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# Resilient Global Supply Chains in Times of Escalating Trade Costs

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## Abstract

Escalating trade costs, driven by new tariff regimes, the effects of the COVID-19 pandemic, armed conflicts, and sustainability-driven legislation, have disrupted global supply chains and challenged the traditional model of trade-led development. The latest disruption affecting global supply chains are the recent 2025 US tariff measures. **This policy brief analyses the welfare and export impacts of these tariff measures, highlighting the uneven effects on industrializing countries.** Case studies from Kenya and Cambodia reveal that countries with diversified export portfolios and flexible sectoral compositions, like Kenya, are better positioned to benefit from trade diversion. The results show that beyond direct tariff exposure, indirect effects through global supply chains can amplify vulnerabilities to trade policy shifts. **The brief underscores the need for strategies including export diversification, value addition, strong domestic and regional supply chains, quality infrastructure, supportive trade policy, and investment.** These measures are vital for enhancing resilience and enabling countries to seize new opportunities in a global environment where trade disruption is increasingly the norm.

## Key Messages

1. Escalating trade costs threaten the trade-led development model of industrializing countries.
2. Tariffs and other trade costs create winners and losers.
3. Countries need to increase resilience through diversification, value addition, strengthening domestic and regional supply chains, quality infrastructure and a conducive policy environment.

## Escalating trade costs threaten economic development

Trade-led economic growth has been a promising path to economic development for decades. Through trade, countries are able to specialize in the most productive activities, access high-quality inputs, learn from importing and exporting, and serve the world's demand without the limit of a small domestic market. This has only been amplified by the emergence of global supply chains since the 1980s. Economic development has also taken off in countries specializing in specific production stages within global supply chains, allowing countries to benefit from increased trade specialization and the vast technology and knowledge transfer opportunities.

Yet, this model is under threat, because it relies on reliable and free trade. Most recently and most notably, the Trump administration announced

so-called reciprocal tariffs on almost every country in the world on 2 April 2025. While all trading partners faced a 10 per cent minimum tariff, countries whose exports to the United States (US) exceeded imports by 20 per cent or more, incurred much higher tariffs. For instance, major Southeast Asian exporters (precisely those that successfully integrated into global supply chains) like Viet Nam, the Lao People's Democratic Republic, and Cambodia were confronted with tariffs reaching up to 50 per cent.

While the recent tariffs remain in flux, as some have been paused or changed for specific countries, these announcements provide an important case study to reflect on the impacts of trade costs on industrializing countries, and how to prepare for such trade shocks.

## Disruptions in global supply chains are the “new normal”

Trade shocks have continuously disrupted global supply chains over the past couple of years. In 2020, during the COVID-19 pandemic, companies and governments started to rethink global supply chains, shifting focus from their efficiency and cost competitiveness to resilience and robustness. Companies and governments were mainly interested in ensuring the smooth operation of supply chains in times of crisis, and critical dependencies on key input suppliers became apparent (such as in the production of personal

protective equipment). Armed conflicts further amplified this, specifically in terms of agricultural commodities and energy inputs. At the same time, more advanced economies sought to use their influence in global supply chains to promote sustainability objectives by adopting legislation on climate or social development (for example, the European Union's Carbon Border Adjustment Mechanism, or the United Kingdom's Modern Slavery Act), which impacts the entire supply chain.

The re-emergence of tariffs is the latest development in this context. **The key question is how industrializing countries can both enhance their resilience to trade shocks and strengthen their sustainable economic development** by

## How tariffs work

Tariffs, as well as other trade costs, work through various channels. Depending on the strength of each specific effect for a given country or sector, the trade and welfare impacts can be negative to different degrees. There can also be potential third-country beneficiaries when tariffs are imposed on trade partners. Table 1 summarizes the main transmission channels.

One key effect is **trade depression**, which refers to a **decline in trade volumes due to higher costs and market disruptions**, often harming export-oriented economies that depend heavily on access to foreign markets. The severity of trade depression, may vary depending on a country's export portfolio. For instance, countries highly specialized in tariff-affected products or reliant on a single market, are likely to experience more pronounced disruptions.

Conversely, tariff reductions can lead to **trade creation**, where **new trade flows emerge as more expansive suppliers gain market access**. For example, the US and Morocco signed a free trade agreement in 2006, establishing new trade relationships. Morocco thereafter expanded its exports of textiles, clothing, and perfume to the US, because Moroccan exports got cheaper due to reduced tariffs and trade barriers.<sup>1</sup>

**Trade diversion** occurs when **importers shift to suppliers from countries with lower tariff exposure**, enabling those countries to gain market share. To benefit from trade diversion, countries must meet several conditions: they need sufficient production capacity, the ability to supply goods of comparable quality, and preferential market

integrating into global supply chains. This policy brief uses the recently announced tariffs as an exemplary case to discuss how economies can prepare for such disruptions.

access through trade agreements. In addition, they require strong infrastructure, established trade networks, compliance with destination-market standards, and political and economic stability. For example, following the most recent announcement of tariffs by the Trump administration, US firms import textiles from Kenya instead of Cambodia, which faces a 48 per cent tariff.

**Trade deflection** involves **exporters rerouting goods through third-party countries to avoid tariffs**, which may inflate trade figures in the intermediary countries and prompt increased customs scrutiny. For example, Cambodian goods might be trans-shipped via Viet Nam or Kenya to reach the US, making the destination less traceable in trade statistics. The benefit to the third-party country is very limited because it does not involve building new production capacity, nor adding value to the rerouted product.

Lastly, **import source diversion** describes a shift in the sourcing of intermediate or input products to alternative, often lower-cost suppliers. This frequently arises as firms adjust to tariffs by seeking cheaper sources. For instance, countries like Kenya and Cambodia may increase their imports from heavily tariffed economies, either because of price advantages or surplus availability resulting from disrupted trade flows elsewhere.

For any country to understand the implications of trade costs, and tariffs in particular, it is essential to assess the strength of the various transmission channels and understand how to prepare for and minimize the negative ones.

**Table 1.** Transmission channels of tariff shocks

	Effect	Example	Implications	Preconditions
Trade depression	Overall trade volumes decline due to higher costs and market disruption.	Cambodia’s exports to the US fall by nearly 40 per cent, depressing output in key sectors.	Tariffs can destabilize export-led sectors, reducing jobs and investment.	Stronger effect for countries with high export dependency on targeted products or markets.
Trade creation	Overall trade volumes increase due to new market access and substitution effects.	Viet Nam expands electronics exports to the US as Chinese shipments decline.	Previously marginal suppliers gain market share and expand production.	Product overlap with targeted goods, capacity to scale, tariff preference.
Trade diversion	Buyers switch to suppliers in countries facing lower tariffs.	US firms import textiles from Kenya instead of Cambodia, which faces a 48 per cent tariff.	Countries with low tariffs can gain export market share through substitution effects.	Competitive products, export readiness, and favourable tariff status.
Trade deflection	Exporters reroute goods through third countries to avoid tariffs.	Cambodian goods may be trans-shipped via other countries like Viet Nam or Kenya to reach the US.	May trigger customs. Scrutiny and third countries might see inflated but artificial trade.	Trade infrastructure in third countries.
Import source diversion	Importers shift sourcing to countries with lower prices.	Kenya and Cambodia increase import shares from the 10 most tariffed countries.	May offer cheaper inputs, but also raises dependency on trade-distressed suppliers.	Availability of lower-cost alternatives and flexible sourcing capacity.

**Note:** Own representation based on the KITE model.

## How Trump’s “Liberation Day” tariffs impact industrializing countries

The imposition of tariffs generates heterogeneous impacts on both welfare (real national income) and export performance across countries. Table 2 illustrates this heterogeneous impact by highlighting the 20 most negatively and most positively impacted countries following the tariff measures announced by the US on 2 April 2025 in terms of welfare (part A) and exports (part B).<sup>2</sup> Although the aggregate global

welfare effects appear relatively modest, **the distributional consequences between countries are highly uneven.** Notably, while economies in North America, Europe, and some Asian regions experience welfare losses, several countries in Africa, the Middle East, and Central Asia remain largely unaffected, or even experience marginal welfare gains.

**Table 2.** Impacts on welfare and exports

A: Impact on welfare				B: Impact on exports			
Top 20: positive impact		Top 20: negative impact		Top 20: positive impact		Top 20: negative impact	
Kyrgyzstan	0.7	Congo	-6.7	Haiti	27.8	United States of America	-43.2
Togo	0.5	Mongolia	-5.2	Honduras	14.3	Mexico	-28.5
Chad	0.4	Cambodia	-3.7	El Salvador	11.3	Canada	-27.4
Tajikistan	0.4	Viet Nam	-3.0	Guatemala	6.9	China	-7.7
Cyprus	0.3	Mexico	-2.6	Ethiopia	4.5	Cambodia	-7.5
Iraq	0.3	Canada	-1.6	Nicaragua	3.5	Viet Nam	-7.3
Syrian Arab Republic	0.3	Brunei Darussalam	-1.6	Dominican Republic	3.0	Switzerland	-4.5
Afghanistan	0.3	Thailand	-1.3	Kenya	2.4	Japan	-3.9
El Salvador	0.3	Malaysia	-0.9	Nepal	1.9	Thailand	-3.6
Benin	0.3	Nicaragua	-0.8	Jordan	1.6	Republic of Korea	-3.5
Malta	0.3	Qatar	-0.7	Trinidad and Tobago	1.4	Chile	-3.1
Comoros	0.3	Democratic Republic of Congo	-0.7	Nigeria	1.1	Singapore	-2.9
Belarus	0.3	United States of America	-0.5	Comoros	1.1	Sri Lanka	-2.8
Venezuela (Bolivarian Republic of)	0.2	Republic of Korea	-0.5	Puerto Rico	1.1	Madagascar	-2.5
Nepal	0.2	Madagascar	-0.5	Egypt	1.1	Israel	-2.4
Kenya	0.2	Ireland	-0.4	Chad	1.0	India	-2.4
Malawi	0.2	Chile	-0.4	Costa Rica	0.8	Türkiye	-2.3
Ethiopia	0.2	Guinea	-0.4	Philippines	0.5	Namibia	-2.3
Senegal	0.2	Jamaica	-0.4	Iraq	0.5	Australia	-2.3
Ghana	0.2	Equatorial Guinea	-0.4	Venezuela (Bolivarian Republic of)	0.3	Ireland	-2.2

In most cases, exports decline, with the most pronounced reductions observed in North America, Latin America, and Asia. These effects are partly attributable to the direct imposition of tariffs on specific countries. For example, China is subject to tariffs of 52 per cent on its exports, which are expected to contract due to increased trade costs. Beyond these direct effects, the model also captures indirect impacts transmitted through the

global supply chain linkages. Even countries not directly targeted by the tariffs, such as Bolivia, may experience export reductions, if their goods are embedded in the value added exports from other countries, particularly those exporting to the US. To further illustrate the underlying mechanisms of the most recent tariff shock on welfare, the following sections highlight the cases of Cambodia and Kenya.

## Why Kenya is gaining, and Cambodia is losing in terms of welfare and exports: Two case studies

As outlined above, trade policy changes can generate a variety of effects through distinct channels, including trade diversion, trade deflection, trade depression, and import diversion. To illustrate the mechanisms that drive the heterogeneous welfare and export impacts observed across countries, two countries are examined: Kenya and Cambodia. Kenya experiences a welfare gain, and Cambodia suffers from a welfare loss. The tariff measures announced on 2 April 2025 affected both countries asymmetrically. Kenya was subject to a baseline tariff rate of 10 per cent, whereas Cambodia faced significantly higher tariffs at 48 per cent. The extent of exposure to the US market prior to the imposition of tariffs also varied markedly: 8.9 per cent of Kenya's exports were destined for the US, compared to 35.7 per cent of Cambodia's exports.

### Impacts on export volumes – Trade diversion and trade depression

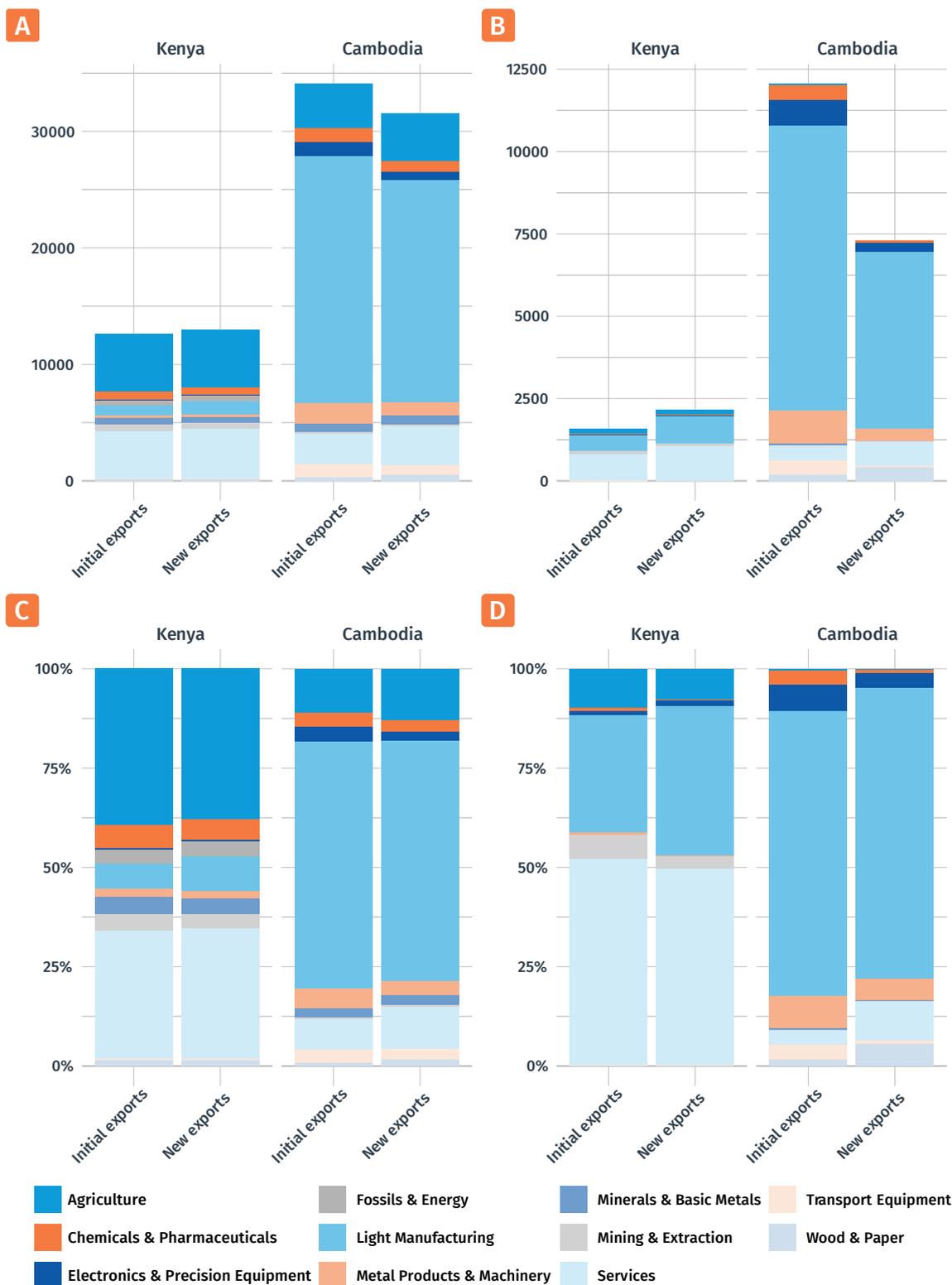
The tariff changes lead to trade diversion for Kenya and a trade depression for Cambodia. In Figure 1, Panels A and B present the changes in total export volumes and exports to the US. Kenya shows a modest increase in total exports (Panel A) and a significant surge in exports to the US (Panel B). In contrast, Cambodia's total exports decline (Panel A), and its exports to the US are reduced by nearly half (Panel B), underscoring the severity of the negative impact.

### Impacts on sectoral export composition

Panel C of Figure 1 illustrates the composition of total exports by sectors for Kenya and Cambodia, before and after the implementation of tariffs. For Kenya, agricultural exports decline slightly, while exports of light manufacturing increase. In contrast, Cambodia experiences a notable decline in its light manufacturing share. Panel D shows the sectoral distribution of exports directed specifically to the US market. Kenya's principal export sector is agriculture; however, agricultural products constitute only a minor share of its exports to the US. As a result, Kenya's primary export industry remains largely insulated from the direct effects of the US tariffs. Moreover, Kenya expands its exports of light manufacturing products to the US, increasing the export share from 29.4 per cent to 37.5 per cent. This category includes goods such as textiles and leather products. The observed increase in exports may reflect a trade diversion effect, whereby Kenya substitutes for other countries such as Cambodia, whose exports to the US have become less competitive due to higher tariffs.

Cambodia, by contrast, faces more adverse outcomes. A total of 35.7 per cent of its exports are directed to the US, with semiconductors and textiles making up the largest share of around 20 per cent and 25 per cent of total exports, respectively. This concentration exposes Cambodia to a high level of risk.

**Figure 1.** Changes in absolute and relative exports for Kenya and Cambodia



**Note:** The left column shows the total exports, and the right column shows the exports to only the US. The upper row shows absolute values in USD million, and the lower row shows percentage shares.

**Source:** Author's elaboration.

As its overall export basket closely mirrors the composition of its US-bound exports, Cambodia is more vulnerable to both direct and indirect negative shocks from the tariff regime (as it cannot easily compensate through other export products). Cambodia's exports to third countries, such as Kenya, have increased – potentially indicating trade deflection, though it remains unclear whether these goods ultimately reach the US market.

### Impacts on import source diversion

Beyond their impact on exports, tariff changes can also influence sourcing decisions. To illustrate this, we examine changes in imports to Cambodia and Kenya from the ten countries

most affected by the new tariffs. Table 3 presents the evolution of import patterns for Kenya and Cambodia in response to the tariff measures. In Kenya, imports from the most affected countries and total imports increased. As a result, the share rose from 30.5 per cent to 31.7 per cent, indicating a 1.2 percentage point increase. In Cambodia, imports from the targeted countries declined slightly in absolute terms, but total imports dropped more significantly, leading to a rise in the share from 51.0 per cent to 52.0 per cent increase of one percentage point. The observation that the share of imports from the most affected countries increased suggests that these countries may have redirected their exports toward alternative markets, such as Kenya and Cambodia, in response to the US tariff hikes.

**Table 3.** Changes in imports in USD million.

	Kenya		Cambodia	
	Initial imports	New imports	Initial imports	New imports
Imports from 10 of the most affected countries	9,141.81	9,579.48	14,424.14	12,537.68
Total imports	29,991.67	30,262.88	28,290.93	24,120.65
Share	0.305	0.317	0.510	0.520

### How to prepare for trade shocks

In terms of development strategy, the volatility introduced by tariff shocks reinforces the urgency of export diversification. Relying heavily on a few products or markets increases vulnerability to trade policy shifts. Countries that invest in broadening their export base, both in terms of sectors and destinations, are more likely to withstand external shocks and benefit from shifts in global trade patterns.

Countries can benefit from trade shocks if they can step in as alternative suppliers and seize new trade opportunities. The ability to do so depends on infrastructure, compliance capacity, preferential access agreements and the policy environment. For industrializing countries, this underscores the importance of moving beyond passive integration into global supply chains toward active upgrading and value addition.

## Policy Recommendations

The key recommendations for enhancing resilience include:

- 1. Diversification:** Diversifying both end markets and source markets can help countries reduce vulnerability to external shocks and sudden trade policy changes. A broader export base enables economies to better absorb disruptions and capitalize on new opportunities as global trade patterns shift.
- 2. Value addition and upgrading:** Investing in skills development, upgrading value chains, and producing more advanced, less easily substitutable products, can strengthen resilience to trade shocks. Such upgrading allows countries to move up the supply chain, capture greater value, and reduce dependence on low-skill and low-margin exports.
- 3. Strong domestic and regional supply chains:** Building robust domestic and regional supply chains, including integration into initiatives like the African Continental Free Trade Area (AfCFTA), helps local suppliers participate in supply chains and retain more value domestically. Increased domestic linkages also ensure multinational enterprises are better embedded into the local economy, making them less likely to relocate in times of uncertainty.
- 4. Quality infrastructure and standards:** Strengthening quality infrastructure and compliance with international standards, including voluntary sustainability standards, enables exporters to meet evolving market requirements including environmental, social and governance principles and other shifting buyer and consumer requirements. This not only opens access to premium markets but also enhances competitiveness and trust in domestic products.
- 5. Trade policy and policy environment:** A supportive trade policy environment through regulatory harmonization with international standards, clean industry requirements, and export facilitation measures that reduce non-tariff barriers is essential for seizing new trade opportunities and reducing trade distortions. Streamlined regulations and efficient border procedures help businesses adapt quickly to changing global conditions and maintain their competitive edge.
- 6. Investment attraction and facilitation:** Creating a transparent, efficient, and investor-friendly business climate is key to attracting and retaining foreign and domestic investment. Streamlining administrative procedures, enhancing regulatory transparency, and providing aftercare services help investors navigate the market more easily, and support economic diversification, innovation, and resilience by enhancing predictability and confidence.

These strategies have become more relevant than ever in light of recent global disruptions. The COVID-19 pandemic, ongoing armed conflicts, and the proliferation of sustainability-driven legislation have fundamentally altered the landscape of international trade, by exposing vulnerabilities and accelerating the need for structural transformation. Rather than being temporary shocks, supply chain disruptions now represent the new normal. Countries that build domestic and regional supply chains, quality infrastructure, and a robust policy environment will be best positioned to navigate this era of persistent volatility. Furthermore, countries that proactively invest in diversification, value addition and upgrading, through skills development, will be better placed to seize emerging opportunities in global trade.

## Endnotes

1. Fajgelbaum, P., Goldberg, P., Kennedy, P., Khandelwal, A., and Taglioni D. (2024). The US-China trade war and global reallocations. *American Economic Review: Insights*, 6(2), 295–312.
2. The findings presented in this brief are derived from the KITE model. For statistical reasons, the data for China do not include those for Hong Kong Special Administrative Region (Hong Kong, SAR), Macao Special Administrative

Region (Macao, SAR) or Taiwan Province of China. Tariff information is taken from the United States Executive Order 14257 of April 2, 2025 “Regulating imports with a reciprocal tariff to rectify trade practices that contribute to large and persistent annual United States goods trade deficits”. For more information about the KITE model see Mahlkow, H. and J. Wanner. (2023). “The carbon footprint of global trade imbalances”. Kiel Working Paper NO. 2260, IFW.



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