

AT A GLANCE

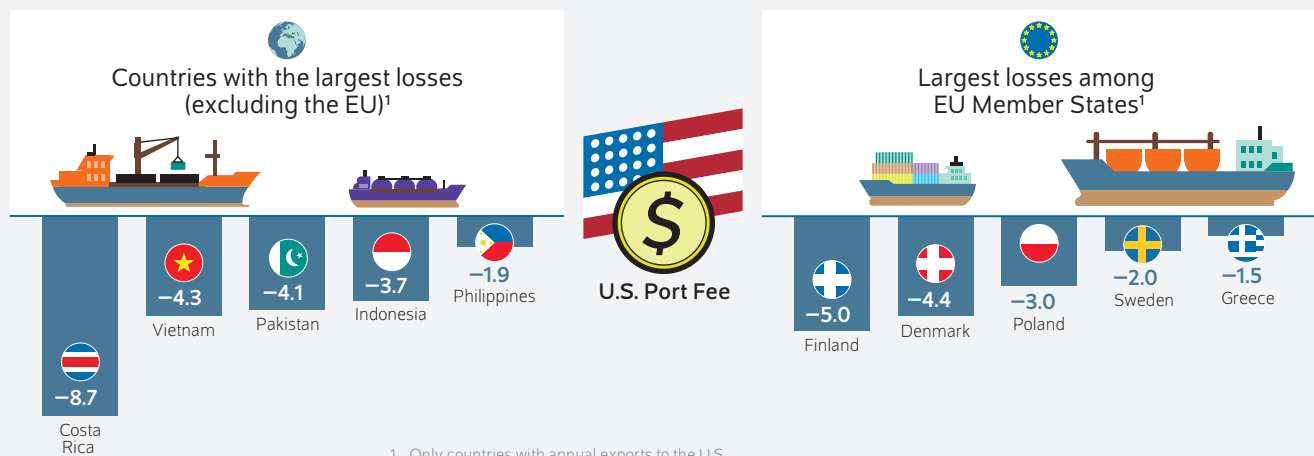
China's dominance in shipbuilding and U.S. trade policy create new risks for Europe and other trading partners

By Sonali Chowdhry, Inga Heiland, and Hendrik Mahlkow

- Since the 1990s, shipbuilding has shifted to China: more than half of newly built ships today originate there
- EU shipbuilding has collapsed: from 17 percent to less than 3 percent of new ships each year in only 30 years
- Ships built in China are now firmly established in global trade flows, including for European exports to the U.S.
- Measures targeting ships built in China, such as the U.S. port fee, have negative consequences for the U.S. itself, the EU, and other U.S. trading partners
- The EU's new maritime industry strategy recognizes these risks, but a systematic assessment of potential impacts is still missing

Global maritime trade: U.S. port fees for ships built in China would have negative global impacts

Change in exports to the U.S. in percent (modeled values compared to 2022)



Source: S&P Global; own calculations.

¹ Only countries with annual exports to the U.S. exceeding five billion U.S. dollars are included.

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FROM THE AUTHORS

"The port fees for Chinese-built ships planned by the Trump administration highlight that China's dominance in shipbuilding could become a new geopolitical risk in maritime trade. Both Europe and many other U.S. trading partners would be negatively affected by the fees."

— Sonali Chowdhry —

MEDIA



Audio Interview with Sonali Chowdhry (in German)
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China's dominance in shipbuilding and U.S. trade policy create new risks for Europe and other trading partners

By Sonali Chowdhry, Inga Heiland, and Hendrik Mahlkow

ABSTRACT

China is now the dominant builder of the world's commercial shipping fleet, building more than half of new ships in 2025. Using new data combining maritime transaction records, ship registries, and vessel positions, this report shows how deeply Chinese-built ships are now embedded in global trade. With new US port fees on Chinese-built vessels potentially starting in November 2026, this report further quantifies the trade effects of such policy. Ultimately the economic burden falls on the US rather than China, with negative spillovers to several other exporters dependent on Chinese vessels. Europe's latest Industrial Maritime Strategy recognizes these emerging geopolitical threats. However, a systematic mapping of countries' dependencies in maritime transportation and their exposure to unilateral policy measures that target these dependencies is still needed.

Maritime transport is the backbone of international trade. For the European Union (EU), 75 percent of external trade in goods is by sea. The ships that carry these goods and the shipyards that build these commercial vessels are increasingly becoming strategically relevant. In recognition of emerging geopolitical risks around maritime transport, the European Commission published its first Industrial Maritime Strategy in March 2026.¹ This agenda explicitly recognizes Europe's maritime manufacturing and shipping industries as strategic sectors and identifies growing dependence on third-country shipbuilding as a risk. It further calls for preserving a critical mass of commercial shipbuilding in Europe, thus securing the bloc's future trade flows, technological know-how, and naval capabilities.

This report presents new quantitative findings that can serve as a basis for policy discussions on this new agenda. It combines maritime transaction data with global ship registries and vessel position data, enabling individual ships to be tracked along trade routes and linked to the countries where they were built.² Global trade flows now rely, to a significant extent, on ships built in China. If these ships become the target of unilateral trade policy measures—as in the case of the proposed U.S. port fees—this will have negative consequences, particularly for countries whose exports are transported by ships built in China.

China is now the dominant builder of new commercial vessels

Global shipbuilding is a concentrated market that has undergone substantial changes. In the mid-1990s, Japan dominated the construction of new dry bulkers and tankers, European shipyards led in container and general cargo vessels, and South Korea occupied a sizable market share in new vessels across different categories. At this time, China's position was

¹ EU Commission press release of March 4, 2026: Commission launches EU strategies for industrial shipping and ports to boost competitiveness across the maritime transport sector (available online last accessed on June 26, 2026. This applies to all online sources in this report unless otherwise noted).

² Sonali Chowdhry, Inga Heiland and Hendrik Mahlkow (2026): Quantitative trade with ships. DIW Discussion Paper No 2158 (available online).

marginal, with less than 10 percent share of new builds in any ship category.

Since then, the market has shifted dramatically (Figure 1). Each year China now builds more than half of all ships across multiple categories, including, for example, dry bulk carriers (62 percent), container ships (58 percent), and general cargo vessels (53 percent). Chinese shipyards are also receiving the bulk of new orders for vessels, driven by demand from both domestic shipowners in China and foreign shipowners, including those from Japan.³

China's rise in shipbuilding has been driven by long-standing industrial policy. Shipbuilding was designated a national "pillar" industry in China's 11th and 12th Five Year Plans, spanning 2006 to 2015, with shipyards benefiting from a package of state support measures including entry subsidies, subsidized coastal land, low-interest long-term financing, and access to inexpensive steel.⁴ The industry retains its strategic status in China's latest plan for 2026 to 2030, which targets the development of high-end shipbuilding and marine engineering equipment, thus signaling that China intends to pursue high-value segments in this sector.

China's gains have also come with collapsing shares of shipbuilding in Japan and Europe for large and modern commercial vessels. By number of vessels delivered, Germany's share of global newbuilds fell from around 6 percent in 1995 to just 0.1 percent in 2025, while the EU's fell from 17 percent to below 3 percent. South Korea remains competitive, especially in high-end container ships and tankers, but is increasingly second to China in terms of the newest ships. The result is a shipbuilding industry that is both more concentrated compared to 1995 and reoriented toward China.

Chinese ships are now deeply embedded in global trade

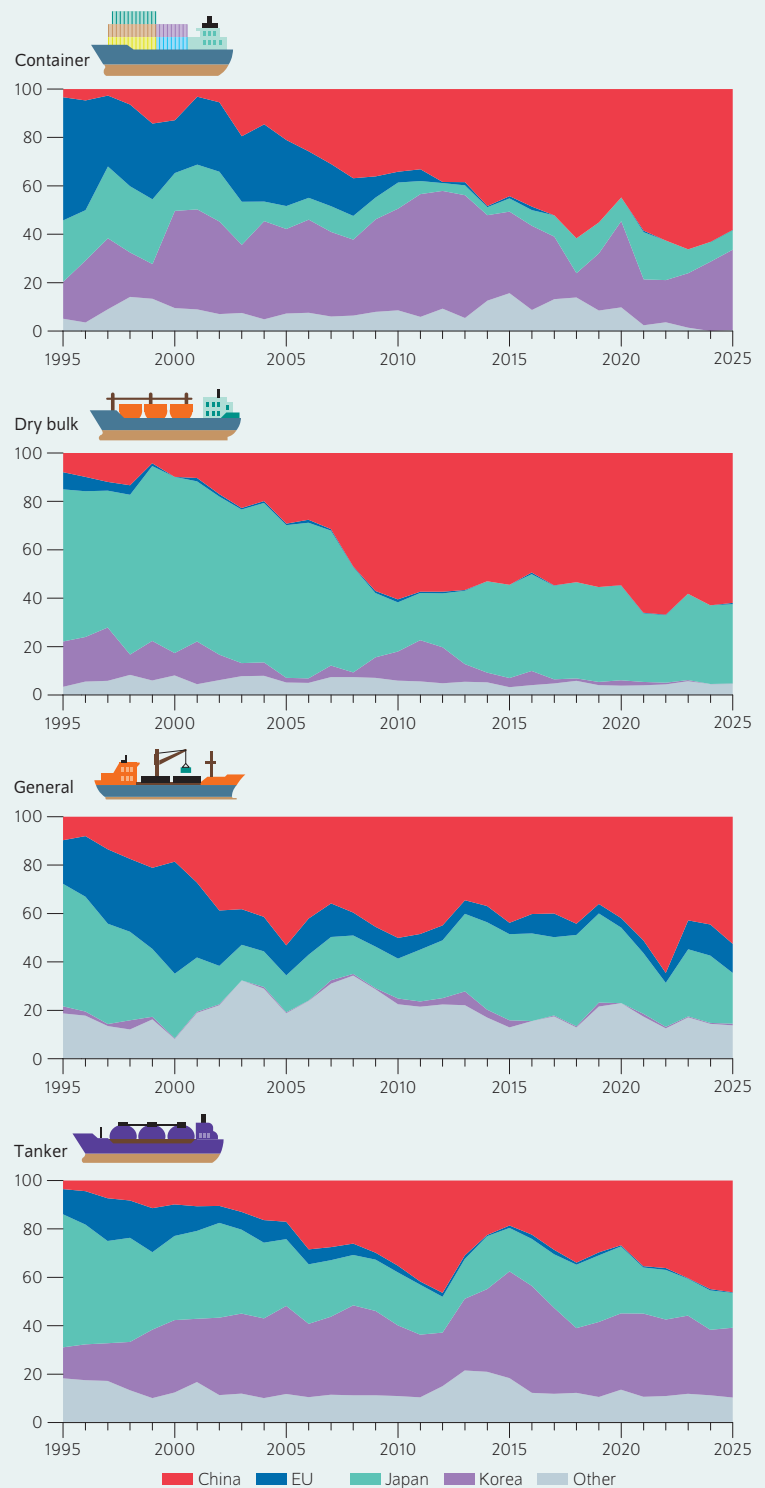
Today, Chinese-built vessels are an integral part of the global merchant fleet and are active across major trade corridors and carriers. In 2024, nearly one in four US importing firms received at least one shipment on a Chinese-built vessel, with Chinese-built ships accounting for 28 percent of all vessels arriving at US ports in that year.

The reach of Chinese-built vessels extends well beyond direct trade with China. Countries such as Mozambique, Costa Rica, and Bolivia rely on Chinese-built ships for more than 40 percent of their maritime exports to the US (Figure 2).

Exposure is particularly high across South-South and emerging market corridors. In 2024, over 48 percent of container ship port calls from the Middle East and North Africa to

Figure 1

Share of Newly Built Merchant Ships In Percent



Note: The percentages are based on all internationally registered ships built between 1995 and 2025. In 2025, these accounted for more than 75 percent of the global fleet.

Source: Lloyd's Register; own calculations.

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China has expanded its global market share of newly built merchant ships since 1995, increasing it to more than 50 percent in some categories.

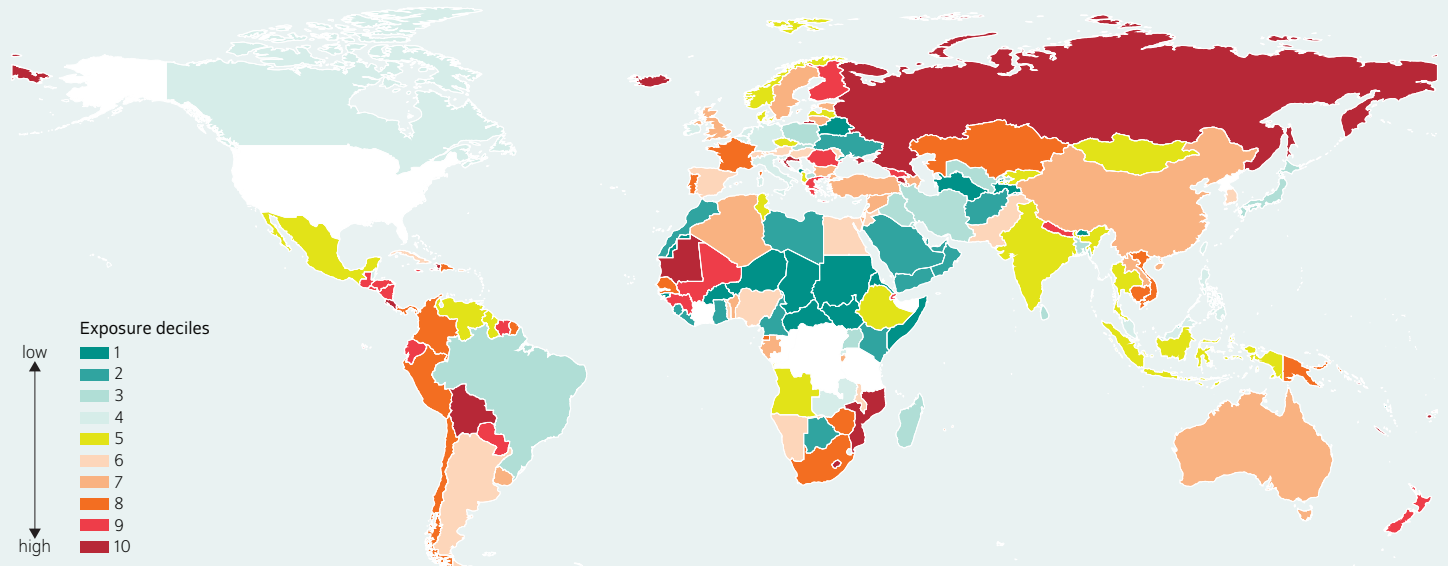
³ Rob Willmington (2025): China tightens grip on bulk carrier and tanker newbuild orderbook. Lloyd's List (available Online).

⁴ "Authorized Release from the Two Sessions: Outline of the 15th Five-Year Plan for National Economic and Social Development of the People's Republic of China", March 13, 2026. (In Chinese, available online)

Figure 2

Maritime exports to the U.S.: Share of shipments carried by ships built in China

In Percent, countries grouped by deciles



Note: Calculations based on export figures for 2022. Countries in the top (tenth) decile transport more than 40 percent of their maritime exports to the U.S. on ships built in China. Countries in the middle deciles transport between 10 and 15 percent, and countries in the bottom (first) decile transport less than 3 percent.

Source: S&P Global; own calculations.

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Many countries exporting to the U.S. transport most of their cargo on ships built in China.

Sub-Saharan Africa were made by Chinese-built vessels, as were 42 percent of container port calls between Latin American and Caribbean economies. More than 22 percent of port calls for vessels transporting goods between EU ports and those in the rest of the world (excluding China) were on Chinese-built vessels. For container ships alone, the share was 27 percent. At Germany's largest container ports, Hamburg and Bremerhaven, Chinese-built vessels accounted for 33 and 32 percent of container ship port calls in 2024, respectively.

All key global carriers also deploy Chinese-built vessels as part of their operating fleets. COSCO and CMA CGM fleets have the highest share, with 56 percent and 43 percent of their ships built in China respectively. Germany's Hapag-Lloyd has 20 percent of its fleet built in China. Taken together, this suggests that Chinese-built vessels are now embedded throughout global supply chains, thus making them difficult to substitute quickly in the short- to medium-term.

Planned US port fees targeting Chinese ships have global implications

In early 2025, US President Donald Trump proposed port fees on Chinese vessels docking at US ports, framing the measure as both a national security response to China's dominance in the maritime sector and a strategy to revitalize

American shipbuilding. The fees took effect in October 2025 but were then suspended for one year in November 2025 as part of a US-China trade truce. Unless the suspension is extended, the fees will resume in November 2026.

This policy marks a further escalation in US-China trade tensions as it targets not only traded goods but also the ships that carry them. Crucially, the effects of this policy will extend beyond China and the US since they affect US imports from other countries relying on Chinese ships. The cost of such port fees is measured using a quantitative trade model that allows for simulating its trade effects (Box).

In the simulations, the port fee enters as an additional 10 percent tax on all imports of goods arriving in the US on Chinese-built vessels. The actual fee structure is significantly more complex, with different rates per net tonnage applying to vessels that are Chinese-operated or owned versus Chinese-built, with exemptions based on vessel type, size and route length. Therefore, these findings should be interpreted as showing the direction of the policy's effects and underlying economic mechanisms, rather than as precise predictions of the outcomes.

The results show that such port fees will adversely impact the US economy, with its imports and exports contracting by 0.2 and 0.3 percent, respectively. The fees raise the prices

Box

Empirical methodology

The impact of trade policy changes on trade flows is identified by conducting simulations with a quantitative trade model. This model is a mathematical representation of the global economy that includes extensive input-output linkages between countries and sectors, thus mirroring a world with global value chains.

The model further incorporates a nested choice of how trade flows between countries across transport modes (sea, air, and land) and across vessels within maritime shipping. A central input to this model is how easily trade can shift between these options when relative costs change.

Estimates from the literature are used to model the shift between different modes of transport.¹ For maritime shipping, a new estimate of the elasticity of substitution between vessels, exploiting the 2016 expansion of the Panama Canal as a quasi-natural experiment, is provided. The expansion allowed larger vessels to use the Canal for the first time, creating a sharp change in fleet composition on affected routes.

Finally, the model is calibrated using the 2025 release of the OECD Inter-Country Input-Output (ICIO) database for the reference year 2022. This provides the baseline global value added, gross output, as well as bilateral trade across countries and sectors. The US port fees are then implemented as an additional 10 percent tax on all imports of goods arriving in the US on Chinese-built vessels.²

¹ Edoardo Tolva (2025): One way or another: Modes of transport and international trade. ISEG Research and Universidade de Lisboa Technical report (available online).

² For further details of the model and its mechanisms, see Chowdhry, Heiland and Mahlkow, *ibid*.

of intermediate inputs, causing US producers to lose competitiveness, while the decline in economic activity further reduces demand for foreign goods in the US. Due to China's dominance in the bulk shipping sector, US importers of commodities are particularly hard hit.

The hardest-hit exporters are smaller, shipping-dependent economies whose US-bound trade relies heavily on Chinese-built ships. According to the model results, exports to the U.S. from Costa Rica will decline by about 8.7 percent, from Vietnam by 4.3 percent, from Pakistan by 4.1 percent, and from Indonesia by 3.7 percent (Figure 3). Among EU Member States, export losses to the U.S. are highest for Finland (5.0 percent), followed by Denmark (4.4 percent), Poland (3.0 percent), and Sweden (2.9 percent). For these economies, maritime shipments to the US rely more heavily on Chinese-built, typically bulk, vessels. Their total exports, however, decline far less, as trade diverts to other markets.

Figure 3

Impact of the U.S. port fee on exports to the U.S.
 Percentage change compared to 2022


Note: The values provided are based on simulations conducted using the model examined here and thus should be understood as estimates of possible effects rather than precise predictions.

Source: S&P Global; own calculations.

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Countries such as Germany, which rely less on ships built in China for their exports to the U.S., benefit from other countries' losses in exports.

Germany's exports to the US, by contrast, even rise slightly (by 1.7 percent), as do China's own exports to the US (1.5 percent), because (i) the fee falls on where a ship was built, not on whose goods it carries; and (ii) these economies gain market shares from other exporters that are even more reliant on Chinese ships. Thus, the US administration's planned port fees not only generates domestic losses for the US economy but also results in negative spillovers to several other economies that export using Chinese vessels to the US. In the absence of accompanying industrial policy along the supply chain, such port fees alone are unlikely to draw meaningful investment away from the world's leading shipbuilding economies or shift demand towards American shipyards. Rather, the initial strategy of carriers is to avoid port fees by redeploying vessels from Japan or South Korea.⁵

Conclusion: Europe should map its dependencies in the maritime transportation network

Europe's new Industrial Maritime Strategy reflects a growing awareness of a new frontier in geopolitical rivalry that extends beyond what is traded to the transportation of trade itself, with strategic investments in ports, shipbuilding, and influence over key arteries of global trade, such as the Panama Canal. Thus, the European Commission proposes an Industrial Maritime Value Chains Alliance for increasing

⁵ Greg Miller (2025): Most Shipping Lines Can Avoid US Port Fees but Cosco Faces Major Challenge. Lloyd's List (available online).

investment in innovative ship technologies alongside monitoring of global shipbuilding markets, and export credits for green shipping.

To summarize, countries and carriers need a clearer picture of their dependencies within maritime shipping and their exposure to policies that weaponize these dependencies. The analysis in this report provides initial evidence

and demonstrates the importance of using novel trade data and detailed trade models to evaluate the impact of extra-territorial transport policies, such as the US port fees on Chinese ships. Germany, as one of Europe's most trade-intensive economies that is home not just to a major cargo shipping carrier, but also two busy EU shipping hubs in Hamburg and Bremen, should increasingly contribute to this effort.

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