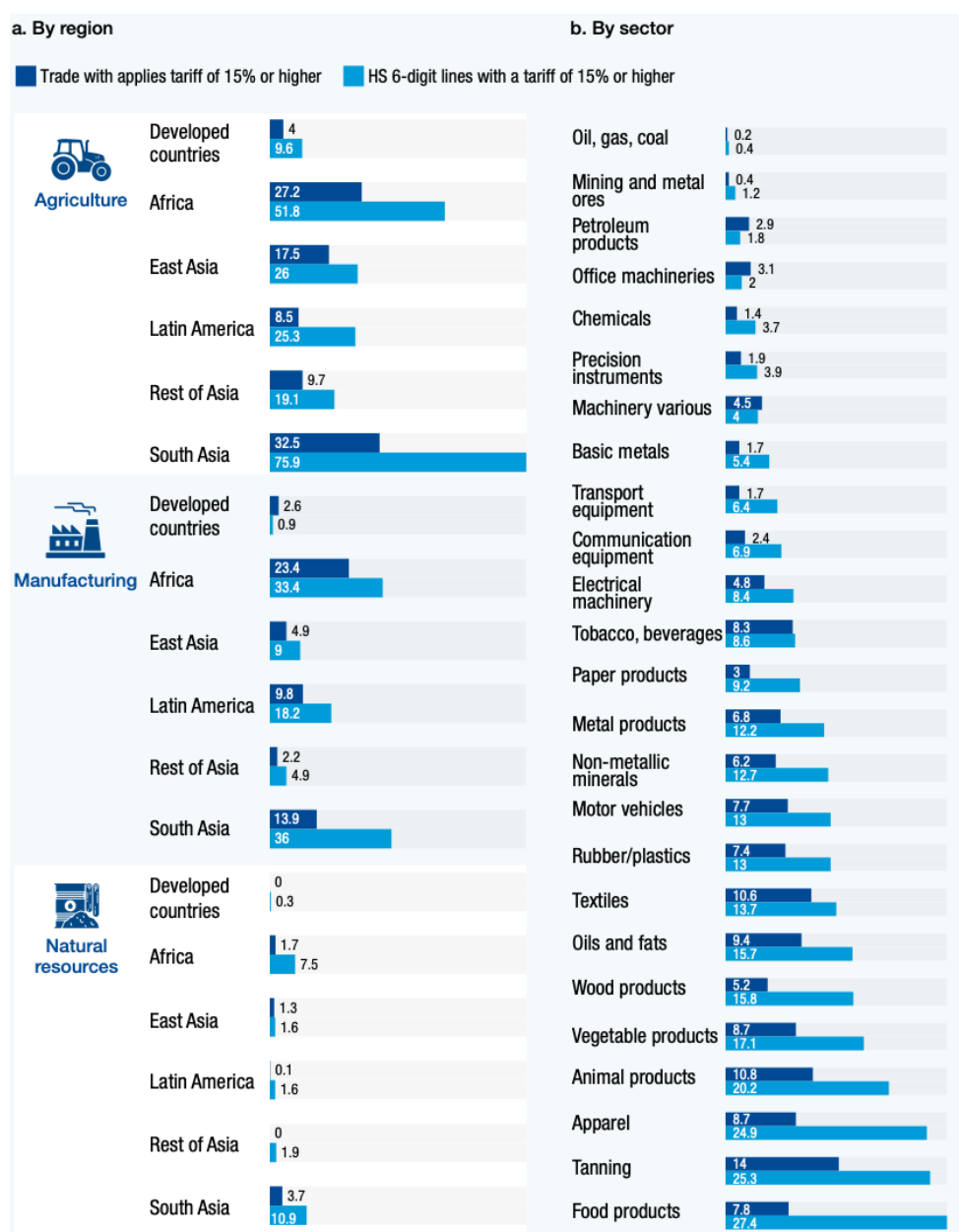
Figure 6 - A five-factor model of State intervention in high technology sectors



Source: Aggarwal V. K., Reddie A. W., *New economic statecraft and global technology conflicts: the dilemma for middle powers*, in *Business and Politics*, Volume 27, Cambridge University Press, 2025.

Note: A five-factor framework explaining the intervention in high-technology sectors. Government action is shaped by the interaction of market characteristics, domestic structures, technological characteristics, system-level dynamics and international regimes. Trade and investment policies operate both behind, at and beyond national borders, reflecting the increasing integration of industrial, technological and geopolitical objectives. The model highlights how strategic sectors are influenced not only by economic considerations, but also by national security concerns, technological competition and international governance arrangements.

Figure 7 – Tariff peak, by region, broad category and sector (2023)



Source: UNCTAD, *Global Trade Updated. The role of tariffs in international trade*, Geneva, March 2025.

UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

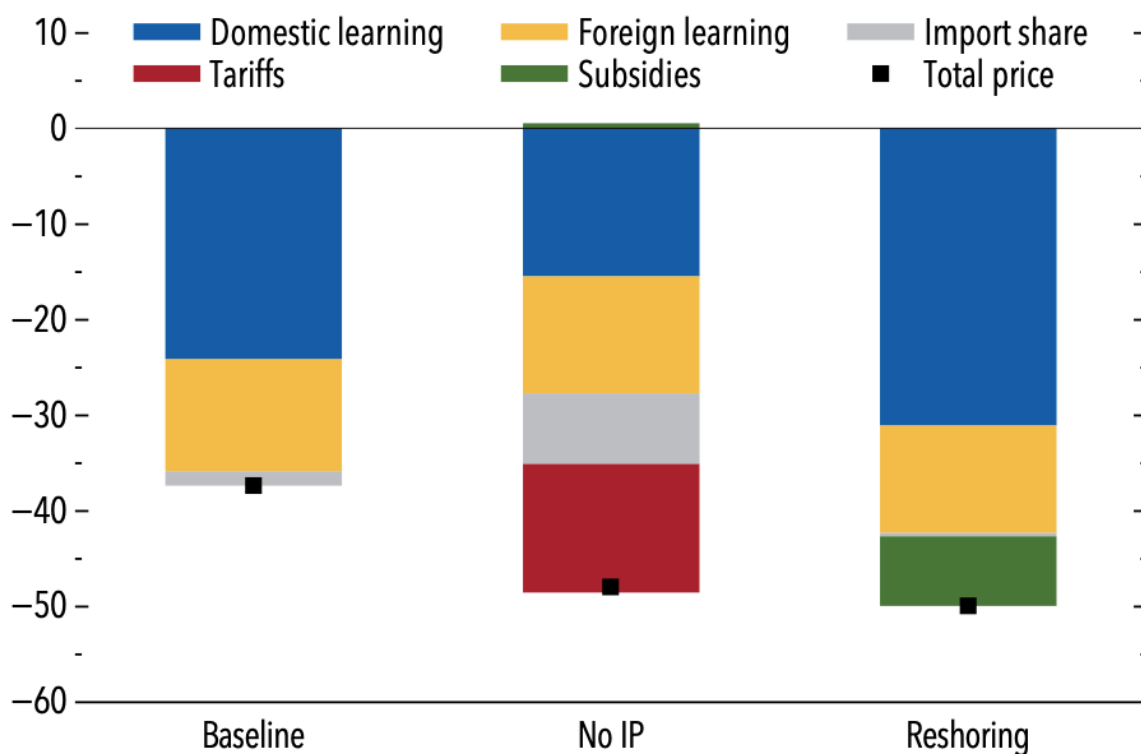
Note: Tariff peaks are not distributed equally, but they are concentrated in key sectors for low-income countries and nascent industries, such as agriculture, food, textiles, clothing, and natural resources.

Data is calculated using two metrics: percentage of product lines, which indicates how many product categories of the 6-digit HS system are subject to tariffs, and the percentage of commercial value, which measures the actual monetary volume of trade.

It can be noticed a discrepancy between these two metrics. A high incidence of lines taxed over 15% (or even more) against a low trade value traded reveals that tariffs are often used as a prohibitive and protectionist measure.

Figure 8 - Decomposition of EU Electric Vehicle Price Decline

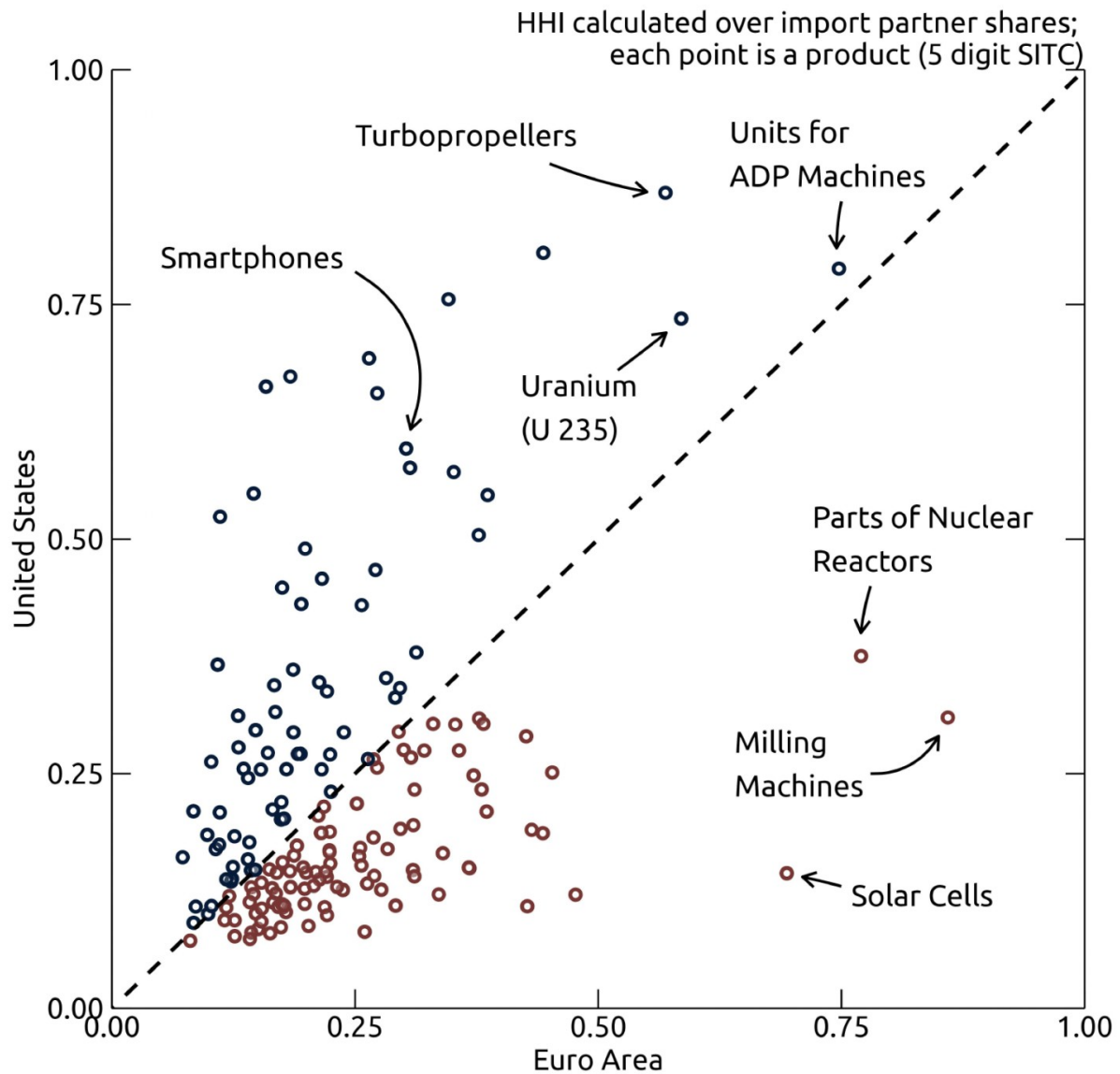
(Percent change between 2024 and 2035)



Source: IMF, *World Economic Outlook. Global Economy in Flux, Prospects Remain Dim*, Washington D.C., October 2025. Data from Bloomberg New Energy Finance, International Renewable Energy Agency and IMF staff calculations.

Note: IP = industrial policy (tariffs and subsidies). Illustrative price change for electric vehicles in the EU under business as usual, and two hypothetical scenarios can be envisaged. Under baseline scenario, the EU maintains “*status quo Ips*”. Under no-IP scenario, all existing IPs are removed starting in 2025. Under reshoring scenario, a 15% manufacture subsidy is introduced in major advanced economies, in addition to “*status quo trade*” protections.

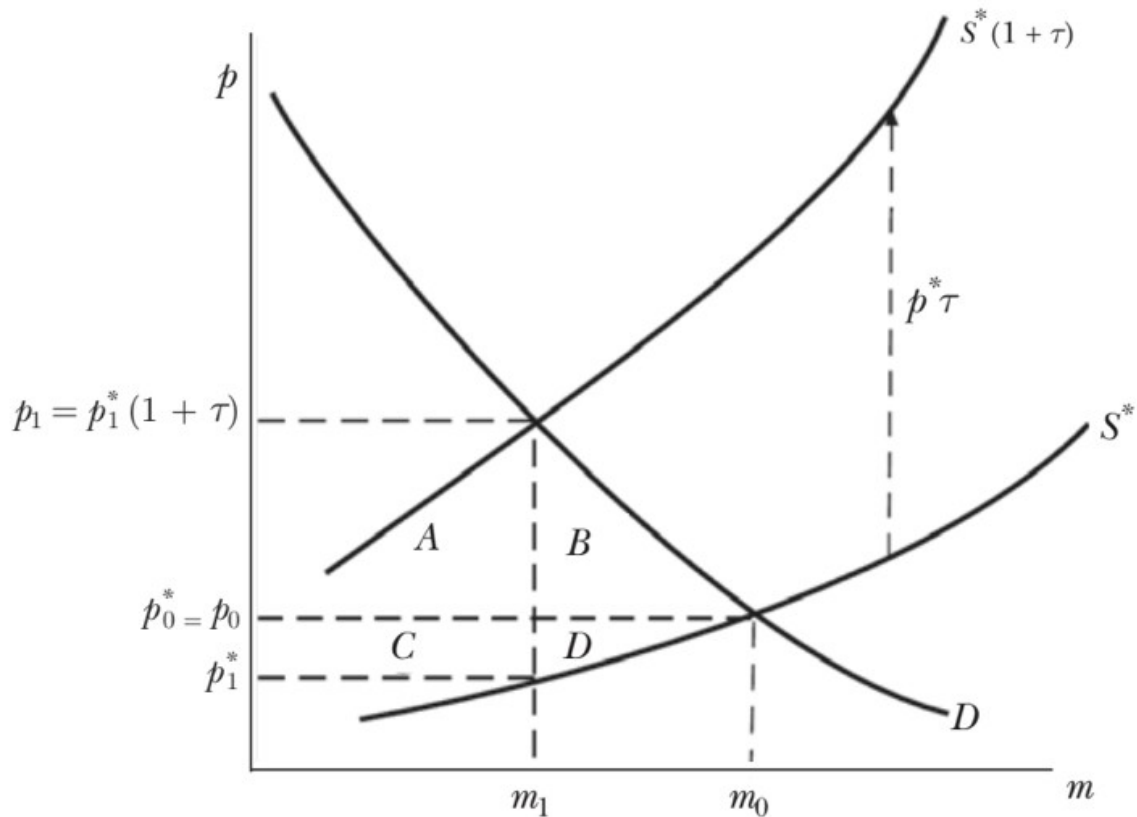
Figure 9 – Import Concentration by Advanced Technology Product (2023)



Note: ADP Machines are automatic data processing machines.

Source: Airaudo F., De Soyres F., Fisgin E., Gaillard A., Santacreu A., Richards K., Young H., *Risks in the new international trade landscape*, August 4 2025, Cepr, VoxEu Column

Figure 10 - Impact of a Tariff on Prices



Source: Amiti M., Redding S. J., Weinstein D. E., *The impact of the 2018 tariffs on prices and welfare*, 2019.

Note: The introduction of tariffs increases domestic prices, reduces import volumes and generate welfare losses through lower trade efficiency.

The graph refers to a standard partial equilibrium framework of import demand and export supply under perfect competition. The horizontal axis (m) represents the quantity of imports, while the vertical axis (p) represents the price of the imported good. D denotes the import demand curve and S^* denotes the foreign export supply curve.

In the absence of tariffs, at the intersection of demand and supply, the market reaches equilibrium at price p_0 ($p_0 = p_0^*$) and initial import quantity m_0 .

The introduction of an ad valorem tariff (t) shifts the relevant export supply curve upward to $S^*(1+t)$, reflecting the additional cost generated by tariff. As result, domestic consumers face a higher price (p_1), while foreign exporters receive a lower price (p_1^*). The difference between the two prices, indicated by p^*t , represents the tariff wedge. The increase in the domestic price reduces demand for imported goods, causing imports fall from m_0 to m_1 .

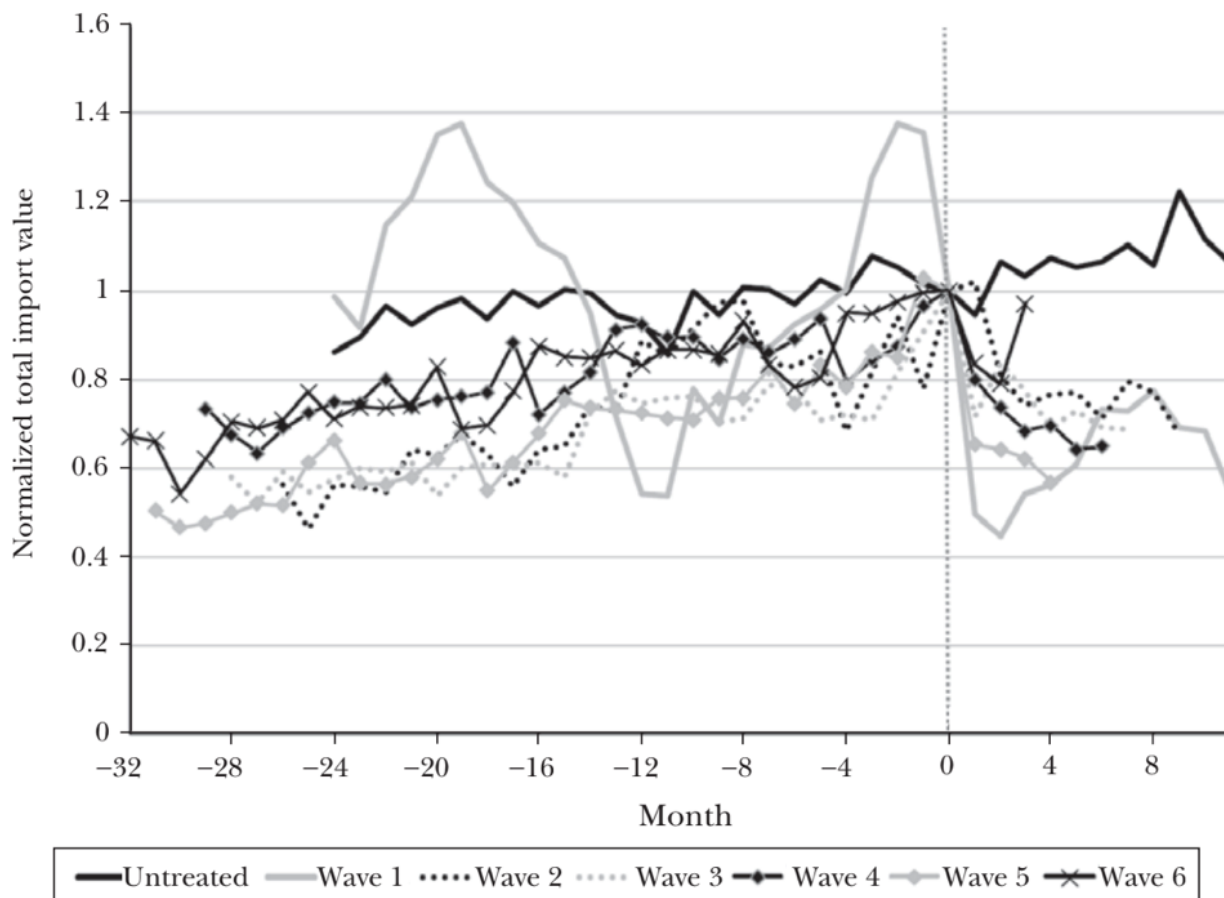
Area C represents tariff revenues collected by the importing -country government.

Area B and D correspond to deadweight losses arising from the reduction in trade (loss of efficiency).

Area A reflects the loss in foreign exporters' surplus due to the lower price received after the tariff is introduced.

The introduction of tariffs increases domestic prices, reduces import volumes and generate welfare losses through lower trade efficiency.

Figure 11 - Total Import Values by Tariff Wave

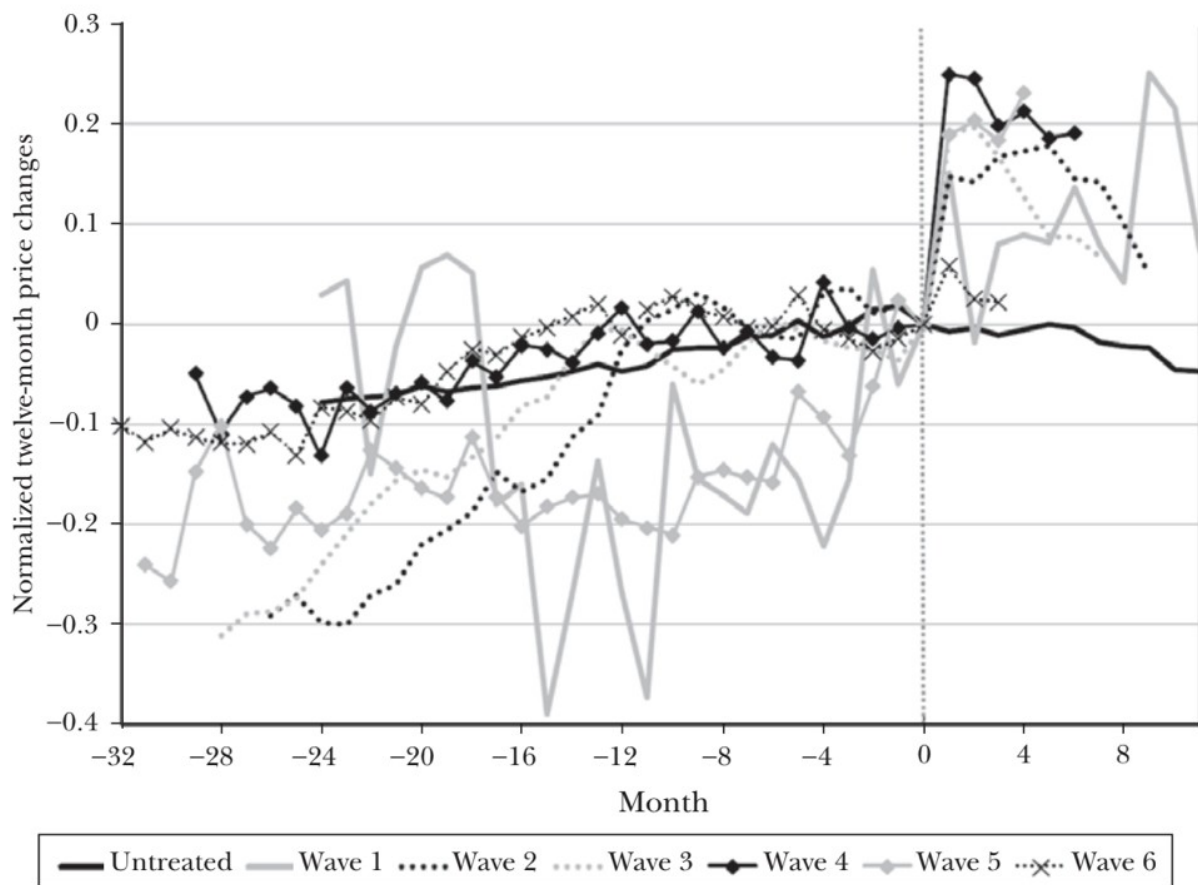


Source: Amiti M., Redding S. J., Weinstein D. E., *The impact of the 2018 tariffs on prices and welfare*, 2019; US Census Bureau; US Trade Representative (USTR); US International Trade Commission (USITC); authors' calculations.

Note: Twelve-month proportional changes in the value of US imports by tariff wave and for unaffected countries and products. Each series is normalized to the value one in the month prior to the introduction of the tariff; for the untreated month, zero is defined as in the first tariff wave.

Import values for tariffed products declined by approximately 25-30% after tariff implementation, whereas imports in unaffected sectors increased by roughly 10%, suggesting a reallocation of demand toward non-targeted products and suppliers. The divergence suggests that the observed decline in import volumes is not driven by broader macroeconomics conditions but rather figures as a direct response to tariff measures. At the same time, the relative increase in imports from unaffected sectors points to a reallocation of the demand across products and trading partners (e.g. import substitution).

Figure 12 - Twelve-Month Proportional Change in Import Prices by Tariff Wave



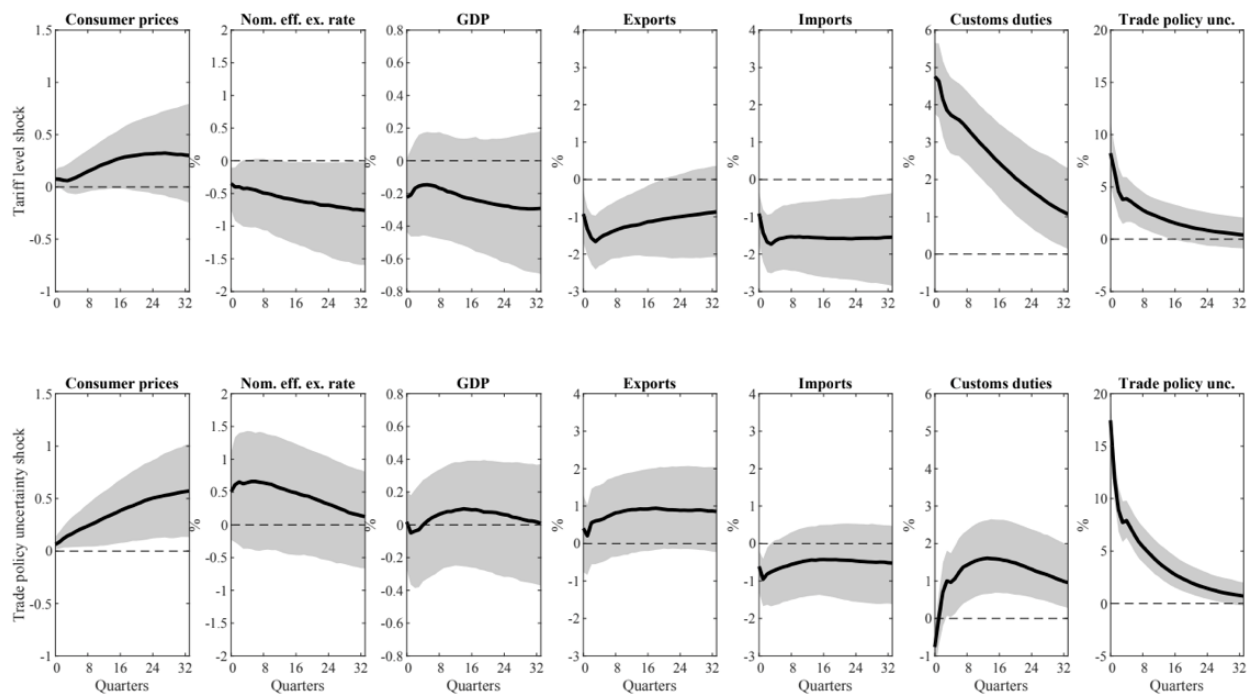
Source: Amiti M., Redding S. J., Weinstein D. E., *The impact of the 2018 tariffs on prices and welfare*, 2019; US Census Bureau; US Trade Representative (USTR); US International Trade Commission (USITC); authors' calculations.

Note: Proportional change in an import share-weighted average of twelve-month relative changes in US import unit values inclusive of tariffs (import values divided by import quantities) for each tariff wave and for unaffected countries and products. Proportional changes for each wave are normalized to equal zero in the month prior to the introduction of the tariff; for the untreated month, zero is defined as in the first tariff wave.

They reach these results using the 2018 U.S. tariffs as a natural experiment and analyzing detailed unit values at the HTS10 level (16,000 product categories).

Import prices for tariffed products increased by approximately 10-30%, broadly matching the size of the tariffs. Prices of non-tariffed goods remained stable and no significant pre-trends were observed.

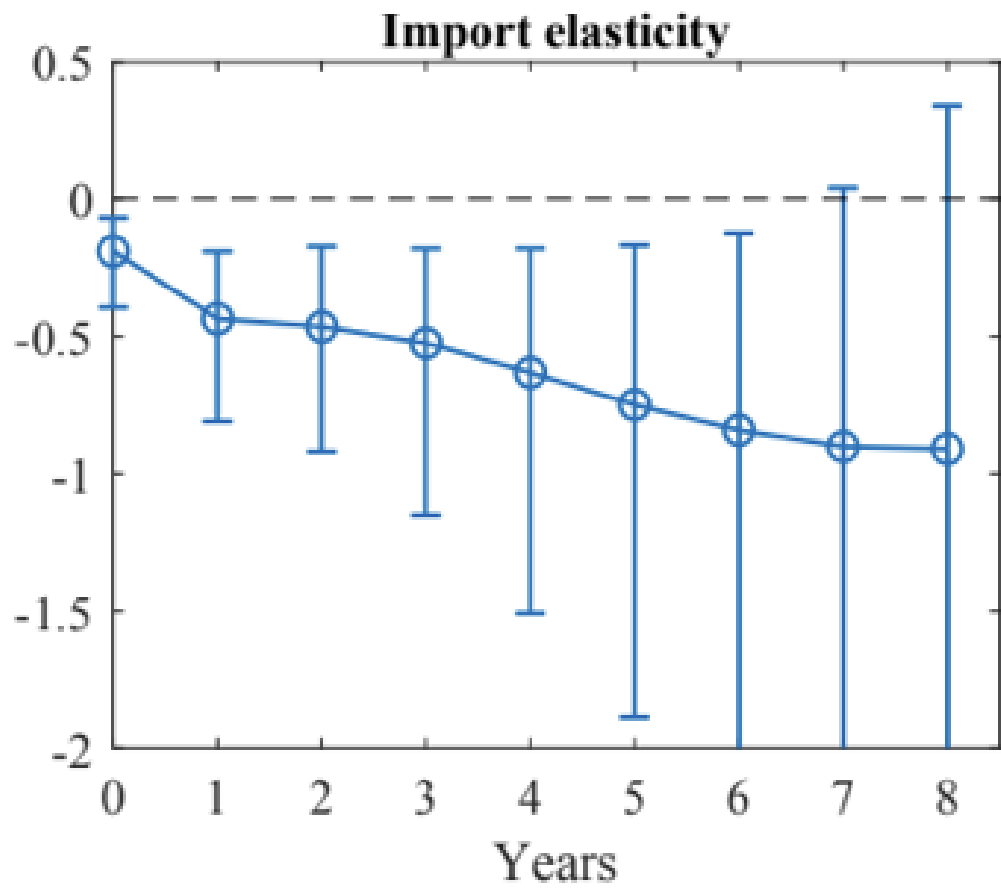
Figure 13 - Estimated responses to tariff level shock and TPU shock



Source: Boer L., Rieth M., *The Macroeconomics Consequences of Import Tariffs and Trade Policy Uncertainty*, IMF 2024.

Note: The solid lines show the macroeconomic effects of a shock of one standard deviation to tariffs in the upper panels and to TPU in the lower panels over a horizon of 32 quarters in the US. In particular, the point-wise median estimates and the shaded areas the 68% highest posterior density credible sets. An increase in the nominal effective exchange rate is a US-Dollar depreciation.

Figure 14 - Import elasticity



Source: Boer L., Rieth M., *The Macroeconomics Consequences of Import Tariffs and Trade Policy Uncertainty*, IMF 2024.

Note: The estimated import elasticity over an eight-year horizon. Negative values indicate that higher import prices, including those resulting from tariff increases, reduce import demand. The estimated elasticity becomes progressively larger in absolute value over time, suggesting that the response of imports strengthens in the medium and long run as firms and consumers gradually adjust their sourcing and consumption decisions. The vertical bars represent confidence intervals around the points estimates. The results shows that tariff restrictions in the short run have a limited impact on imports, that becomes more pronounced over time as substitution effects accumulate.

Figure 15 - The impact of trade tariffs on the global economy: simulation models

Models	Main Data	Model dynamics	Tariff impact: channels
Input-Output Tables	gross value added in exports (by country and sector)	static	direct (trade channel)
Bilateral panel model	bilateral trade flows, bilateral tariffs	dynamic	direct (trade channel)
Aggregate panel model	macro (GDP growth), aggregate tariffs by country	dynamic	direct (trade channel) and others (uncertainty, confidence, financial markets, etc)

Source: BBVA Research, *The impact of trade tariffs on the global economy*, June 2025.

Note: The figure describes the models used to conduct the research, the macroeconomic and trade variables on which tariffs have an impact, the dynamics related to each model and the channels of manifestation of the effects.

Figure 16 - Tariff scenarios

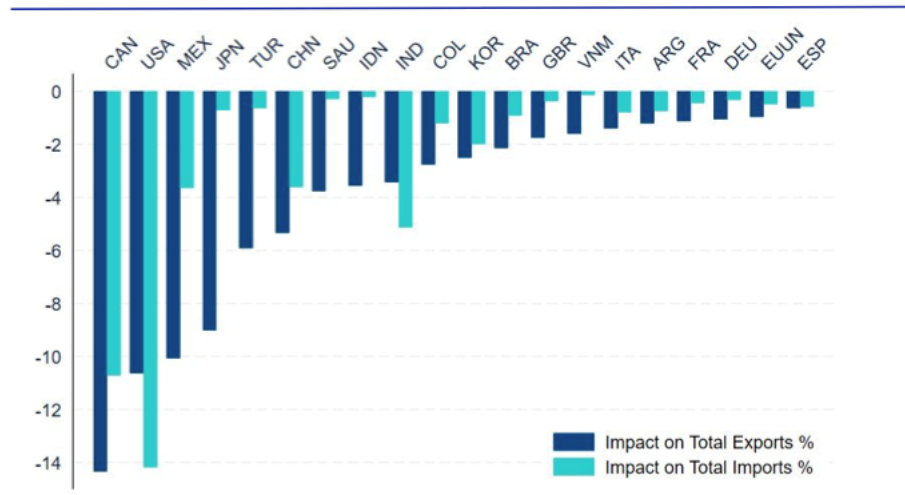
	Reference	Alternative	Extreme
China	60%	60%	145% (tariffs before recent trade deal)
Mexico and Canada	10%	12%	20% and 17%, respectively (tariffs before recent destacking measures)
Other countries	10%	simple average of current tariffs and tariffs including reciprocal tariffs (as of April 4th, 2025)	tariffs including reciprocal tariffs (as of April 4th, 2025)
Retaliation	15% by China, 2.5% by the EU	40% by China, 2% by the EU, 8% by Canada	full retaliation by all countries

Source: BBVA Research, *The impact of trade tariffs on the global economy*, June 2025.

Note: For each scenarios considered, the percentage of tariffs applied by the United States to commercial actors such as China, Mexico and Canada, and other countries; it also indicates the retaliatory tariffs, relative to the scenarios considered.

Figure 17 - Current scenario simulation

CURRENT SIMULATION: CUMULATIVE IMPACT ON TOTAL NOMINAL EXPORTS AND IMPORTS IN THE FIRST YEAR AFTER THE ADOPTION OF TARIFFS (2026)
(PP)



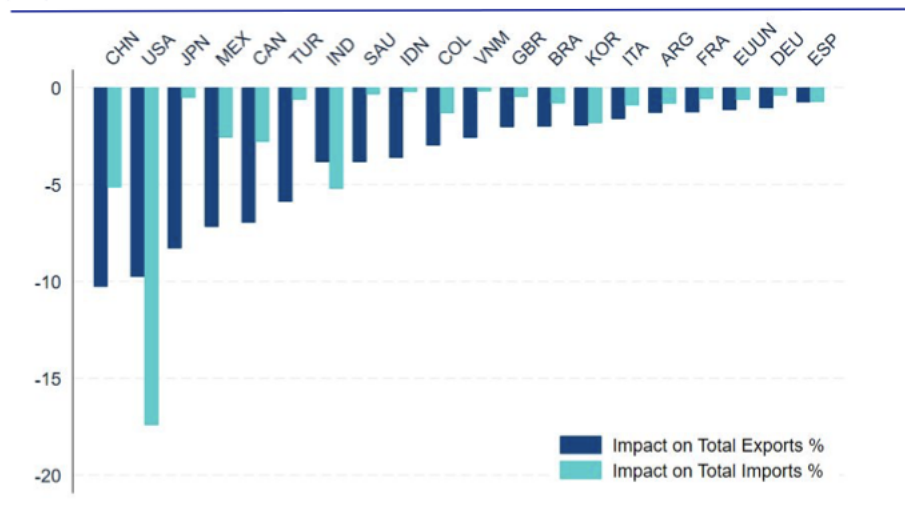
Source: BBVA Research, *The impact of trade tariffs on the global economy*, June 2025.

Note: The estimated negative impact of tariffs across countries. Countries are reported on the horizontal axis (x-axis), while the vertical axis (y-axis) measures the magnitude of the tariff impact (percentage). For each country, the dark blue bar indicates the impact on total exports, whereas the light blue bar indicates the impact on total imports.

Data refer to the *current scenario* and were obtained through the *bilateral panel model* applied to global trade flows. The simulation shows the cumulative impact of tariffs on total nominal exports and imports in the first year following their introduction (2026). The findings highlight a marked contraction in trade flows, particularly among North American countries, with the United States among the most affected economies due to the combined effect of domestic tariffs and retaliatory measures taken by trading partners like China and Canada.

Figure 18 - Reference scenario simulation

REFERENCE SIMULATION: CUMULATIVE IMPACT ON TOTAL NOMINAL EXPORTS AND IMPORTS IN THE FIRST YEAR AFTER THE ADOPTION OF TARIFFS (2026)
(PP)

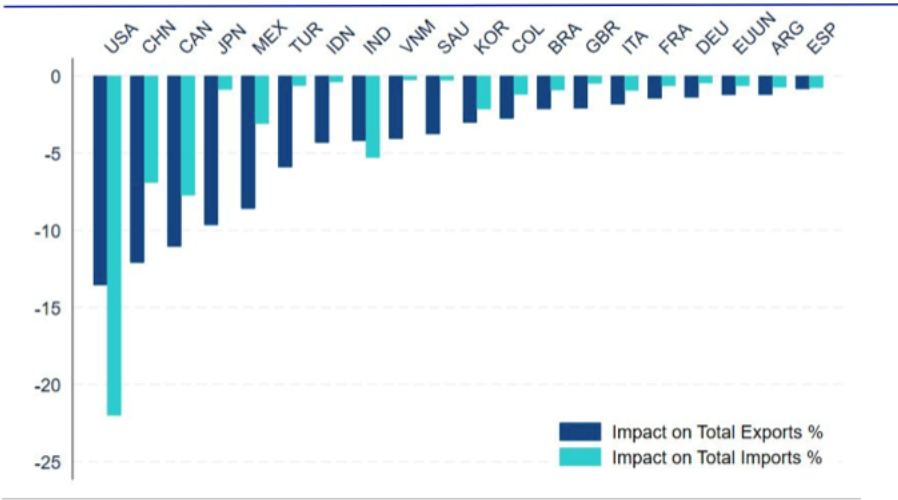


Source: BBVA Research, *The impact of trade tariffs on the global economy*, June 2025.

Note: The estimated negative impact of tariffs across countries. Countries are reported on the horizontal axis (x-axis), while the vertical axis (y-axis) measures the magnitude of the tariff impact (percentage). For each country, the dark blue bar indicates the impact on total exports, whereas the light blue bar indicates the impact on total imports. Data refer to the *reference scenario* and were obtained through the *bilateral panel model* applied to global trade flows. The simulation shows the cumulative impact of tariffs on total nominal exports and imports in the first year following their introduction (2026). The results show a significant reduction in trade, with imports generally contracting more sharply than exports in the short run, especially in the case of the United States.

Figure 19 - Alternative scenario simulation

**ALTERNATIVE SIMULATION: CUMULATIVE IMPACT ON
TOTAL NOMINAL EXPORTS AND IMPORTS IN THE FIRST
YEAR AFTER THE ADOPTION OF TARIFFS (2026)
(PP)**

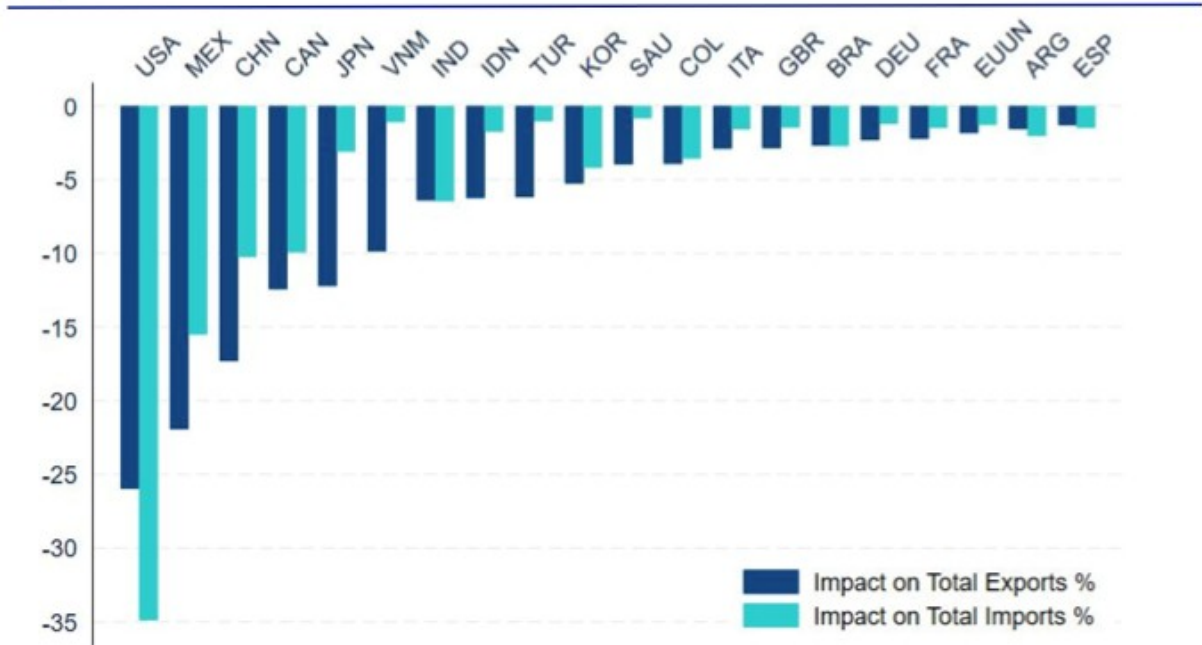


Source: BBVA Research, *The impact of trade tariffs on the global economy*, June 2025.

Note: The estimated negative impact of tariffs across countries. Countries are reported on the horizontal axis (x-axis), while the vertical axis (y-axis) measures the magnitude of the tariff impact (percentage). For each country, the dark blue bar indicates the impact on total exports, whereas the light blue bar indicates the impact on total imports. Data refer to the *alternative scenario* and were obtained through the *bilateral panel model* applied to global trade flows. The simulation shows the cumulative impact of tariffs on total nominal exports and imports in the first year following their introduction (2026). Compared to the *reference scenario*, a more marked contraction in trade flows is observed, consistent with an environment characterized by greater tariff restrictions.

Figure 20 - Extreme scenario simulation

**EXTREME SIMULATION: CUMULATIVE IMPACT ON TOTAL NOMINAL EXPORTS AND IMPORTS IN THE FIRST YEAR AFTER THE ADOPTION OF TARIFFS (2026)
(PP)**



Source: BBVA Research, *The impact of trade tariffs on the global economy*, June 2025.

Note: The estimated negative impact of tariffs across countries. Countries are reported on the horizontal axis (x-axis), while the vertical axis (y-axis) measures the magnitude of the tariff impact (percentage). For each country, the dark blue bar indicates the impact on total exports, whereas the light blue bar indicates the impact on total imports. Data refer to the *extreme scenario* and were obtained through the *bilateral panel model* applied to global trade flows. The simulation shows the cumulative impact of tariffs on total nominal exports and imports in the first year following their introduction (2026). The findings highlight a sharp contraction in international trade, suggesting that any short-term trade benefits for the United States would be largely offset by retaliatory measures taken by trading partners.

Figure 21 - Global GDP growth is projected to moderate next year and recover only slowly

	Average 2013-2019	2024	2025	2026	2027	2025 Q4	2026 Q4	2027 Q4
		Per cent						
Real GDP growth¹								
World ²	3.4	3.3	3.2	2.9	3.1	3.0	3.0	3.1
G20 ²	3.5	3.4	3.2	2.9	3.1	2.9	3.0	3.2
OECD ²	2.3	1.7	1.7	1.7	1.8	1.5	1.8	1.8
United States	2.5	2.8	2.0	1.7	1.9	1.8	1.6	1.9
Euro area	1.9	0.8	1.3	1.2	1.4	1.0	1.5	1.4
Japan	0.8	-0.2	1.3	0.9	0.9	0.5	1.3	0.7
Non-OECD ²	4.4	4.5	4.4	3.9	4.0	4.1	3.9	4.1
China	6.8	5.0	5.0	4.4	4.3	4.7	4.3	4.3
India ³	6.8	6.5	6.7	6.2	6.4			
Brazil	-0.4	3.4	2.4	1.7	2.2			
OECD unemployment rate⁴	6.5	4.9	5.0	5.0	4.9	5.0	5.0	4.9
Inflation¹								
G20 ^{2,5}	3.0	6.3	3.4	2.8	2.5	2.9	2.6	2.4
OECD ⁶	1.6	5.0	4.2	3.5	2.8	4.2	3.1	2.6
United States ⁷	1.3	2.6	2.7	3.0	2.3	3.0	2.9	2.1
Euro area ⁸	0.9	2.4	2.1	1.9	2.0	2.0	1.9	2.0
Japan ⁹	0.9	2.7	3.2	2.2	2.1	2.7	2.2	2.1
OECD fiscal balance¹⁰	-3.1	-4.7	-4.5	-4.6	-4.6			
World real trade growth¹	3.3	3.9	4.2	2.3	2.8	3.3	2.7	2.9

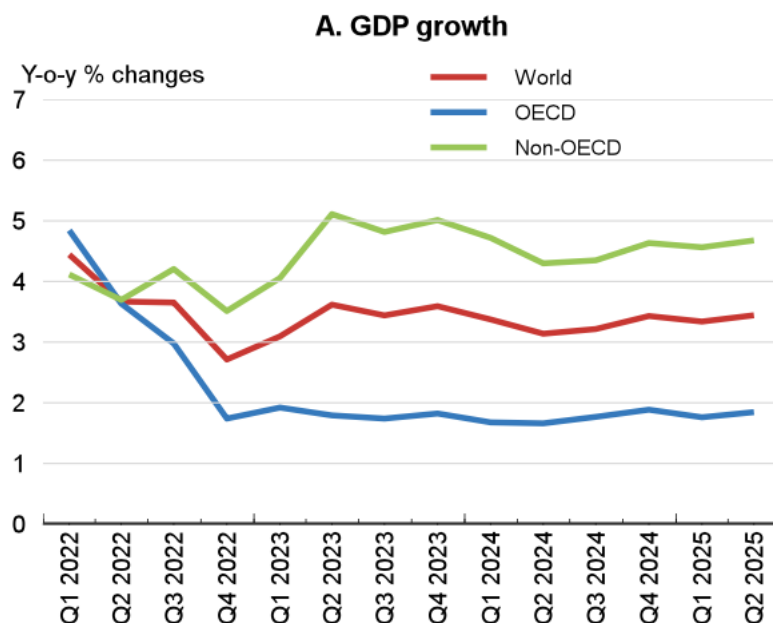
1. Per cent; last three columns show the change over a year earlier.
2. Moving nominal GDP weights, using purchasing power parities.
3. Fiscal year.
4. Per cent of labour force.
5. Headline inflation.
6. Moving nominal private consumption weights, using purchasing power parities.
7. Personal consumption expenditures deflator.
8. Harmonised consumer price index.
9. National consumer price index.
10. Per cent of GDP.

Source: OECD, *Economic Outlook, Resilient Growth but with Increasing Fragilities*, OECD, Volume 2025/2, No. 118, in Publications, December 2025, Paris.

OECD Economic Outlook 118 database.

Note: OECD projections for a range of key macroeconomics indicators, including real GDP growth, the OECD unemployment rate, inflation, the OECD fiscal balance, and the world real trade growth. The analysis covers the global economy, OECD economies, the Euro area, the United States, and several other major economies. The first column reports the average values for the period 2013-2019, followed by annual estimates for 2024, 2025, 2026, and 2027, and fourth quarter estimates for 2025, 2026 and 2027. Overall, global GDP growth is expected to moderate in the coming years, declining from 3.3% in 2024 to 2.9% in 2026, before recovering slightly to 3.1% in 2027.

Figure 22 - Global growth has remained resilient



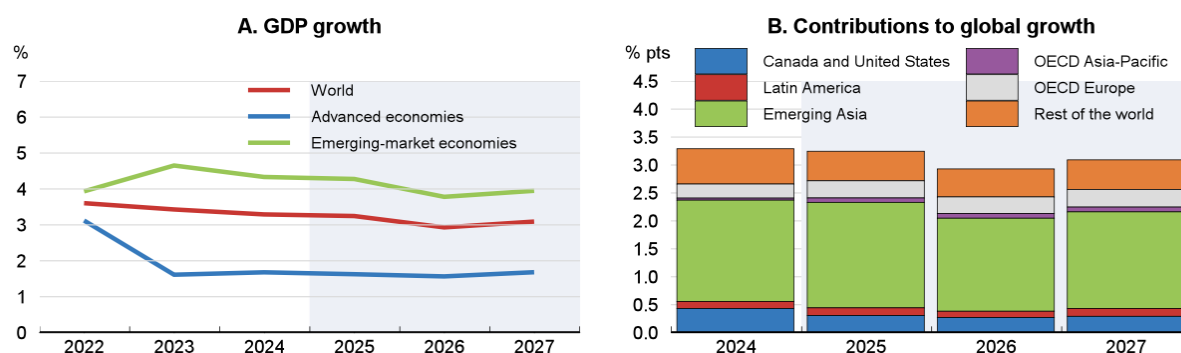
Source: OECD, *Economic Outlook, Resilient Growth but with Increasing Fragilities*, OECD, Volume 2025/2, No. 118, in Publications, December 2025, Paris.

OECD Economic Outlook 118 database; S&P Global; and OECD calculations.

Note:

In Panel A year-on-year GDP growth rates from Q1 2022 to Q2 2025. The horizontal axis (x-axis) reports the quarters, while the vertical axis (y-axis) shows GDP growth expressed as annual percentage changes. Three lines are represented: the red line represents world GDP growth, the blue line represents GDP growth in OECD economies, and the green line represents GDP growth in non-OECD economies. The aggregates are calculated using moving Purchasing Power Parity (PPP) weights. The figure highlights differences in growth dynamics across the three groups over the period considered, with non-OECD economies generally recording stronger growth rates than OECD economies.

Figure 23 - Global growth is projected to weaken before recovering gradually



Source: OECD, *Economic Outlook, Resilient Growth but with Increasing Fragilities*, OECD, Volume 2025/2, No. 118, in Publications, December 2025, Paris.

OECD Economic Outlook 118 database; OECD Economic Outlook 117 database; OECD Interim Economic Outlook 118 database; and OECD calculations. (to be continued in the following page)

Note:

In Panel A GDP growth rates for the world, advanced economies and emerging-market economies between 2022 and 2027. The horizontal axis (x-axis) reports the years, while the vertical axis (y-axis) shows GDP growth expressed as a percentage. Three lines are displayed: the red line represents world GDP growth, the blue line represent advanced economies, and the green lines represents emerging-market economies.

“Advanced economies” include the OECD member countries except Chile, Colombia, Costa Rica, Mexico, and Türkiye, plus Croatia.

“Emerging-market economies” comprises all other economies.

In Panel B the contributions of different regions to global economic growth from 2024 to 2027. The horizontal axis (x-axis) reports the years, while the vertical axis (y-axis) measures contributions to global growth in percentage points. The stacked bars represent the contributions of Canada and the United States (blue), Latin America (red), Emerging Asia (green), OECD Asia-Pacific (purple), OECD Europe (grey) and the ROW (orange). Contributions calculated using moving PPP shares of global GDP.

Details:

“Emerging Asia” comprises China, Hong Kong (China), India, Indonesia, Malaysia, the Philippines, Singapore, Chinese Taipei, Thailand and Viet Nam. Latin America comprises Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Peru.

Figure 24 - A deteriorating policy environment inhibits growth across the globe



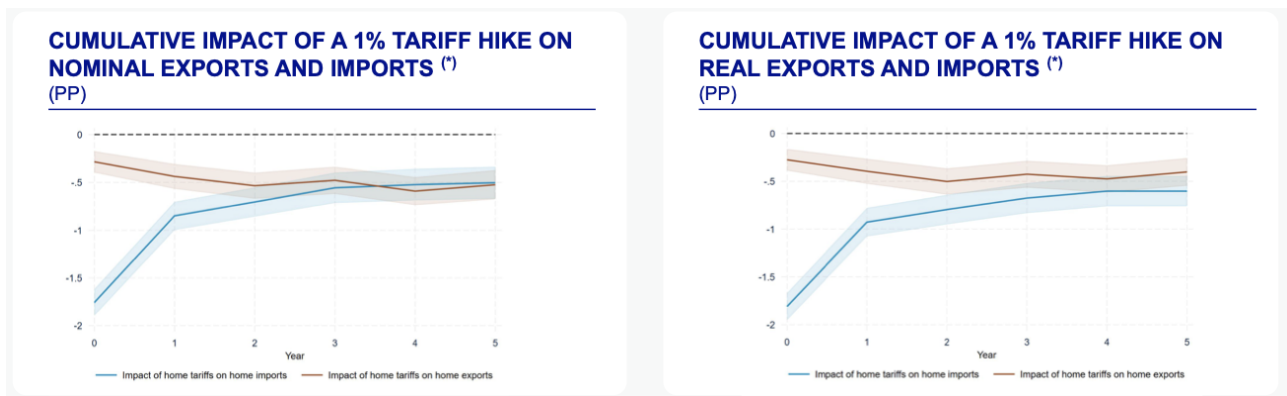
(follows from the previous page)

Source: UNCTAD, *Global Trade Update: Top trends redefining global trade in 2026*, Policy Insights, Geneva, January 2026. UNCTAD. TDR 2025. p. 5

Note: The real GDP growth rates for the world and selected economies between 2004 and 2026. The horizontal axis (x-axis) reports the years, while the vertical axis (y-axis) shows GDP growth expressed as percentage. The dashed orange line represents world GDP growth, while the blue line represents the GDP growth rate of the economy considered in each panel. Four economies are considered: the United States, the European Union, China and the Global south excluding China. The figure compares the growth performance of each economy with the world average, highlighting differences in economic dynamics and the impact of the major global shocks over the period considered.

China and the Global South record higher growth rates than the world average for most of the period, whereas the United States and the European Union generally experience more moderate growth.

Figure 25 - Simulated impact of a 1% tariff hike: impulse-response functions based on a local projections model

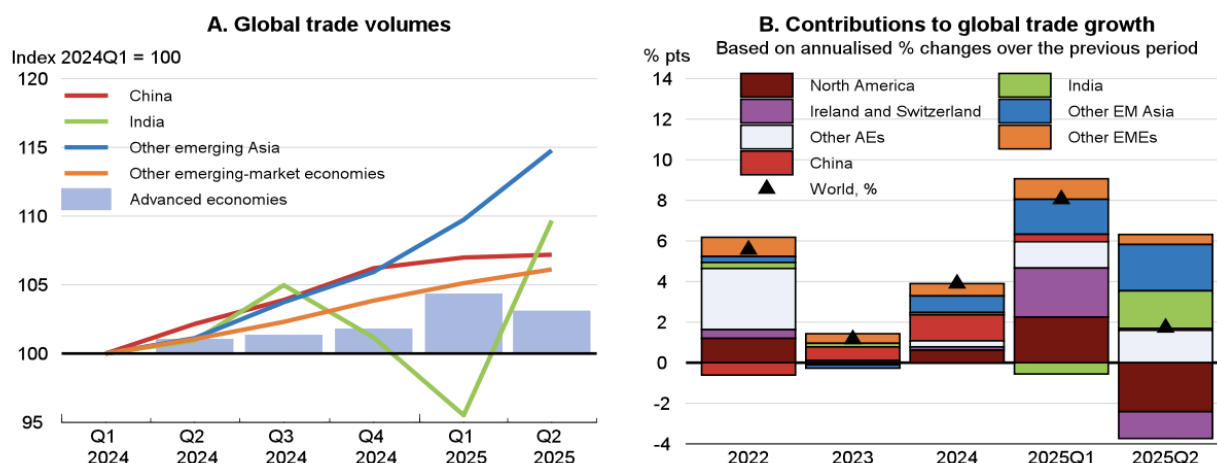


Source: BBVA Research, *The impact of trade tariffs on the global economy*, June 2025.

Note: The graphs display years on the horizontal axis (x-axis), measured on a scale from 0 to 5, and the level of impact on the vertical axis (y-axis). Two lines are represented: the blue line represents the impact of home tariffs on home imports, while the red line represents the impact of home tariffs on home exports.

Exports and imports are measured in current USD. Results represent an average of three specifications regarding fixed and random effects. Impact of foreign tariffs on home exports (imports) is equivalent to impact of home tariffs on home imports (exports).

Figure 26 - Trade growth has been resilient



Source: OECD, *Economic Outlook, Resilient Growth but with Increasing Fragilities*, OECD, Volume 2025/2, No. 118, in Publications, December 2025, Paris.

OECD Economic Outlook 118 database; and OECD calculations.

Note:

In Panel A global trade volumes from Q1 2024 to Q2 2025, with the horizontal axis (x-axis) reporting quarters and the vertical axis (y-axis) showing a trade volume index (Q1 2024=100).

The data correspond to quarterly trade in goods and services, measured as the average of exports and imports.

The figure highlights the evolution of trade volumes across major economies and regions over the period considered. The colored lines represent different country groups and regions: China (red), India (green), Other Emerging Asia (blue), Other Emerging-Market Economies (orange), and Advanced Economies (light blue bars).

Further details:

“*Advanced economies*” include OECD member countries other than Chile, Colombia, Costa Rica, Mexico, and Türkiye.

“*Other emerging Asia*” includes Hong Kong (China), Indonesia, Malaysia, the Philippines, Singapore, Chinese Taipei, Thailand and Viet Nam.

“*Other emerging market economies*” are all remaining emerging-market economies. In Panel B annual growth rates are shown for 2022-2024.

In Panel B the contributions of different regions and country groups to global trade growth. The horizontal axis reports years 2022-2024 and the first two quarters of 2025, while the vertical axis shows contributions measured in percentage points. The stacked bars represent the contribution of North America, Ireland and Switzerland, Other Emerging Asia, and Other Emerging-Market Economies. The black triangles indicate total world trade growth.

Annual growth rates are shown for 2022-2024, while quarterly growth rates are reported for 2025. The figure provides a breakdown of relative contribution of each region to overall global trade growth.

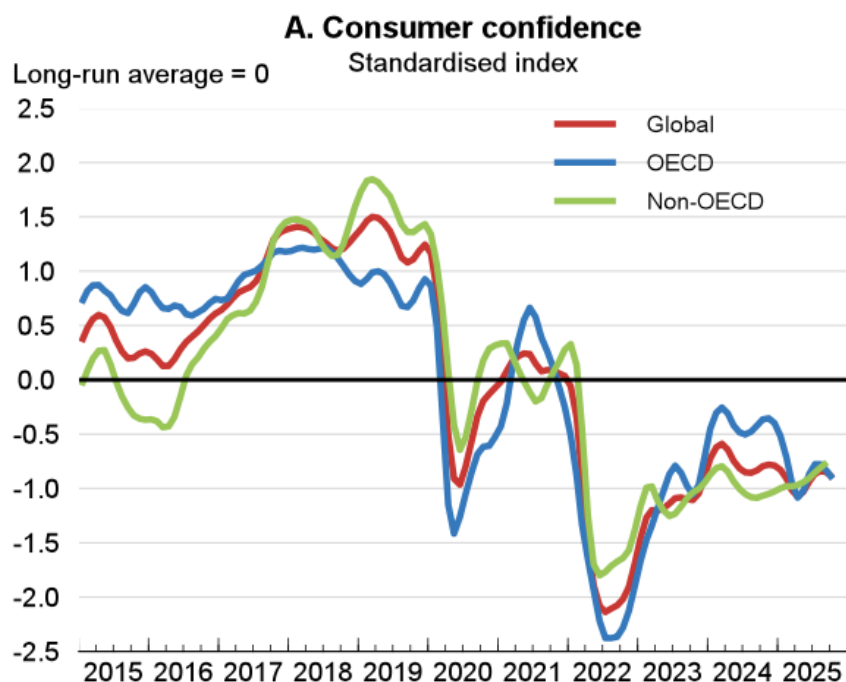
Details:

“*North America*” includes Canada, Mexico and the United States.

“*Other AEs*” are the 33 advanced economies who are OECD members excluding “*North America*”, Ireland and Switzerland.

“*Other EM Asia*” corresponds to “*Other emerging Asia*” in Panel A. “*Other EMEs*” are the remaining emerging-market economies not shown separately.

Figure 27 - Consumer sentiment remains subdued



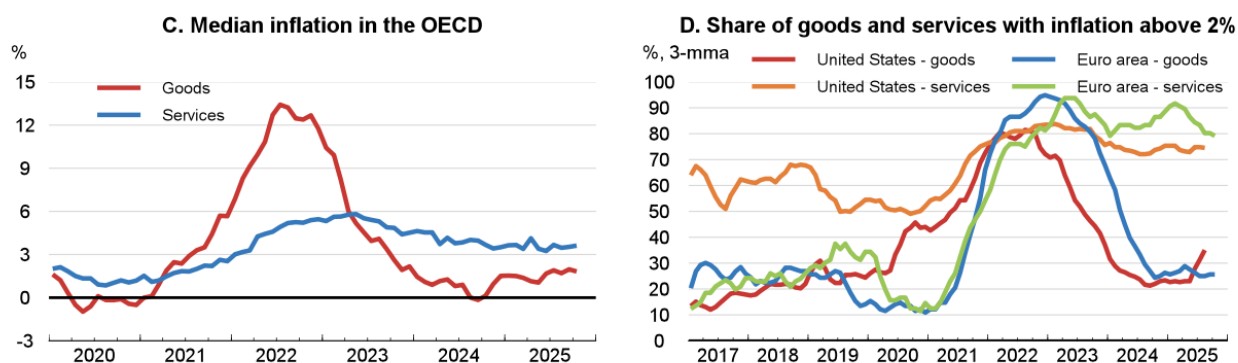
Source: OECD, *Economic Outlook, Resilient Growth but with Increasing Fragilities*, OECD, Volume 2025/2, No. 118, in Publications, December 2025, Paris.

OECD Main Economic Indicators database; LSEG; and OECD calculations.

Note:

In Panel A consumer confidence trends from 2015 to 2025. The horizontal axis (x-axis) reports the years, while the vertical axis (y-axis) shows a standardized consumer confidence index, where the long-run average is equal to zero. Three lines are displayed: the red line represents the global aggregate, the blue line represents OECD economies, and the green line represents non-OECD economies. The global, OECD and non-OECD aggregates are derived using moving PPP weights. The figure illustrates the evolution of consumer sentiment over time, highlighting periods of stronger confidence as well as significant declines, with confidence levels remaining below long-run average in recent years.

Figure 28 - Disinflation has levelled off in some economies partly due to higher goods inflation



Source: OECD, *Economic Outlook, Resilient Growth but with Increasing Fragilities*, OECD, Volume 2025/2, No. 118, in Publications, December 2025, Paris.

OECD Economic Outlook 118 database; OECD Consumer Prices database; Bureau of Economic Analysis; Eurostat; and OECD calculations.

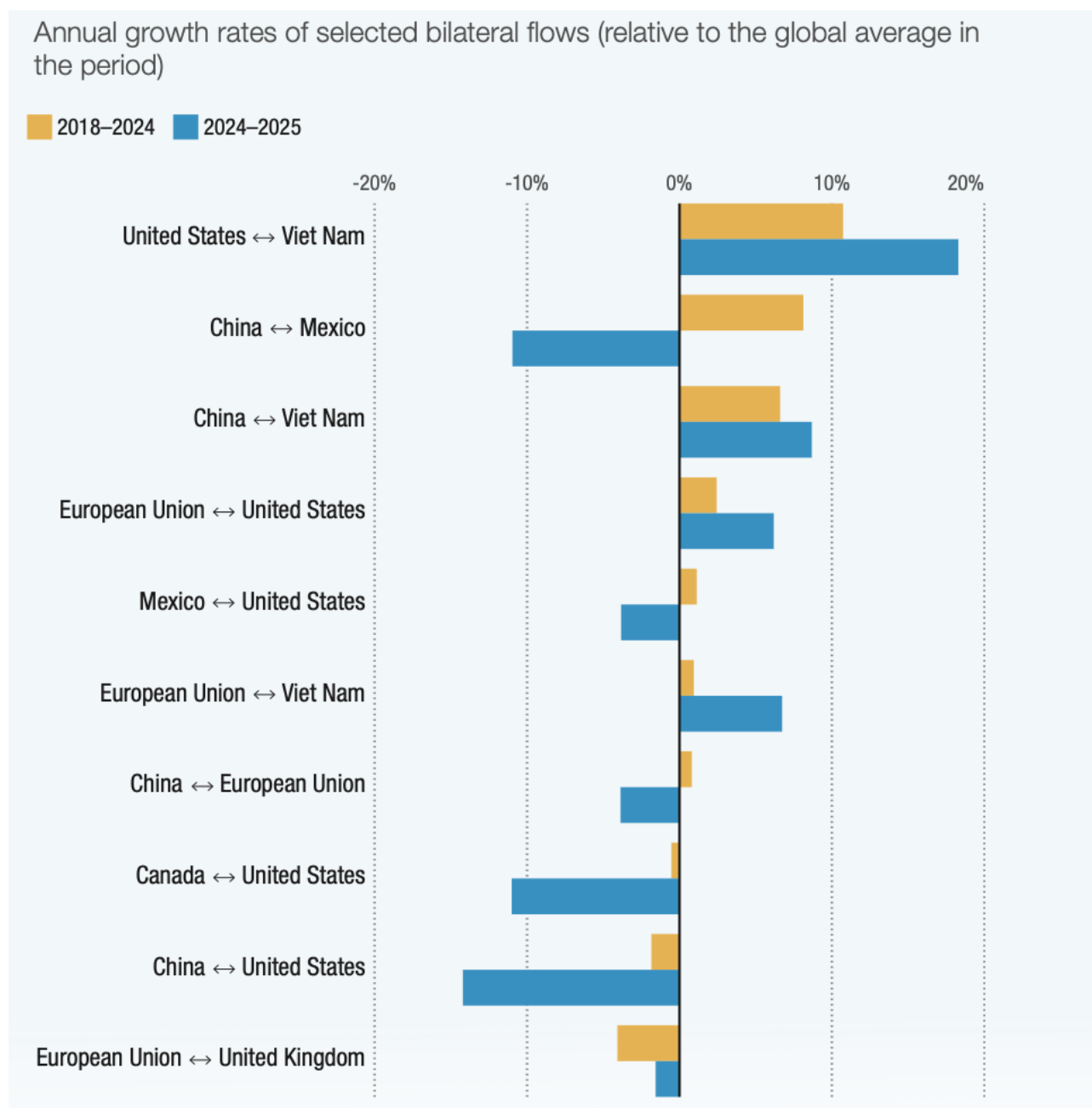
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Note:

In Panel C median inflation rates in OECD economies between 2020 and 2025. The horizontal axis (x-axis) reports the years, while the vertical axis (y-axis) shows inflation rates expressed as percentages. Two lines are displayed: the red line represents goods inflation, while the blue line represents services inflation. The figure illustrates the different inflation dynamics across goods and services, highlighting the sharp increase in goods inflation during the period 2021-2022, followed by a significant decline, whereas services inflation remained relatively stable throughout the period considered, fluctuating between 3% and 6%.

In Panel D the share of goods and services with inflation above 2% in the United States and the Euro area between 2017 and 2025. The horizontal axis (x-axis) reports the years considered, while the vertical axis (y-axis) indicates the percentage share of items with inflation exceeding 2% (3-month moving average). Four lines are represented: United States goods (red), United States services (orange), Euro area goods (blue), and Euro area services (green). The figure highlights the broadening of inflation across both economies during the period 2021-2023; then, while services inflation remains persistently high in both economies, goods inflation declines significantly after the previous peak.

Figure 29 - Uneven trade growth in GVC-related bilateral flows



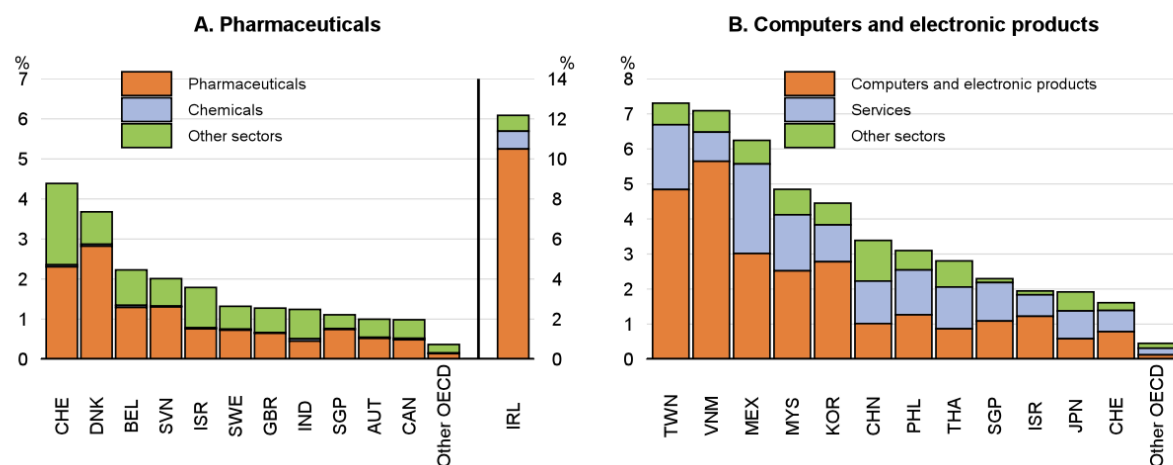
Source: UNCTAD, *Global Trade Update: Top trends redefining global trade in 2026*, Policy Insights, Geneva, January 2026.

UNCTAD calculation based on UNCTADSTAT and national statistics.

Note: The annual growth rates of selected bilateral trade flows related to GVCs, relative to the global average growth rate. The horizontal axis (x-axis) shows the growth differential, expressed as a percentage, while the vertical axis (y-axis) reports the main bilateral trade relationships. Two bars are displayed for each trade flow: the yellow one refers to the period 2018–2024, whereas the blue one refers to the period 2024–2025. Positive values indicate trade growth above the global average, while negative values indicate growth below the global average. The figure highlights the uneven evolution of GVC-related trade flows across major economies.

Figure 30 – Tariffs on pharmaceutical products or semiconductors would hit output in many countries

Share of domestic value added in exports dependent on US demand



Source: OECD, *Economic Outlook, Resilient Growth but with Increasing Fragilities*, OECD, Volume 2025/2, No. 118, in Publications, December 2025, Paris.

OECD Trade in Value Added (TiVA) 2025 edition; OECD ICIO 2025 edition; and OECD calculations.

Note:

In Panel A the share of domestic value added in exports that depends on U.S. demand for pharmaceutical products. The graph is not measuring exports volume to the U.S. market, but the economic exposure and dependence of foreign exports to U.S. demand. The horizontal axis (x-axis) reports the countries considered, while the vertical axis (y-axis) indicates the percentage share of domestic value added in total exports. The stacked bars distinguish between pharmaceuticals (orange), chemicals (grey) and other sectors (green). The figure includes both direct and indirect trade linkages associated with U.S. intermediate and final consumption of pharmaceutical products. Ireland is displayed on a separate scale (right-hand scale) due to its higher level of dependence.

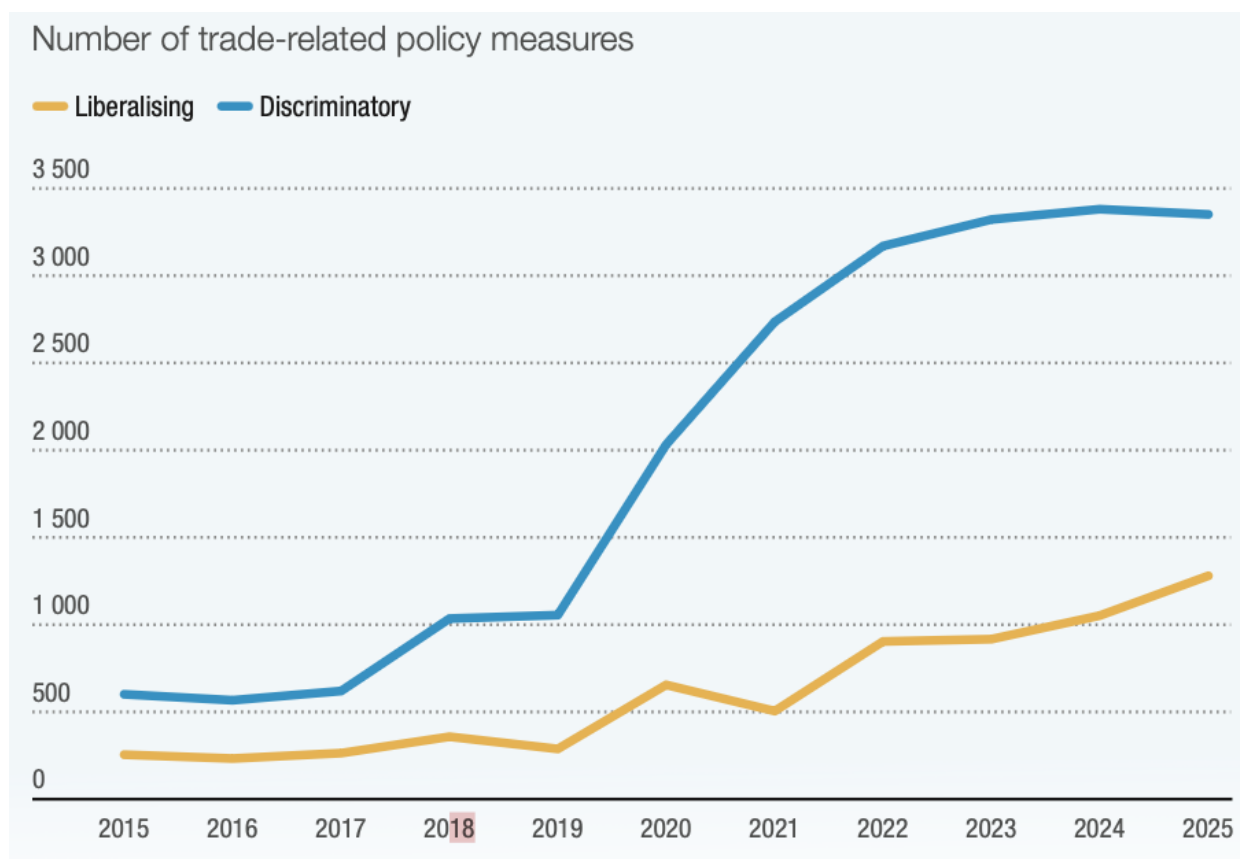
Details:

“*Pharmaceuticals*” is the basic pharmaceuticals and preparations sector.

“*Chemicals*” is the chemicals and chemical products sector.

In Panel B the share of domestic value added in exports that depends on U.S. demand for computers and electronic products. The horizontal axis (x-axis) reports the countries considered, while the vertical axis (y-axis) shows the percentage share of domestic value added in total exports. The stacked bars distinguish between computers and electronic products (orange), services (grey), and other sectors (green). The measures includes both direct and indirect trade linkages related to U.S. intermediate and final consumption. The computers and electronic products category include semi-conductor related products, such as the design and use of integrated circuits. The figure illustrates the degree to which selected economies rely on U.S. demand in technology sector.

Figure 31 - The use of trade-restricting and trade-distorting measures continues to rise

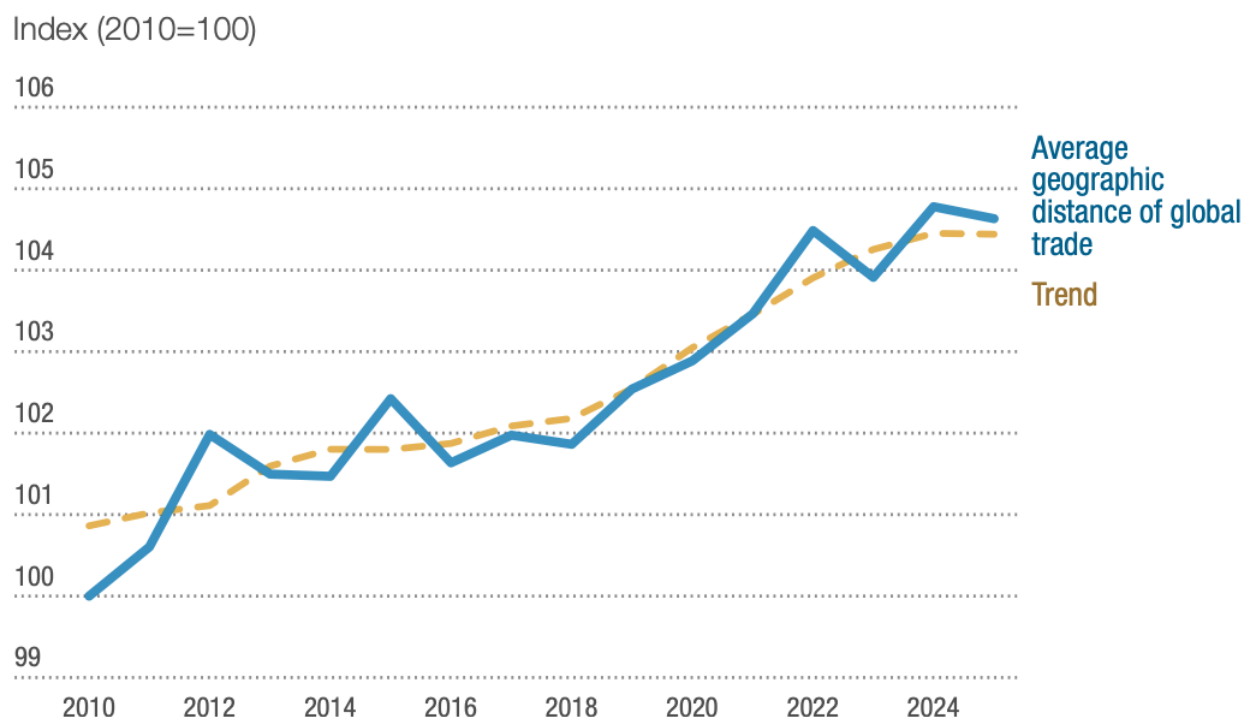


Source: UNCTAD, *Global Trade Update: Top trends redefining global trade in 2026*, Policy Insights, Geneva, January 2026.

UNCTAD. TDR 2025. p. 5

Note: The number of trade-related policy measures adopted between 2015 and 2025. The horizontal axis (x-axis) reports the years, while the vertical axis (y-axis) shows the total number of measures. Two lines are displayed: the yellow one represents liberalizing measures, whereas the blue one represents discriminatory measures. The figure highlights a substantial increase in trade-related interventions over the period considered, particularly discriminatory measures, which rose sharply after 2019 and still remain significantly higher than liberalizing measures.

Figure 32 – Far-shoring dominated the past decades but reversed in 2025



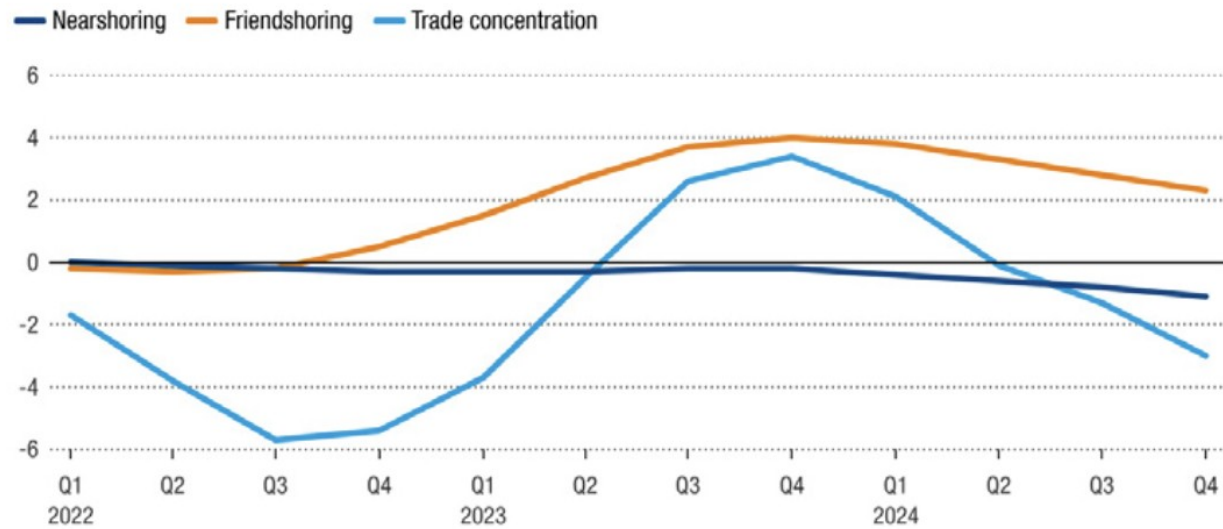
Source: UNCTAD, *Key statistics and trends in international trade 2025. Geoeconomic forces influence the dynamics of international trade*, technical and statistical report, Geneva, 2025.

UNCTAD calculations based on UNCTAD stat data. Geodesic distance is from CEPII.

Note: The evolution of the average geographic distance of global trade between 2010 and 2025, using an index where 2010=100. The horizontal axis (x-axis) reports the years, while the vertical axis (y-axis) presents the index values. Two lines are displayed: the blue line represents the average geographic distance of global trade, measured as the trade-weighted average distance in km, while the dashed yellow line represents the trend calculated using a centered 5-year moving average. Data do not include services. The figure illustrates the long-term evolution of trade distances, showing a general increase in the average geographic distance of global trade over the period considered.

Figure 33 - Friendshoring, nearshoring and trade concentration eased during 2024

Annual change relative to 2021 (per cent)



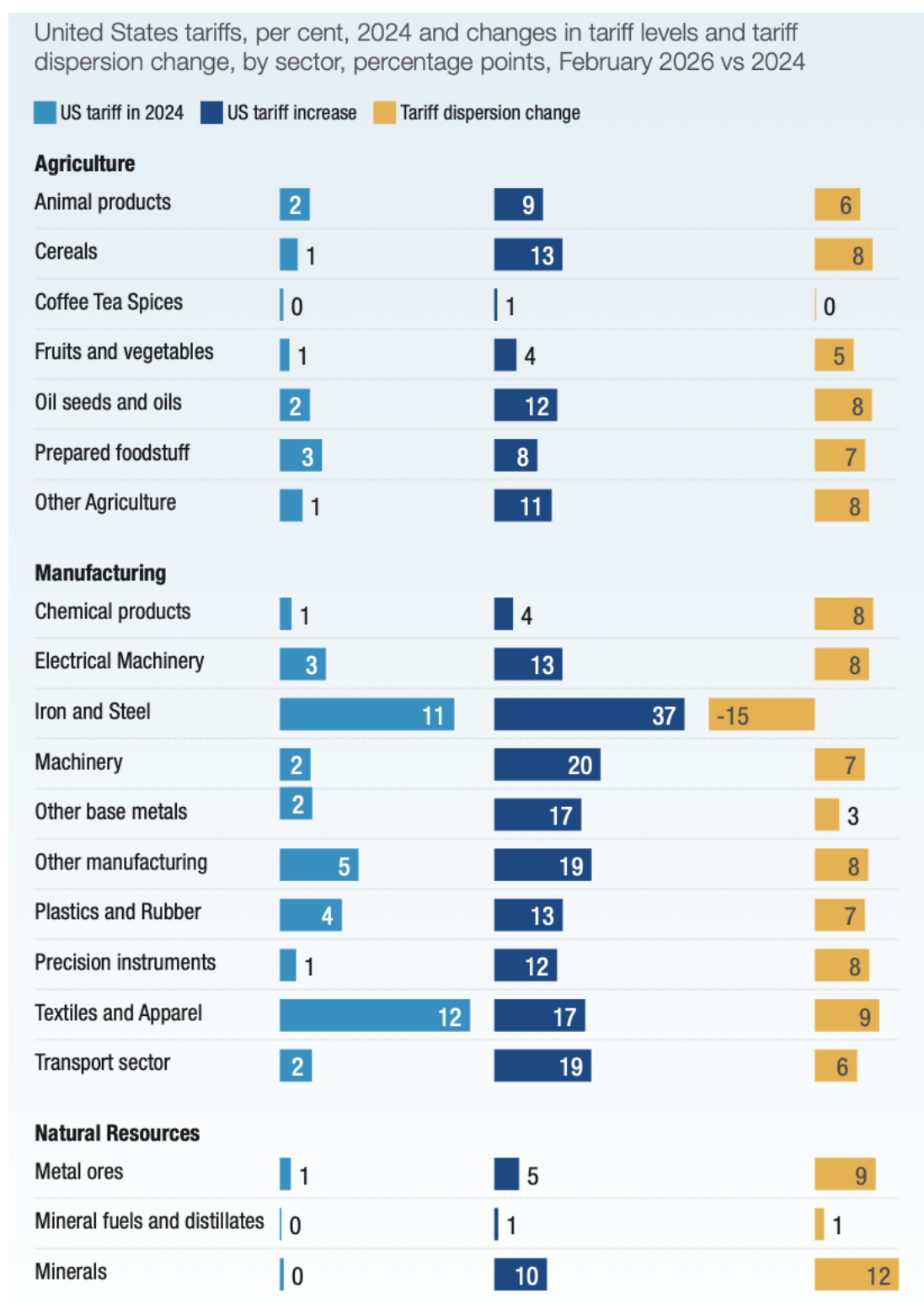
Source: UNCTAD, *Global Trade Updated. The role of tariffs in international trade*, Geneva, March 2025.
UNCTAD estimates based on national statistics.

Note: The annual change, relative to 2021 levels, in three indicators of global trade integration between 2022 and 2024. The horizontal axis (x-axis) reports quarters, while the vertical axis (y-axis) shows percentage changes. Three lines are displayed: the dark blue line represents nearshoring, the orange line represents friendshoring, and the light blue represents trade concentration.

Nearshoring is measured as reverse of trade-weighted average distance between trading partners. Friendshoring is calculated as trade-weighted political proximity as measured by the United Nations voting patterns. Trade concentration is calculated based on the Herfindahl concentration index.

The decline in these indicators during 2024 suggests that global trade became less concentrated and less oriented towards geographically close or politically aligned partners.

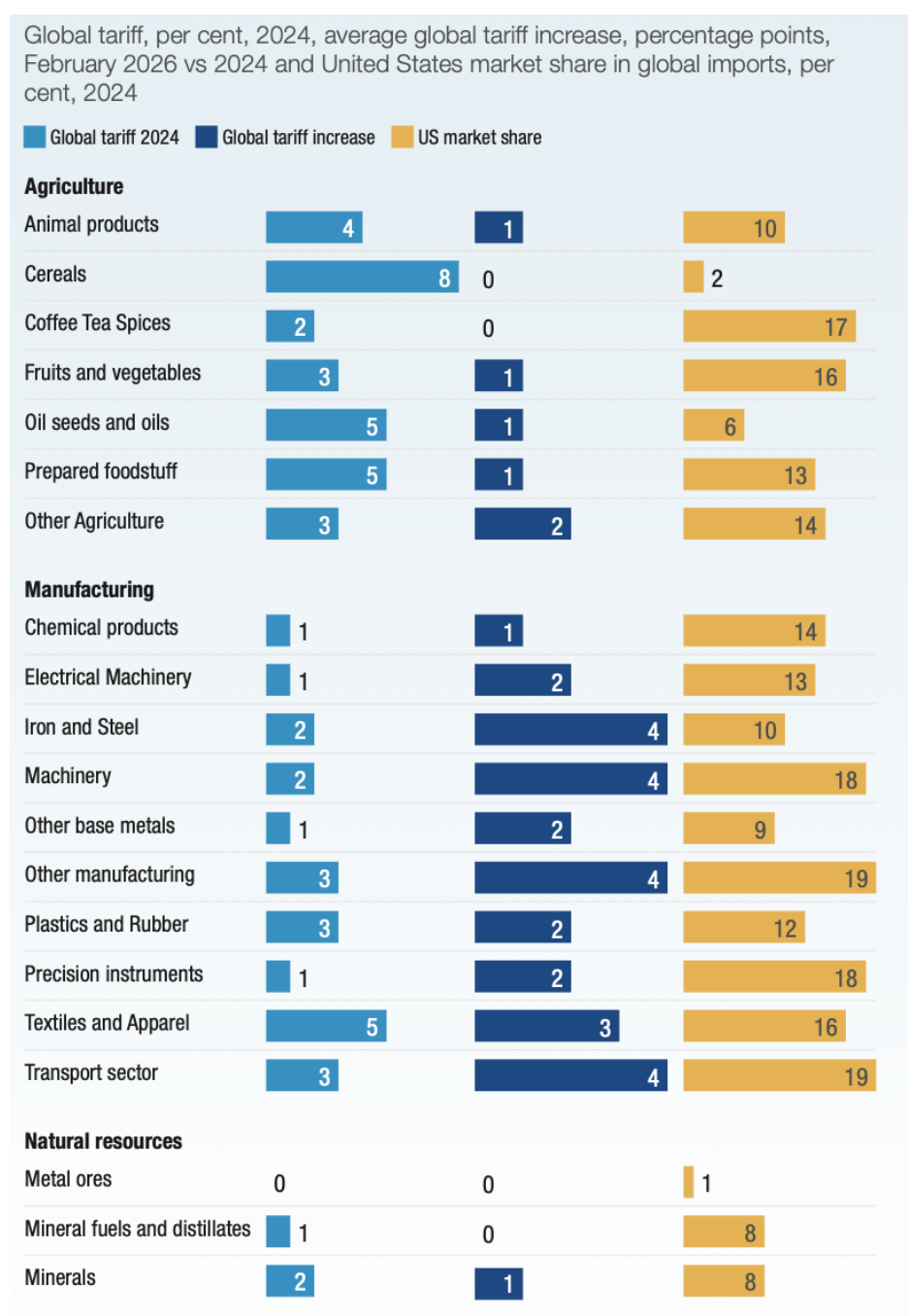
Figure 34 – Rising tariffs have uneven magnitude and spread across sectors



Source: UNCTAD, *Global Trade Update: Who wins when trade policies shift? New rules are reshaping global export competition and determining which countries gain ground.*, Policy Insights, Geneva, F.
UNCTAD estimates based on United States national statistics.
(to be continued in the following page)

Note: The U.S. tariff levels (%) by sector in 2024 and the corresponding tariff increases recorded by February 2026. The sectors are grouped into agriculture, manufacturing, and natural resources. Three indicators are reported for each subsector: the light blue bars represent U.S. tariff levels in 2024, the dark blue bars represent the increase in tariff levels between February 2024 and February 2026, and the yellow bars show changes in tariff dispersion. Tariff changes are trade-weighted using 2024 as the base year, while tariff dispersion is measured through the interquartile range (IQR), the difference between the 75th percentile and 25th percentile. IQR of a specific sector is the simple average of the IQRs of tariffs faced by economies at HS 6-digit level. The figure highlights the uneven distribution of tariff increases across sectors and subsectors, with particularly large increases observed in manufacturing industries such as iron and steel, machinery, transport equipment and textiles and apparel.

Figure 35 - Tariff shifts have uneven global spillovers across sectors

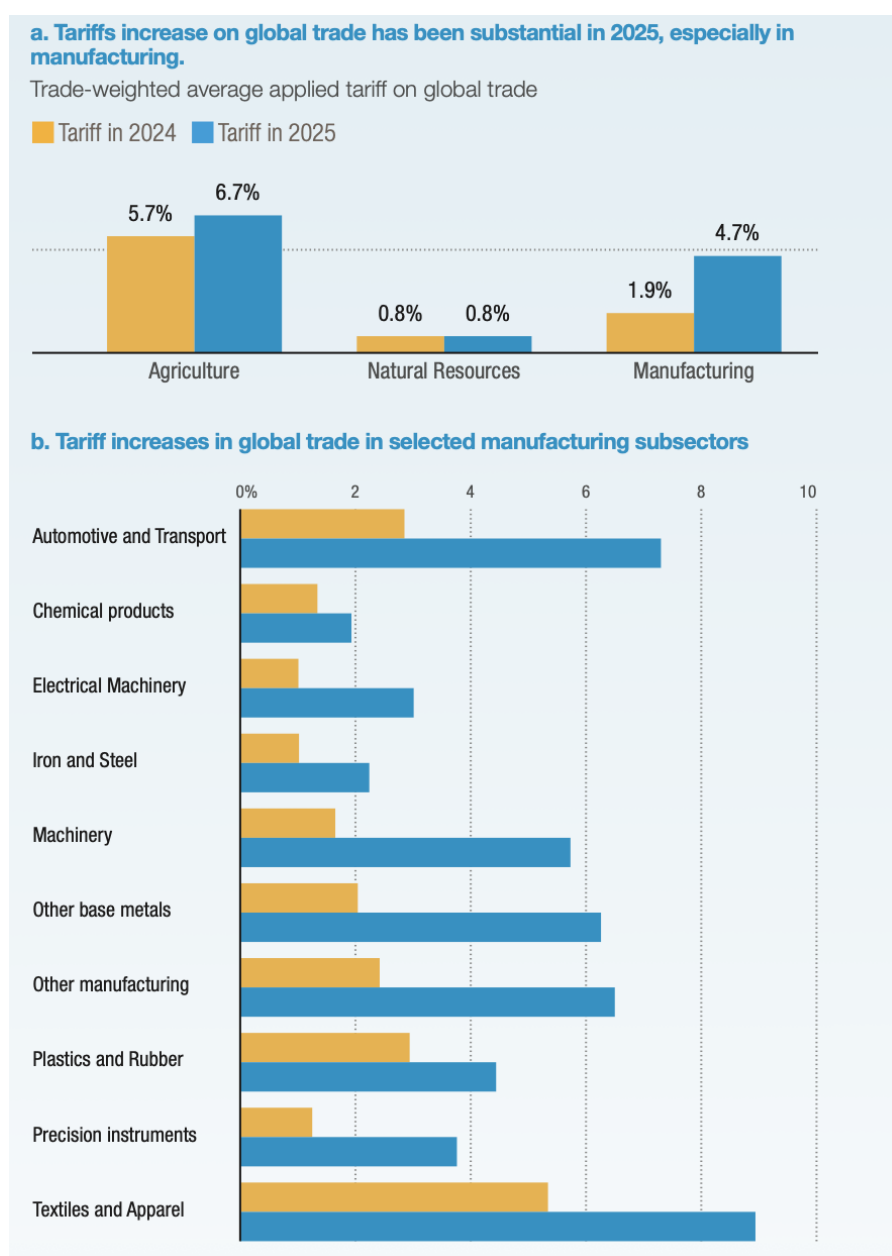


Source: UNCTAD, *Global Trade Update: Who wins when trade policies shift? New rules are reshaping global export competition and determining which countries gain ground.*, Policy Insights, Geneva, February 2026. (to be continued)

UNCTAD estimates based on United States national statistics and UNCTAD TRAINS database.

Note: The global spillover effects of tariff changes across sectors. The sectors are grouped into agriculture, manufacturing and natural resources. For each subsector, three indicators are reported: the light blue bar represent global tariff levels in 2024, the dark blue bar represent the average increase in global tariffs between February 2024 and February 2026, and the yellow ones indicate the share of the United States in global import 2024. The increase in global tariffs is calculated as the average change in tariffs on global trade resulting exclusively from United States tariff changes.

Figure 36 - Tariffs on the rise: increased protectionism may trigger greater policy uncertainty



Source: UNCTAD, *Global Trade Update: Top trends redefining global trade in 2026*, Policy Insights, Geneva, January 2026.

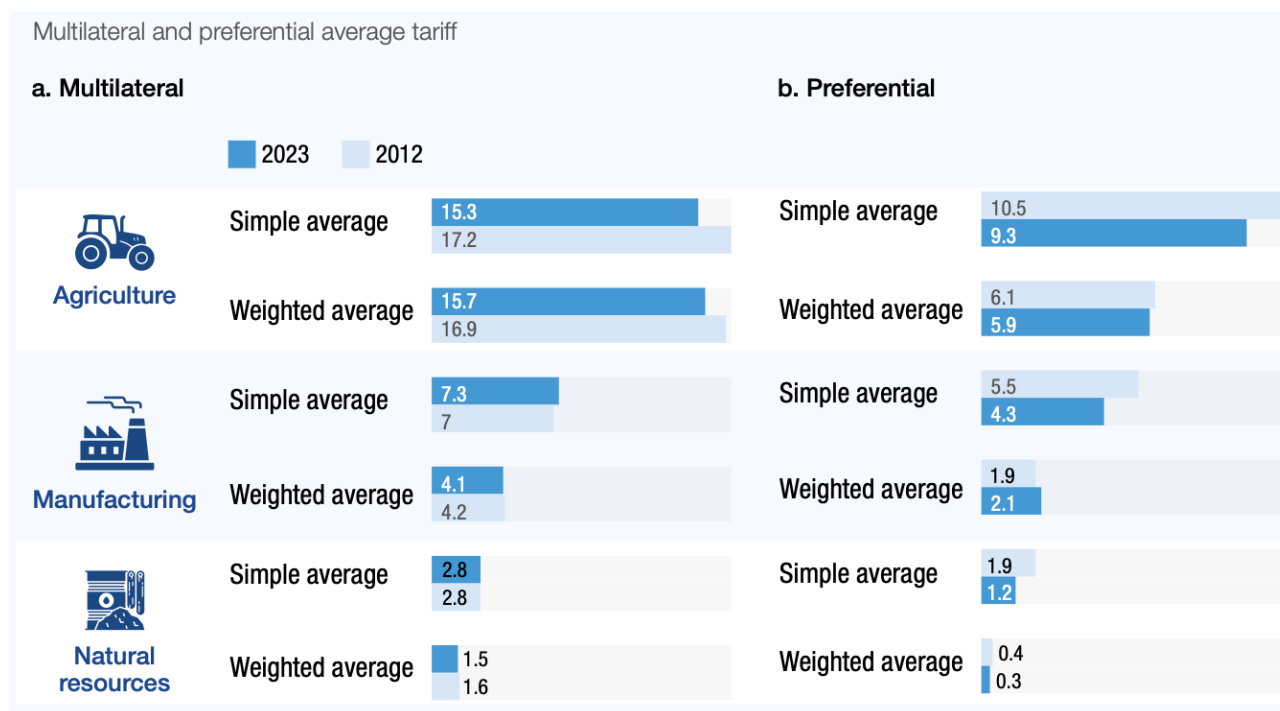
Note:

In Panel A, trade weighted average applied tariff on global trade in 2024 and 2025. The vertical axis (y-axis) shows tariff rates expressed as percentages, while the horizontal axis (x-axis) reports three sectors: agriculture, natural resources and manufacturing. For each sector, the yellow bars represent tariff levels in 2024, whereas the blue bars represent tariff levels in 2025. *(to be continued in the following page)*

The figure shows that tariff increases in 2025 were particularly pronounced in the manufacturing sector, a sector that plays a crucial role in GVCs. Despite the increase in manufacturing tariffs in 2025, the agricultural sector continued to record the highest overall tariff levels among the sectors considered.

In Panel B the trade-weighted average applied tariffs in selected manufacturing subsectors for 2024 and 2025. The horizontal axis (x-axis) reports tariff rates expressed as percentages, while the vertical axis (y-axis) lists manufacturing subsectors considered. Yellow bars represent tariff levels in 2024, whereas blue bars represent tariff levels in 2025.

Figure 37 - Regional and global trade deals have helped reduce tariffs, but not all sectors benefit equally



Source: UNCTAD, *Global Trade Updated. The role of tariffs in international trade*, Geneva, March 2025.

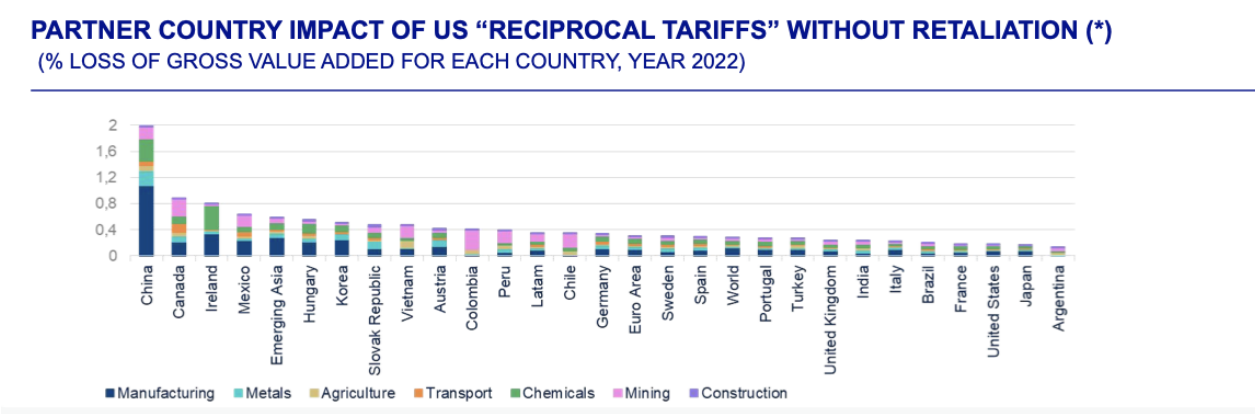
UNCTAD secretariat calculations based on COMTRADE data and UNCTAD TRAINS data.

Note:

In Panel A (Multilateral tariffs) the average multilateral tariff rates in 2012 and 2023 across three sectors: agriculture, manufacturing and natural resources. For each sector, both simple average tariffs and trade-weighted average tariffs are reported. The light blue bars represent tariff levels in 2012, while the dark blue bars represent tariff levels in 2023. The figure shows that multilateral tariffs generally declined over the period considered, although agricultural sector continues to record higher tariff levels than manufacturing and natural resources till today.

In Panel B average preferential tariff rates in 2012 and 2023 for agriculture, manufacturing and natural resources. For each sector, both simple average tariffs and trade-weighted average tariffs are reported. The light blue bars represent tariff levels in 2012, while the dark blue bars represent tariff levels in 2023. The figure indicates that preferential trade agreements contributed to lower tariff levels across sectors. Agriculture remains the most protected sector, while natural resources continue to face the lowest tariff rates till today.

Figure 38 - Reference scenario: sectors

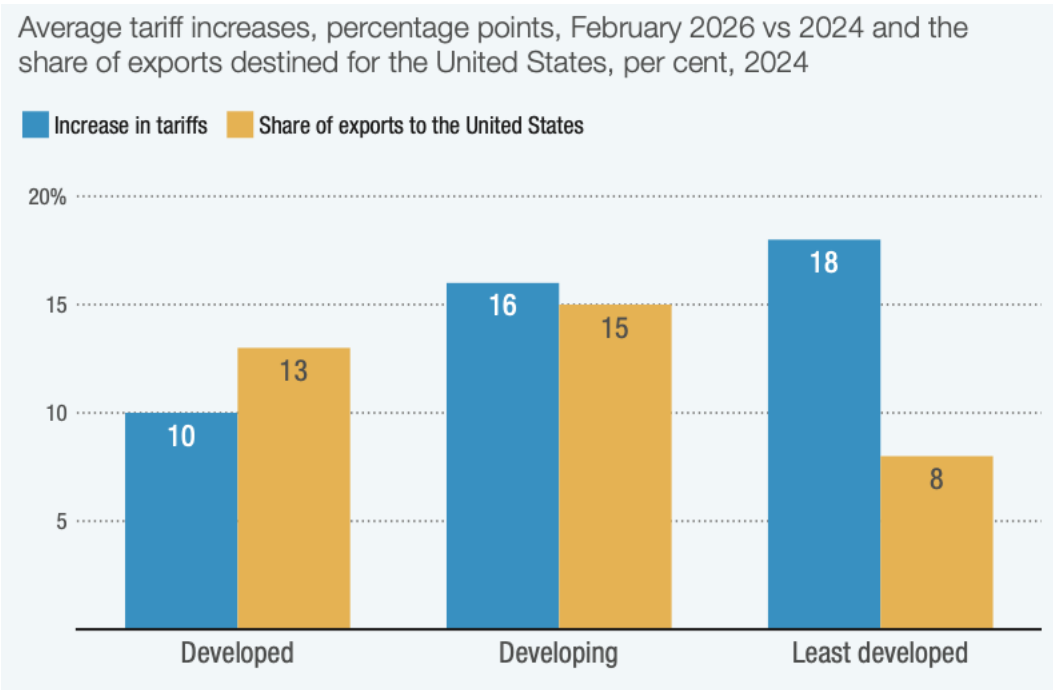


Source: BBVA Research, *The impact of trade tariffs on the global economy*, June 2025.

Note: The estimated impact of U.S. reciprocal tariffs on partner countries in the absence of retaliation. The horizontal axis (x-axis) reports the countries considered, while the vertical axis (y-axis) shows the percentage loss of GVA based on 2022 data. The stacked bars provide a sectorial decomposition of the total impact, distinguishing between manufacturing, metals, agriculture, transport, chemicals, mining and construction. The figure highlights how the effect of the U.S. tariffs differs across countries and sectors.

According to this scenario, tariffs are the same across all sectors with elasticity constant at 0.8.

Figure 39 - Developing and least developed economies are more exposed to tariff changes

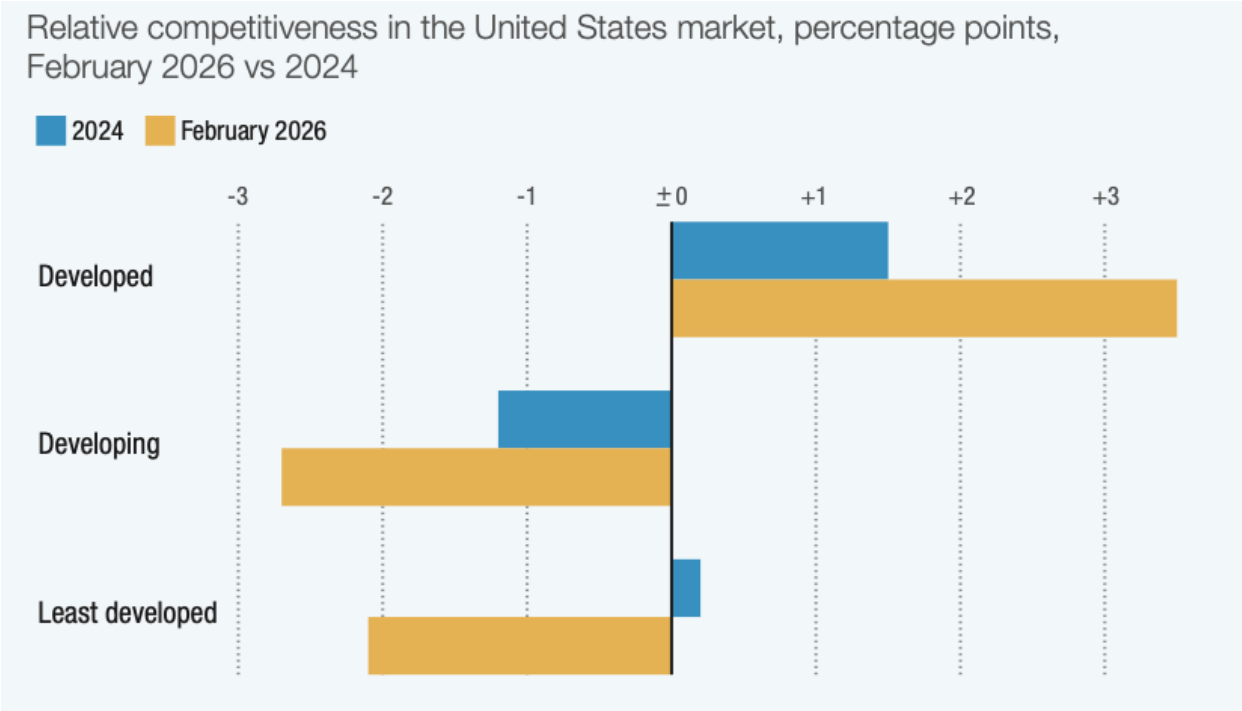


Source: UNCTAD, *Global Trade Update: Who wins when trade policies shift? New rules are reshaping global export competition and determining which countries gain ground.*, Policy Insights, Geneva, February 2026.

UNCTAD estimates based on United States national statistics and UNCTAD Comtrade.

Note: The comparison between the average tariff increases (February 2024 - February 2026) and the share of exports destined for the United States in 2024 across three groups of economies: developed, developing and LDCs. The vertical axis (y-axis) reports percentages, while the horizontal axis (x-axis) classifies economies according to their level of development. The blue bars represent the average increase in tariffs, whereas the yellow bars indicate the share of exports directed to the U.S. market. Tariff changes are trade-weighted with 2024 as base. The figure highlights that developing countries and LDCs face larger tariff increases than developed economies, suggesting a greater exposure to recent changes in U.S. trade policy.

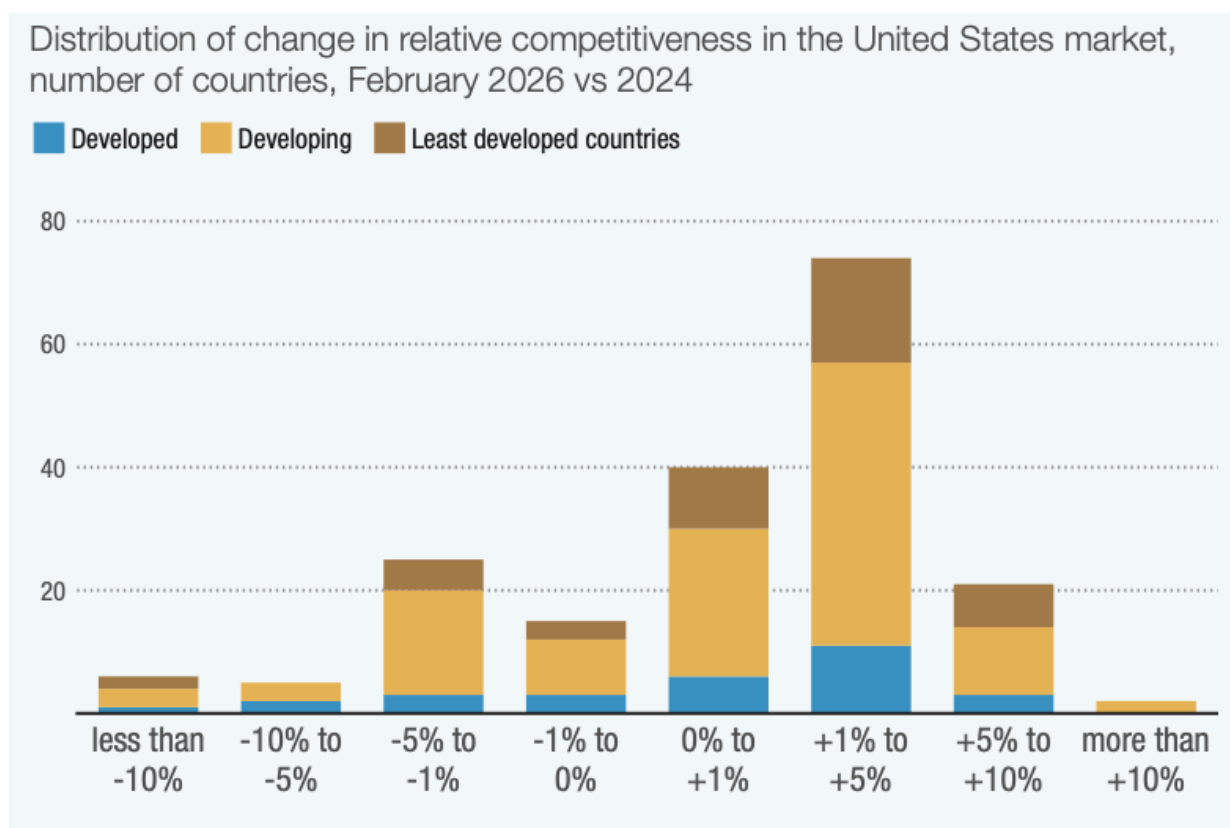
Figure 40 - New tariffs erode the competitiveness of developing economies and least developed economies



Source: UNCTAD, *Global Trade Update: Who wins when trade policies shift? New rules are reshaping global export competition and determining which countries gain ground.*, Policy Insights, Geneva, February 2026. UNCTAD estimates based on United States national statistics.

Note: The relative competitiveness of developed, developing, and least developed economies in the U.S. market in February 2024 and February 2026. The horizontal axis (x-axis) reports changes in relative competitiveness, measured in percentage points, while the vertical axis (y-axis) classifies economies according to their level of development. The blue bars represent relative competitiveness in February 2024, whereas the yellow bars represent relative competitiveness in February 2026. Relative competitiveness is measured using the “*relative preferential margins*”, which indicate how favorably a country’s exports are treated in tariff terms compared to those of its competitors. This measure is calculated at the HS 8-digit level and then averaged across groups using trade weights. is calculated at the HS 8-digit level and then averaged across groups using trade weights. A negative change reflects a deterioration in relative tariff conditions, while a positive change indicates an improvement.

Figure 41 – Relative competitiveness increases for most economies

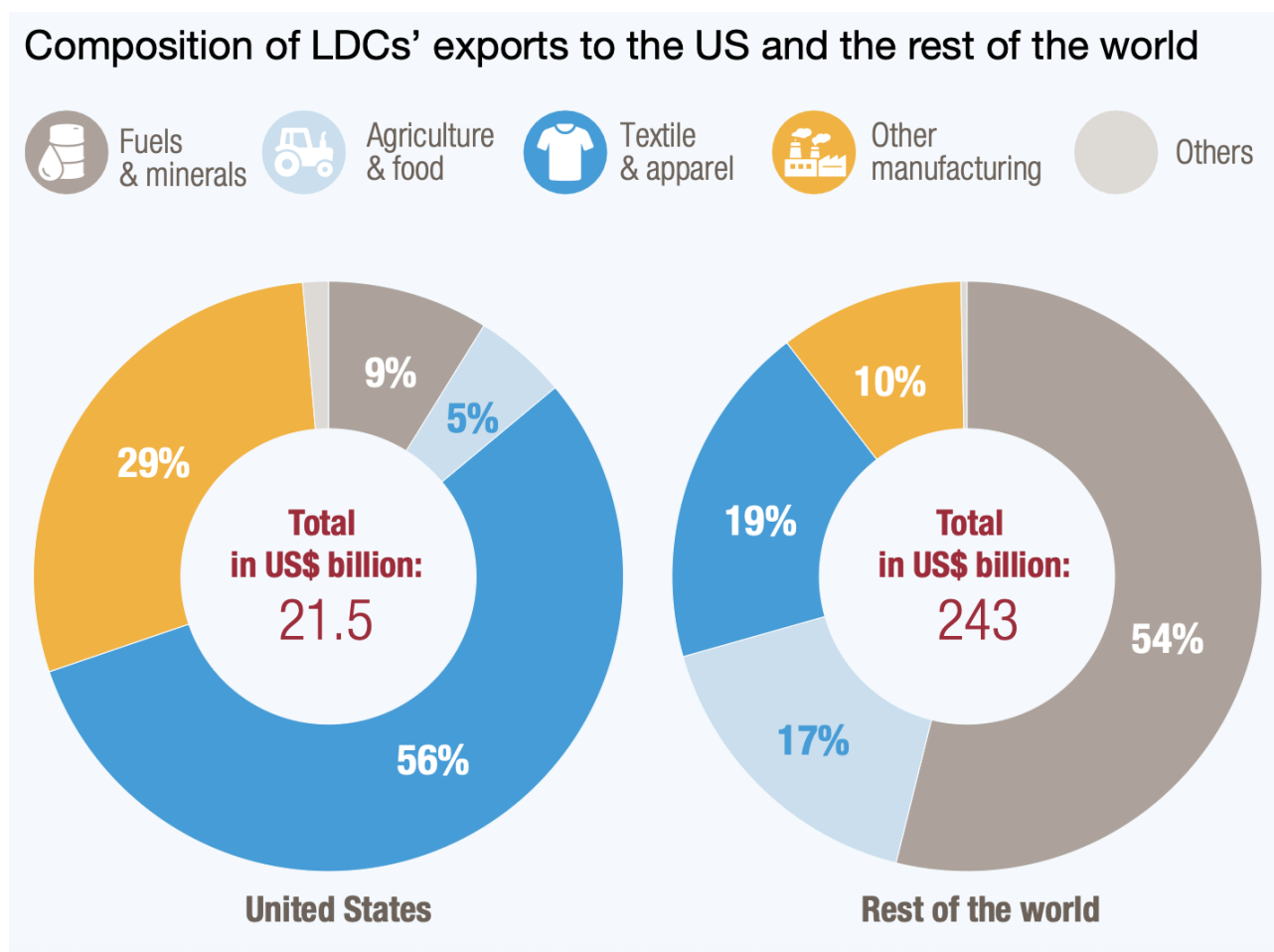


Source: UNCTAD, *Global Trade Update: Who wins when trade policies shift? New rules are reshaping global export competition and determining which countries gain ground.*, Policy Insights, Geneva, February 2026.

UNCTAD estimates based on United States national statistics.

Note: The distribution of changes in relative competitiveness in the United States market between February 2024 and February 2026. The horizontal axis (x-axis) reports intervals of changes in relative competitiveness, expressed in percentage points, while the vertical axis (y-axis) indicates the number of countries falling within each interval. The stacked bars distinguish between developed economies (blue), developing economies (yellow) and least developed economies (brown). Relative competitiveness is measured using the “*relative preferential margins*”, which measure how much better or worse a country’s exports are treated tariff-wise relative to its competitors. This measure is how much better or worse a country’s exports are treated tariff-wise relative to its competitors. This measure is calculated at the HS 8-digit level and then averaged across groups using trade weights. A negative change reflects a deterioration in relative tariff conditions, while a positive change indicates an improvement.

Figure 42 - LDC exporters of manufactured goods are more exposed to U.S. trade policy

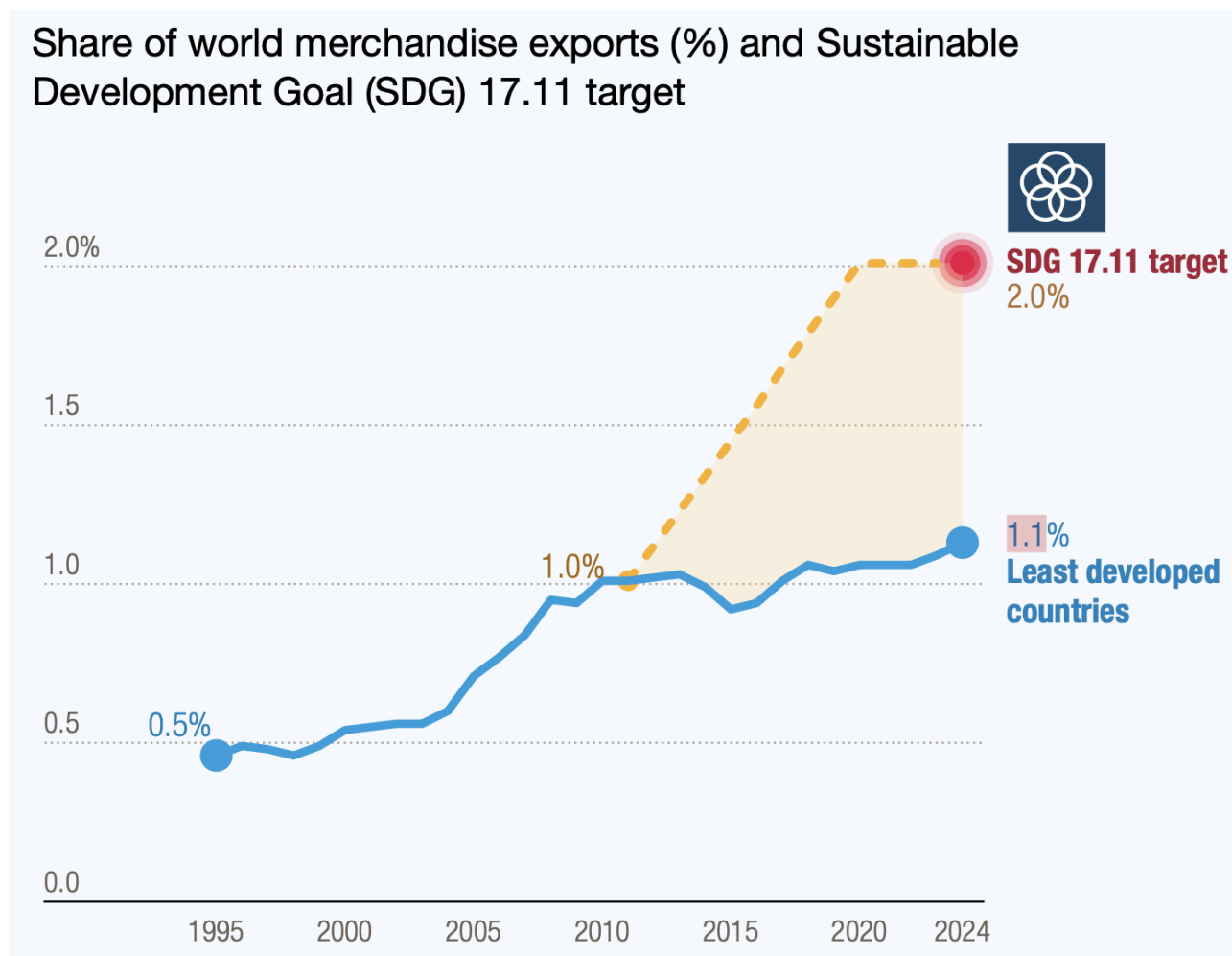


Source: UNCTAD, *Tariff Disruption. The impact on least developed countries*, Geneva, 2024.

UN Trade and Development (UNCTAD), based on UNCTADSTAT.

Note: The composition of exports from LDCs to the United States and to the ROW, based on a three-year average for the period 2022-2024. The two charts show the sectoral distribution of exports, distinguishing between fuels and minerals, agriculture and food, textiles and apparel, other manufacturing, and others. A marked sectoral concentration emerges in exports directed to the U.S. market. More than half of LDCs exports to the United States consist of textiles and apparel (56%), while a further 29% is represented by other manufactured products. In contrast, exports to the ROW are diversified, with a larger share concentrated in fuels and minerals (54%) and agriculture and food products (17%). The figure therefore suggests that LDCs are particularly exposed to changes in U.S. trade policy, as a substantial share of their exports to the United States is concentrated in a limited number of manufacturing sectors that may be directly affected by Trump tariffs.

Figure 43 - LDCs remain grossly off track in doubling their share in global exports



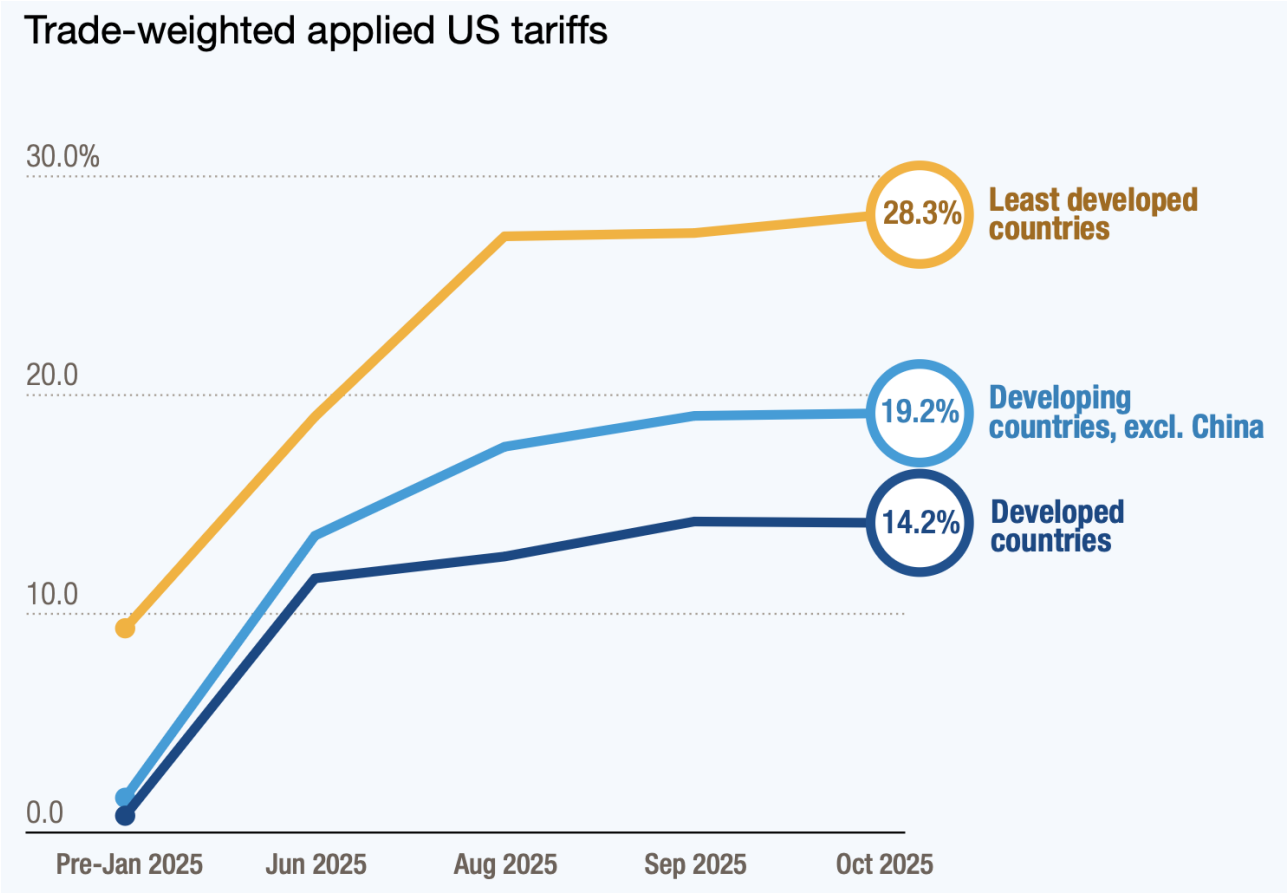
Source: UNCTAD, *Tariff Disruption. The impact on least developed countries*, Geneva, 2024.

UN Trade and Development (UNCTAD), based on UNCTADSTAT.

Note: The evolution of LDCs share in global merchandise exports compared with the Sustainable Development Goal (SDG) 17.11 target. The SDG target aims to double the share LDCs in world exports from 1.0% in 2011 to 2.0%. The goal of doubling LDCs' share of world exports was first adopted in the Istanbul Programme of Action for the LDCs (2011) and later incorporated in the SDGs.

The share of LDC exports increased from approximately 0.5% in 1995 to around 1.0% by 2011 and reached only 1.1% in 2024. Although some progress has been made over the last decades, growth has slowed significantly since 2011.

Figure 44 – LDCs face tariffs twice as high as those imposed on developed countries



Source: UNCTAD, *Tariff Disruption. The impact on least developed countries*, Geneva, 2024.

UN Trade and Development (UNCTAD), based on U.S. presidential actions.

Note: The evolution of trade-weighted U.S. tariffs applied to different groups of countries during 2025. Tariffs increased sharply for all country groups following the introduction of new U.S. trade measures. However, the increase was not uniform across countries. LDCs faced the highest tariff burden, with average tariffs rising from around 9% before January 2025 to 28.3% by October 2025. Developing countries excluding China experienced an increase to 19.2%, while developed countries were subject to lower tariffs, reaching 14.2% over the same period.

Figure 45 - TPU has risen to historically high levels



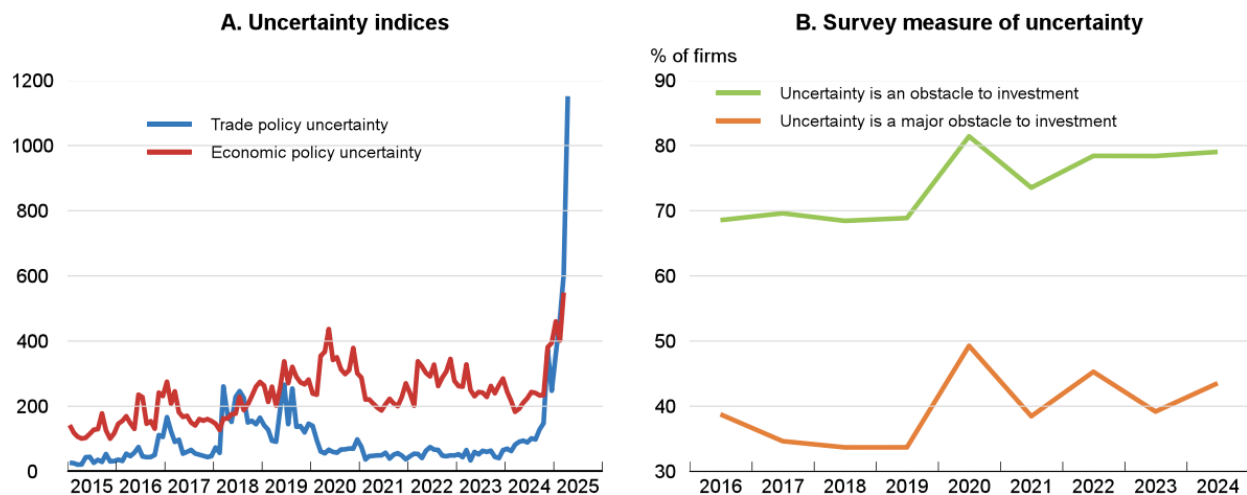
Source: OECD, *Economic Outlook, Resilient Growth but with Increasing Fragilities*, OECD, Volume 2025/2, No. 118, in Publications, December 2025, Paris.

Caldara, et al (2019).

Note: The TPU Index is computed by counting the frequency of joint occurrences of trade policy and uncertainty terms across major US newspapers.

TPU has reached historically high levels in recent years, particularly following the renewed escalation of protectionist measures.

Figure 46 - Uncertainty has increased, becoming a greater obstacle to investment



Source: OECD, *Economic Outlook: Tackling Uncertainty, Reviving Growth*, in Publications, June 2025.

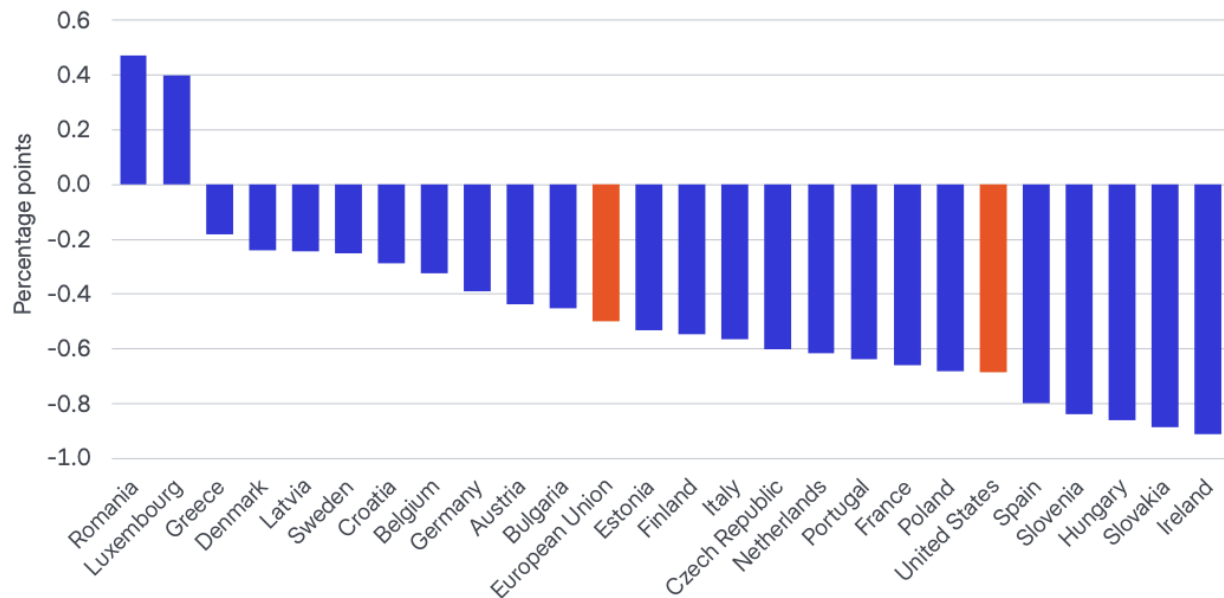
www.policyuncertainty.com; European Investment Bank (EIB) Investment Survey; and OECD calculations.

Note: In Panel A the evolution of the TPU Index and the Economic Policy Uncertainty (EPU) Index. The EPU Index, developed by Baker, Bloom and Davis (2016), is a nominal GDP-weighted aggregate measures of policy uncertainty across major economies, while the TPU Index, proposed by Caldara et al (2019), is constructed from automated text searches of newspaper archives.

In Panel B the share of firms identifying uncertainty as an obstacle to investment, based on the EIB Investment Survey.

Figure 47 – Short run effects of imported tariffs on Economic Growth in 2025

Expected Effects of a 10% EU Import Tariff on All Goods on Growth in 2025



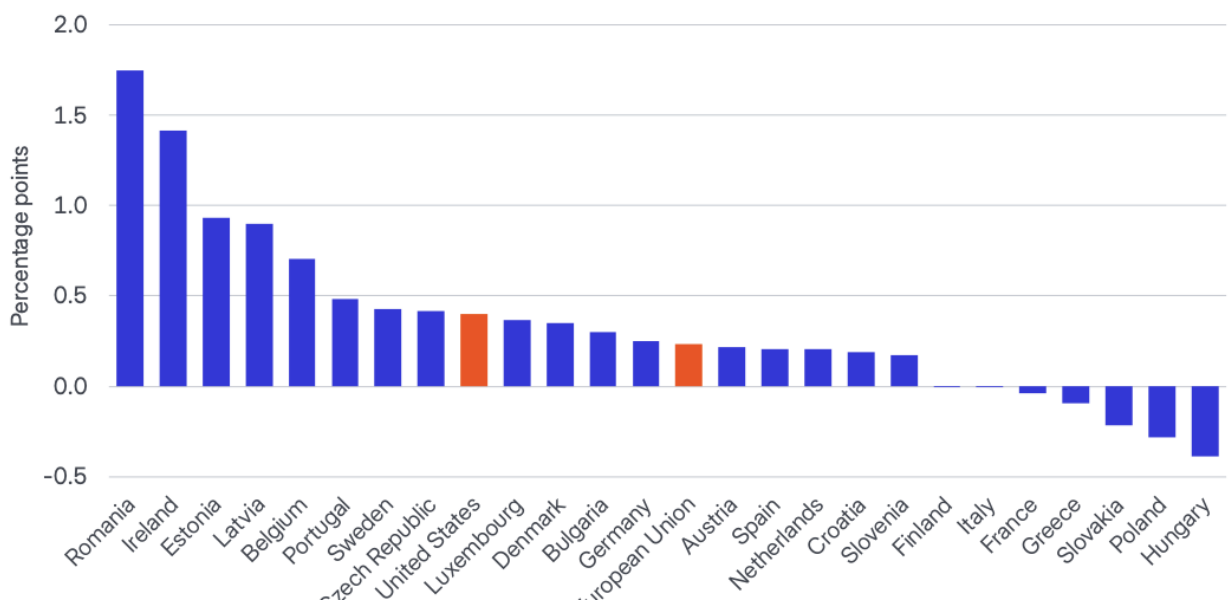
Source: Greus C., Heil P., Potrafke N., Schmid R., Tahtinen T., *The Economic Consequences of Tariffs and Trade Policy Uncertainty*, ECONPOL, Policy Brief, No. 79, Volume 9, November 2025.

Economic Experts Survey 2025Q2

Note: With the exception of experts in Romania and Luxembourg, economists across the EU anticipate overall negative impacts on output in their countries of expertise (-0.5 percentage points on average). The most pronounced declines in growth are expected in Hungary, Slovakia, and Ireland (-0.9pp). For most other countries, the anticipated effects range from -0.2pp to -0.8pp, suggesting broadly contractionary impacts. Experts in Lithuania and Greece foresee only small negative effects. Experts in the United States expect a stronger decrease of growth following the introduction of tariffs (-0.7pp.) than the average EU expert (-0.5pp.).

Figure 48 – Short run effects of imported tariffs on Employment in 2025

Expected Effects of a 10% EU Import Tariff on All Goods on Unemployment in 2025



(follows from the previous page)

Source: Greus C., Heil P., Potrafke N., Schmid R., Tahtinen T., *The Economic Consequences of Tariffs and Trade Policy Uncertainty*, ECONPOL, Policy Brief, No. 79, Volume 9, November 2025.

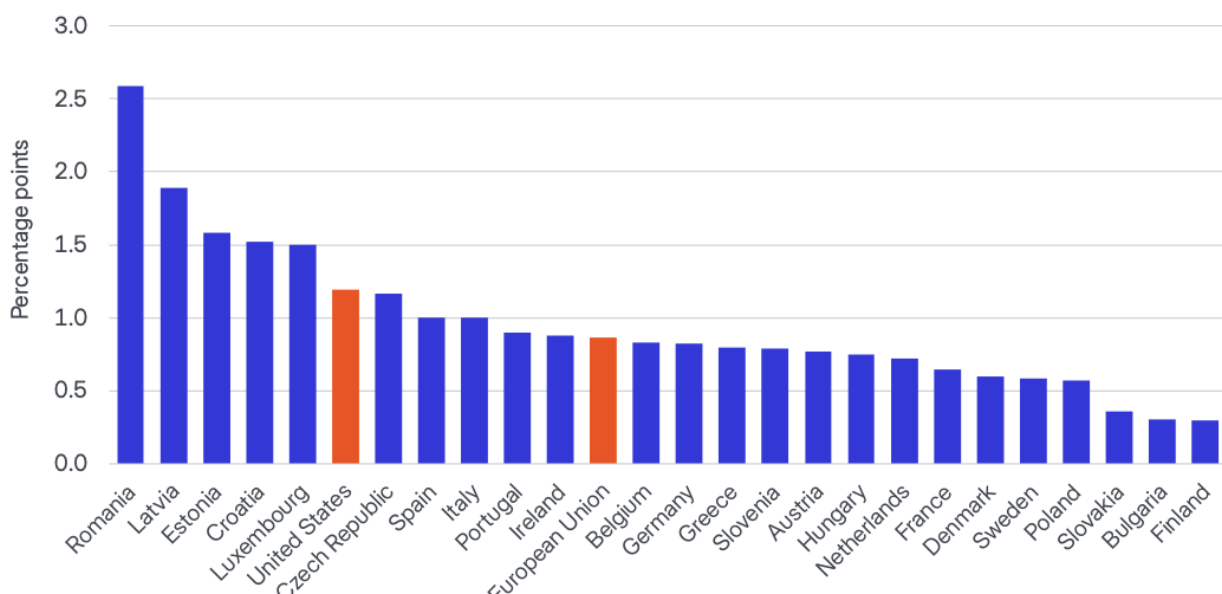
Economic Experts Survey 2025Q2

Note: In more than two-thirds of the countries surveyed, experts anticipate that a uniform 10 percent import tariff would raise unemployment levels by the end of 2025. The largest expected increases are in Romania (1.7pp) and Ireland (1.4pp).

For most other countries, expected changes range between 0.9pp and 0.1pp. Only a few experts anticipate limited or no impact, among them are experts in Finland, Italy, France, Cyprus, and Greece. Modest declines in unemployment are expected in Slovakia (-0.2pp), Poland (-0.3pp), and Hungary (-0.4pp). The expected rise in unemployment is higher in the United States (0.4pp) than among EU experts (0.2pp).

Figure 49 – Short run effects of imported tariffs on Inflation in 2025

Expected Effects of a 10% EU Import Tariff on All Goods on Inflation in 2025



Source: Greus C., Heil P., Potrafke N., Schmid R., Tahtinen T., *The Economic Consequences of Tariffs and Trade Policy Uncertainty*, ECONPOL, Policy Brief, No. 79, Volume 9, November 2025.

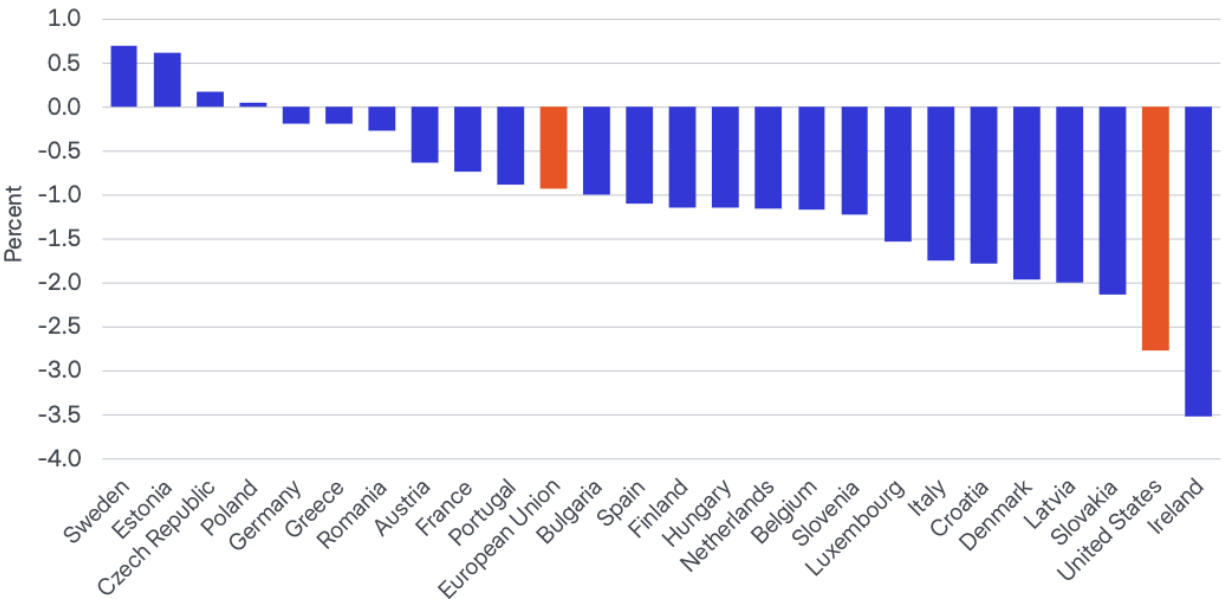
Economic Experts Survey 2025Q2

Note: Across all countries, higher trade costs are expected to be transmitted to consumer prices. The largest increases in inflation are expected in Romania (2.6pp), Latvia (1.9pp), and Estonia (1.6pp). Economic experts in central Europe, while also expecting higher inflation, foresee more moderate increases between 0.6pp and 1.5pp. Smaller increases in inflation are anticipated in Slovakia (0.4pp), Bulgaria (0.3pp), Finland (0.3pp), and Lithuania (0.1pp). The expected rise in inflation

is higher in the United States (1.2pp) than on average in the EU (0.9pp).

Figure 50 – Short run effects of imported tariffs on FDI in 2025

Expected Effects of a 10% EU Import Tariff on All Goods on FDI in 2025



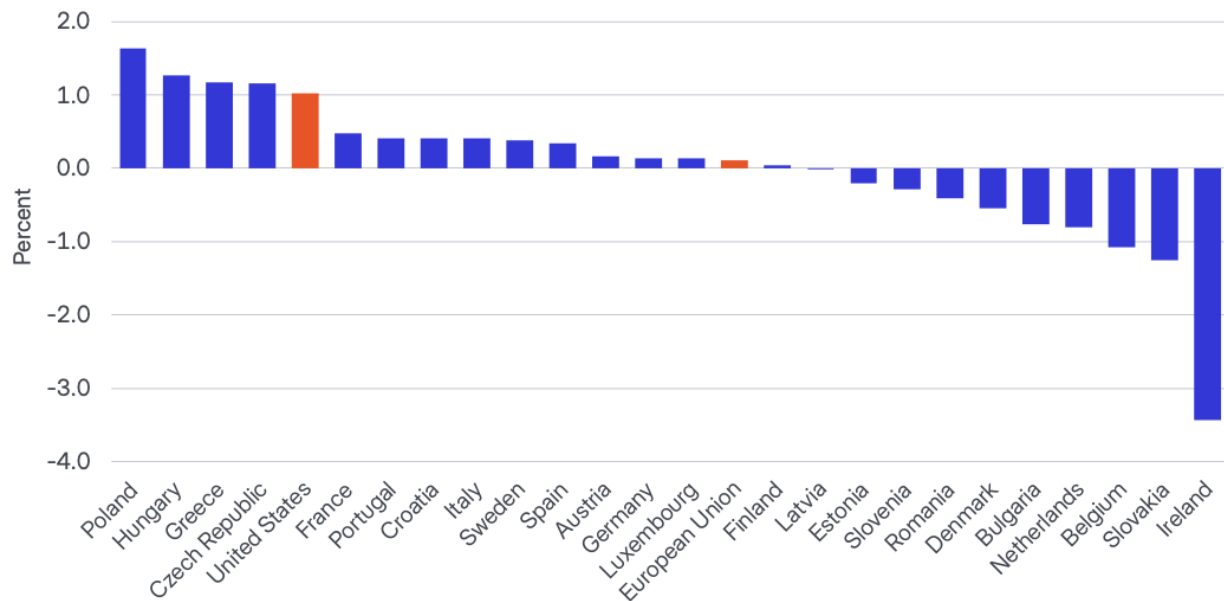
Source: Greus C., Heil P., Potrafke N., Schmid R., Tahtinen T., *The Economic Consequences of Tariffs and Trade Policy Uncertainty*, ECONPOL, Policy Brief, No. 79, Volume 9, November 2025.

Economic Experts Survey 2025Q2

Note: Experts in about three-quarters of the countries in the sample anticipate a decline in FDI, with the steepest reduction expected in Ireland (-3.5 percent) and in the United States (-2.8 percent). Experts in most of the other countries expect reductions in FDI between -0.6 percent and -2.0 percent, including the Benelux states as well as several Northern and Southern Europe countries. The EU average amounts to a change of -0.9 percent. A smaller group consisting of Cyprus, Germany, Greece, and Romania foresees only modest declines in FDI up to -0.3 percent. In contrast, experts in Sweden (0.7 percent), Estonia (0.6 percent), and the Czech Republic (0.2 percent) anticipate slight gains. In Poland and Lithuania, experts predict virtually no changes in FDI levels.

Figure 51 – Short run effects of imported tariffs on Government Revenue in 2025

Expected Effects of a 10% EU Import Tariff on All Goods on Government Revenue in 2025



Source: Greus C., Heil P., Potrafke N., Schmid R., Tahtinen T., *The Economic Consequences of Tariffs and Trade Policy Uncertainty*, ECONPOL, Policy Brief, No. 79, Volume 9, November 2025.

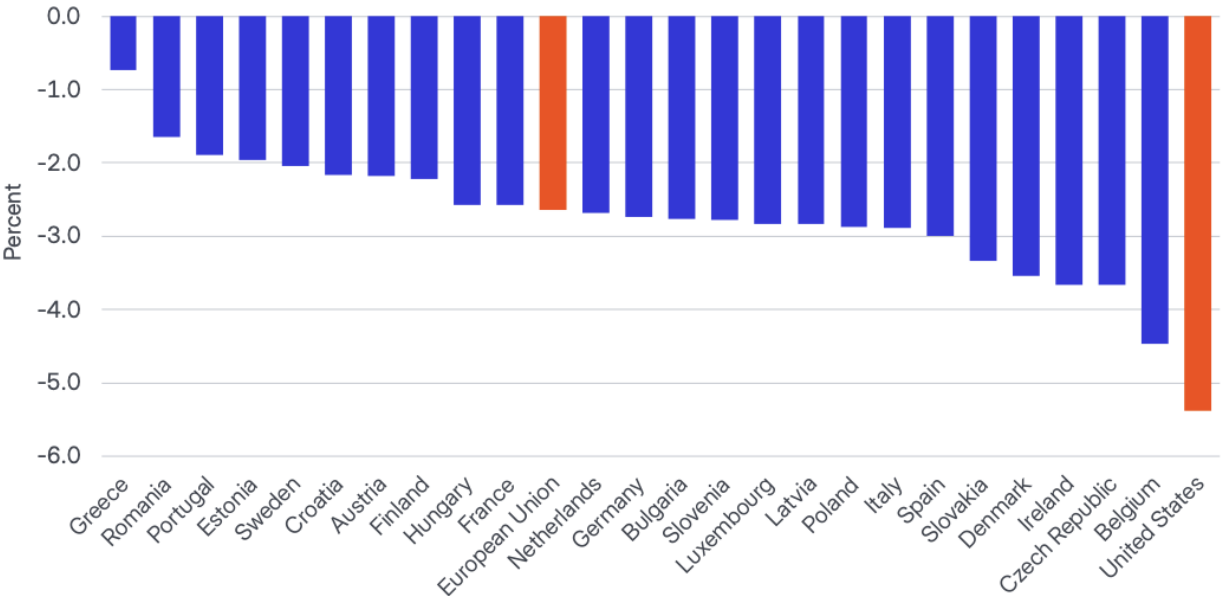
Economic Experts Survey 2025Q2

Note: In several Central and Southern European countries, including Poland (+1.6 percent), Cyprus (+1.5 percent), and Hungary (+1.3 percent), experts anticipate moderate revenue gains. In contrast, experts in other countries, notably Ireland (-3.4 percent) and Slovakia (-1.3 percent), expect substantial declines.

The EU average is close to zero. Experts in the United States, however, expect a positive change in government revenues of 1 percent.

Figure 52 – Short run effects of imported tariffs on Trade Volumes in 2025

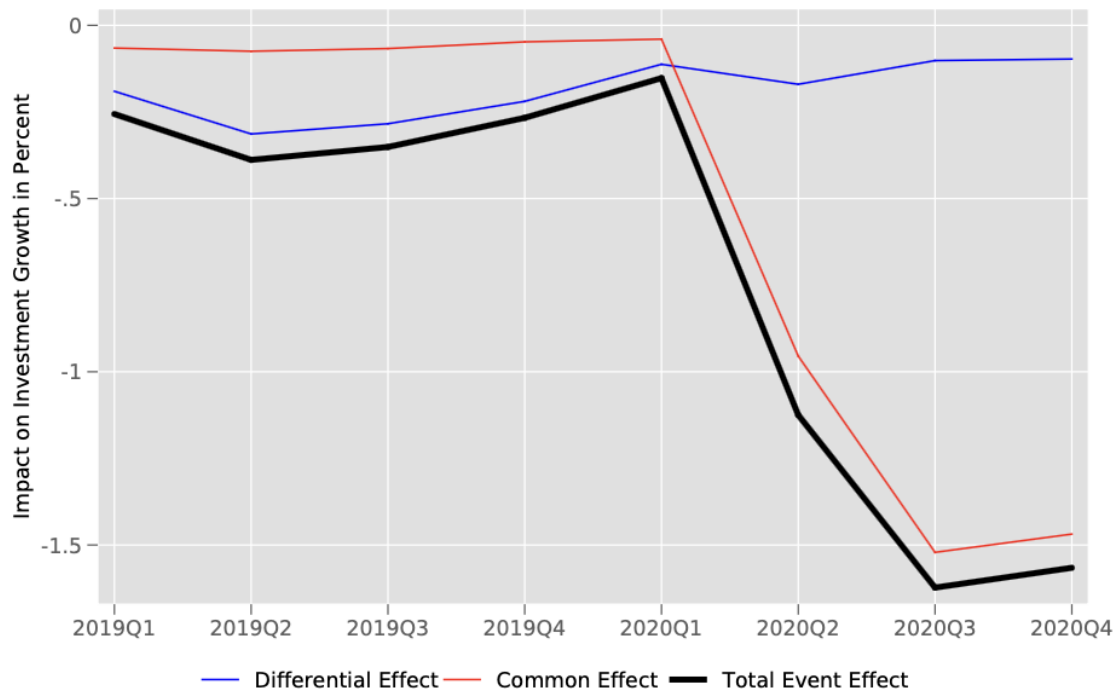
Expected Effects of a 10% EU Import Tariff on All Goods on Trade Volume in 2025



Source: Greus C., Heil P., Potrafke N., Schmid R., Tahtinen T., *The Economic Consequences of Tariffs and Trade Policy Uncertainty*, ECONPOL, Policy Brief, No. 79, Volume 9, November 2025.
Economic Experts Survey 2025Q2

Note: The steepest projected decrease is expected in Belgium (-4.5 percent), reflecting its role as an important trade hub. The smallest decreases in trade volumes are anticipated in Lithuania (-0.2 percent) and Greece (-0.7 percent). For the remaining countries, experts project reductions ranging between -1.6 and -3.7 percent. Experts from the United States expect a stronger decline in trade volume (-5.4 percent) than experts from any EU member state.

Figure 53 – Effect of U.S.-China Tariff Announcements on Investment Growth



Source: Amiti M., Kong S. H., Weinstein D., *The Effect of the U.S.-China Trade War on U.S. Investment*, NBER WORKING PAPER SERIES, NATIONAL BUREAU OF ECONOMIC RESEARCH, 1050 Massachusetts Avenue Cambridge, May 2020.

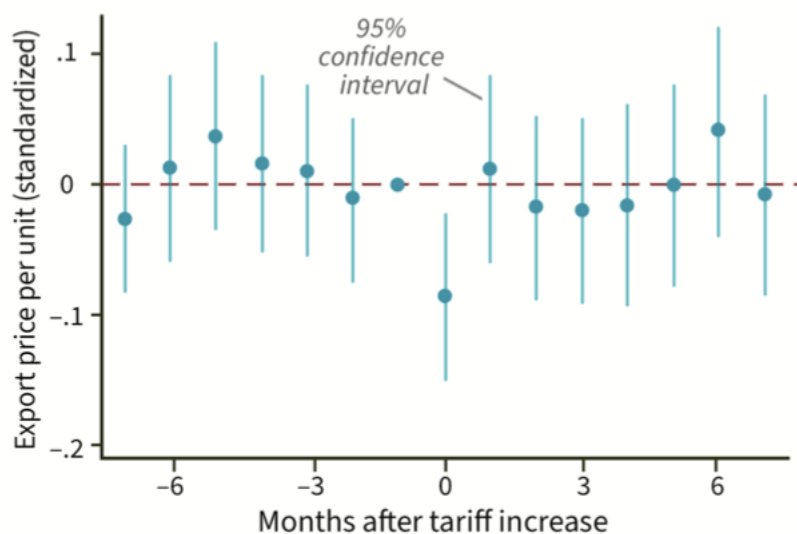
Note: The estimated impact of U.S.-China tariff announcements on investment growth of listed firms over the period from the first quarter of 2019 to the fourth quarter of 2020.

The analysis breaks this impact into three components: the differential effect (blue line), the common effect (red line) and the total even effect (black line), where the latter represents the sum of the two previous effects.

During 2019, the overall effect on investment remains relatively small, ranging between a minimum of -0.26 and a maximum of -0.39 percentage points. At this early stage, the slowdown is mainly attributable to the differential effect. This reflects the impacts of the first tariff announcements in March 2018, whose effects on investment emerge with a delay of four quarters.

Starting from the second quarter of 2020, a much more marked worsening is observed. The total event effect rises from -0.15 in the first quarter of 2020 to -1.12 in the second quarter, reaching -1.62 in the third quarter and -1.57 in the fourth quarter of 2020. This negative acceleration is mainly driven by the common effect, which grows in intensity to -1.52 in the third quarter of 2020, indicating how deteriorating expectations and increasing uncertainty (e.g. macroeconomic factors) progressively affect the entire system.

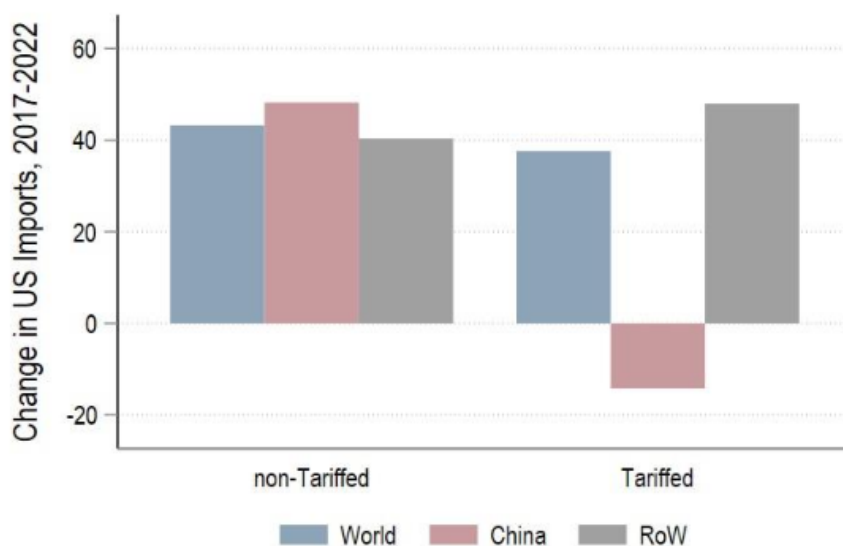
Figure 54 - Impact of U.S. tariff rates on Chinese export prices



Source: Jiao Y., Liu Z., Tian Z., Wang X., *The Impacts of the U.S. Trade War on Chinese Exporters*, The Review of Economics and Statistics, 2022.

Note: The figure is based on proprietary firm-level data covering approximately 20,000 Chinese exporting firms located in a prefecture-level city in Eastern China. The vertical axis reports the standardized export price per unit excluding tariffs, while the horizontal axis measures the number of months before and after the U.S. tariff increase. The dots represent estimated average price adjustments, and the vertical bars indicate the 95% confidence intervals.

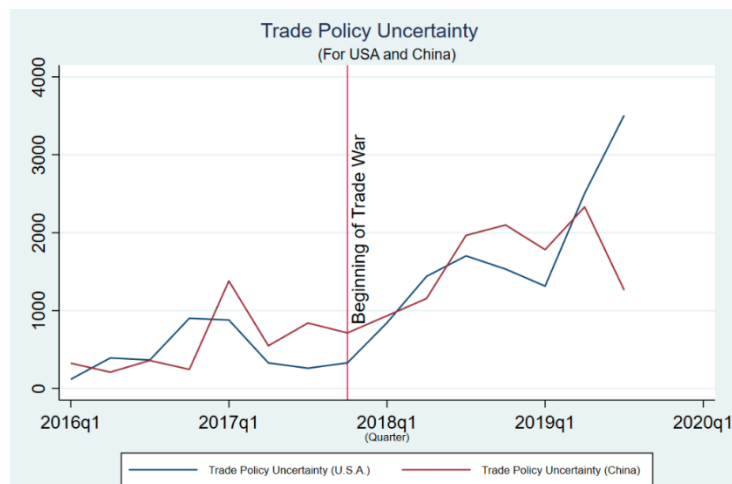
Figure 55 - Percentage changes in US imports, tariffed and non-tariffed goods, 2017-2022



Source: Freund C., Mattoo A., Mulabdic A., Ruta M., *Is US Trade Policy Reshaping Global Supply Chains?* Policy Research Working Paper 10593, World Bank Group, October 2023.

Note: Percentage changes in U.S. imports between 2017 and 2022, distinguishing between tariffed and non-tariffed goods, and comparing three sources of supply: the World as a whole, China and the ROW. The horizontal axis separates goods between non-tariffed goods and tariffed goods, while the vertical axis measures the percentage change in U.S. import volumes over the period. For non-tariffed goods, U.S. imports increase across all suppliers, with China recording the highest growth. By contrast, for tariffed goods, imports from China decline approximately by 14% below 2017 levels, while imports from the ROW increase by around 48%.

Figure 56 - TPU (US) and TPU (China)

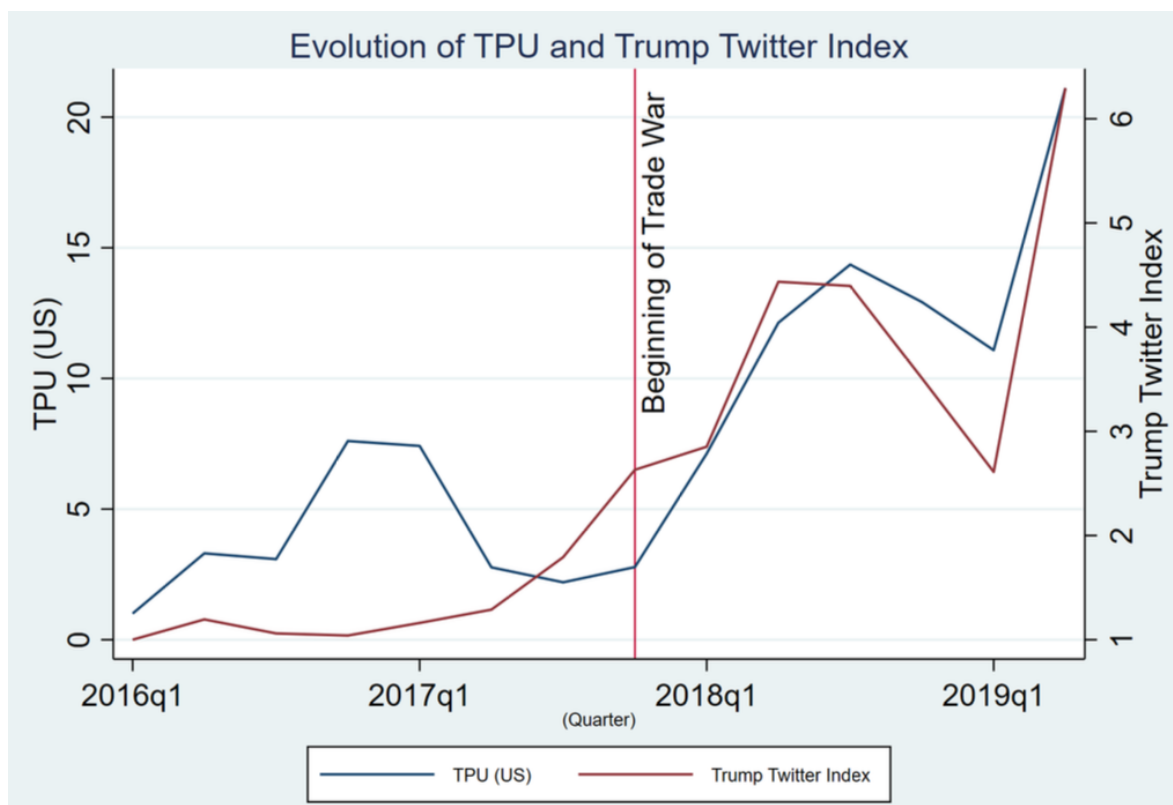


Source: Keshav V., *Corporate investment amid trade policy uncertainty: Past lessons, future presidency*, The North American Journal of Economics and Finance, September 2025.

Data from Baker et al (2016) and Author's Calculation.

Note: The comparison between the evolution of U.S. and Chinese TPU from 2016q1 to 2019q2. The vertical line marks the beginning of the U.S.-China trade war (e.g. 2017q4), showing the strong correlation between the two uncertainty indices.

Figure 57 - Evolution of TPU and Trump Twitter Index

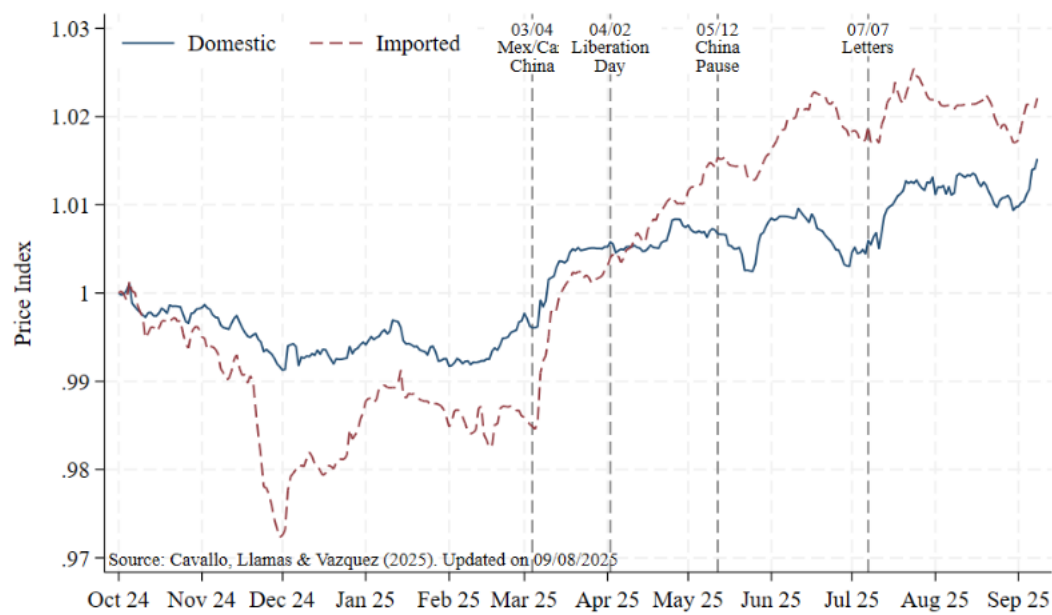


Source: Keshav V., *Corporate investment amid trade policy uncertainty: Past lessons, future presidency*, The North American Journal of Economics and Finance, September 2025.

Data from Baker et al (2016) and Author's Calculation.

Note: The comparison between the evolution of U.S. TPU and the Trump Twitter Index from 2016q1 to 2019q2. The vertical line marks the beginning of the U.S.-China trade war (e.g. 2017q4), highlighting the parallel increase in both indices during the escalation of trade tensions.

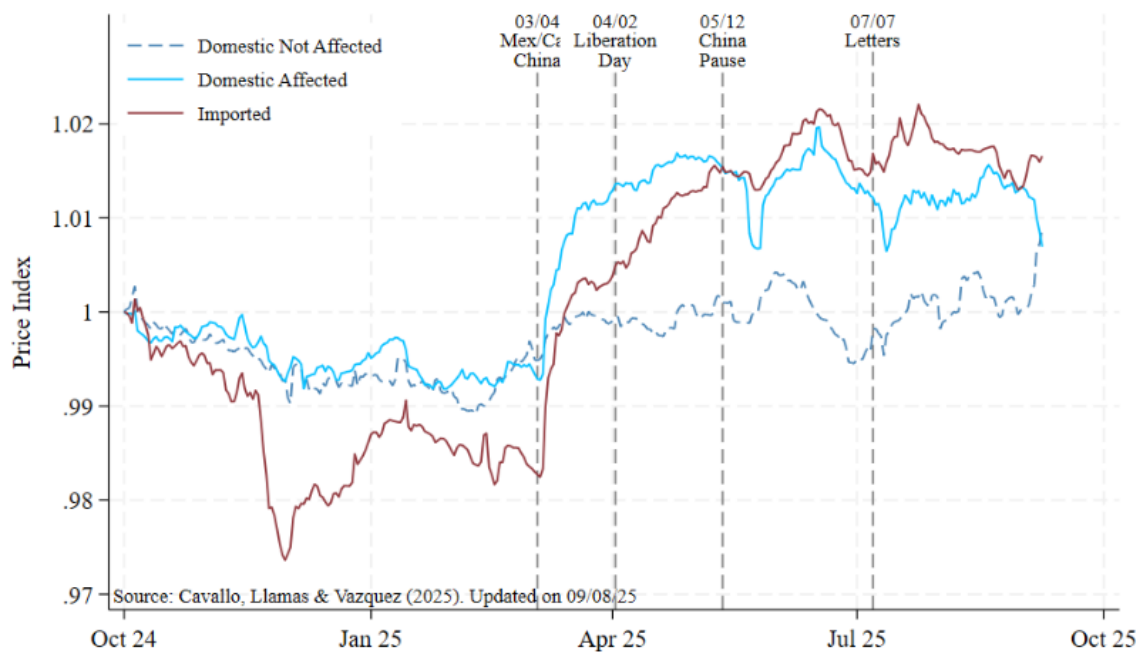
Figure 58 - U.S. Retail Price Indices - Domestic vs Imported



Source: Cavallo A, Llamas P., Vasquez F., *Tracking the Short-Run Price Impact of U.S. Tariffs*, Harvard Business School, Draft Working Paper, September 10, 2025.

Note: Data from five large U.S. retailers. Vertical lines denote major tariff events.

Figure 59 - U.S. Retail Price Indices in Affected and Unaffected Categories



Source: Cavallo A, Llamas P., Vasquez F., *Tracking the Short-Run Price Impact of U.S. Tariffs*, Harvard Business School, Draft Working Paper, September 10, 2025.

Note: Data from five large U.S. retailers. Vertical lines denote major tariff events.