Responding to China's Growing Influence in Ports of the Global South

By Daniel F. Runde, Austin Hardman, and Clara Bonin

Port infrastructure around the world is critical to U.S. economic and military security. Although vitally important, it is an investment area where China is outpacing the United States. China now dominates maritime trade in terms of volume, shipbuilding activity, and construction and ownership of ports around the world. China's position puts U.S. economic interests and national security priorities at risk.

A strategy to counter China's influence in Global South ports is an important piece of a larger program to **enable a better offer** to the Global South. Actions include creating a port infrastructure strategy, promoting transparency in global port infrastructure procurement, and using other tools to better compete against China. Several policy recommendations are not unique to ports but apply to other infrastructure investment areas, such as undersea cables or digital architecture. China's **dominance of overseas ports** is well established, but the U.S. policy response is lacking. This policy brief initiates a much-needed conversation and offers preliminary suggestions for consideration and further assessment.

The Global South's Demand for Port Infrastructure

During the past 25 years, **international trade patterns** have shifted in favor of the Global South. Even though North-North trade is responsible for the biggest share of international trade (**37.1 percent**), South-South trade has increased by **14.1 percent** since 1995, reaching a 25 percent share. Trade between developing countries has increased by an average annual rate of **9.8 percent** since 2000, reaching $5.3 trillion in 2021. Over the same period, world trade grew at an annual rate of 5.5 percent. According to the International Monetary Fund (IMF) **2024 *World Economic Outlook***, world trade is expected to increase by 3 percent in 2024 and by 3.3 percent in 2025. As a result, the demand for port infrastructure from the Global South will continue to rise as these countries seek to develop and integrate into global trade.

Maritime transport is the backbone of international trade. Around **80 percent** of the volume of international trade in goods is carried by sea; this figure is even greater for developing countries. Lower-income countries and small islands are **1.5 to 2 times** more reliant on their ports for global trade than the global average. **High-quality port infrastructure** supports successful economic growth, especially in export-driven economies in developing regions. It attracts investment in production and distribution systems, supports the growth of manufacturing and logistics, and generates more employment. Port development supports supply chain diversification, which is particularly important in the face of shutdown due to accidents, pandemics, or wars.

In 2000, the United States was the top trading partner for over **80 percent** of countries. As of today, this figure has shrunk to 30 percent, while China has now become the **top trading partner** for more than 120 countries. China is **South America's** top trading partner, and it is **Africa's** largest trading partner in terms of total volume, dwarfing U.S.-Africa trade by a factor of four, according to the **United States Institute of Peace**.

China's Leadership in Port Infrastructure

Within this context, China has significantly invested in the Maritime Silk Road (MSR) to increase trade route options and bypass choke points, posing a significant challenge for U.S. trade. In 2013, Chinese president Xi Jinping unveiled the **Belt and Road Initiative** (BRI), an ambitious political-economic infrastructure initiative to link East Asia and Europe through land, sea and air under China's leadership and with the backing of its resources. The twenty-first-century MSR is responsible for the BRI maritime routes that connect China to Europe and the Arctic Ocean via the South China Sea and the Indian Ocean. President Xi has repeatedly emphasized that economic powers must be maritime and shipping powers. As China now positions itself as the **world's top exporter**, **top shipbuilder**, and **largest trading nation**, with around 95 percent of its international trade carried out through sea-lanes, the Chinese Communist Party (CCP) will soon dominate global maritime trade.

The Indo-Pacific is a major hub of global commerce and will continue to be the main target for China's maritime control. The 10 busiest container ports in the world are located along the shores of the Pacific and Indian Oceans. The Indian Ocean hosts **80 percent** of China's imported oil and **95 percent** of China's trade with the Middle East, Africa, and Europe. China also has a strong presence in port construction in the developing world: it operates or has ownership of **91 active port projects** across the globe where military use is a possibility, providing it with a foothold in every continent except Antarctica. These projects are part of the MSR network, which, according to the People's Republic of China (PRC) **State Council Information Office**, has reached 117 ports across 43 countries, mostly in the Global South. China's position of control and influence over the majority of port infrastructure globally poses a significant economic and military security threat to the United States. Simply put, China could use its power to interfere with operations that rely on port access—including military and economic operations—and are vital to U.S. interests.

Ports are one strategic infrastructure investment area where China is outpacing the United States. In addition to **technology**, digital infrastructure, and energy infrastructure, China has made significant and strategic investments in ports that are highly connected to global trade networks and critical to the global flow of goods. It has invested in port projects in 16 of the top 20 countries or territories for **shipping connectivity**. Six of those countries are from the Global South: Egypt, Malaysia, Saudi Arabia, Thailand, the United Arab Emirates, and Vietnam. More than **27 percent** of global container trade last year passed through terminals where leading Chinese and Hong Kong-based firms held direct stakes.

China's state-owned enterprises (SOEs) also dominate in financing, design, construction, and management of overseas port infrastructure. Between 2010 and 2019, Chinese companies invested roughly **$11 billion** into overseas ports. China's two main SOEs involved in port infrastructure are COSCO Shipping Ports, the **world's largest shipping company** and port terminal operator, operating and managing **371 berths** globally, and China Merchants Ports, the **sixth-largest port terminal operator** globally. Additionally, the **China Communications Construction Company Limited** (CCCC) is the biggest port design and construction enterprise in the world. It shapes more than 70 percent of the national standards for the water transportation industry and designed 7 of the top 10 ports. State support to Chinese shipping companies in their endeavors totaled an estimated **$132 billion** between 2010 and 2018.

Concerns about China's Port Infrastructure

China-backed infrastructure projects permeate the Global South. However, these projects often come with unsustainable financing terms, a lack of transparency, and a clear disregard for environmental and social norms. China even **imports its workforce** and prevents locals from profiting from the investment projects. In its first 10 years, cumulative BRI engagement surpassed **$1 trillion**, and the developing world amassed an estimated **$385 billion** in "hidden debt" to China. For each dollar of aid to low- and middle-income countries, China has provided **$9 of debt**.

Sri Lanka has accumulated more than $8 billion in debt to Chinese SOEs, of which **$1.1 billion** was used to construct Hambantota Port. In 2017, when the Sri Lankan government was struggling to repay its debts, it had agreed to lease the port to China for 99 years in exchange for debt reduction. However, in 2024, Sri Lanka had to **renegotiate its debt** after it defaulted on its foreign loans in 2022. The situation raised concerns about China's economic and geopolitical influence through predatory lending and the risks for smaller countries that undertake infrastructure deals with China.

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Similarly, as of 2022, Pakistan owed **$23 billion** to China. After large-scale borrowing, particularly in relation to the China-Pakistan Economic Corridor (CPEC), Pakistan is struggling to repay its debt and faces an economic crisis. These loans may have contained hidden terms that hinder Pakistan's economy and force the country to depend on China. Although **some analysis** dismisses accusations of China's debt-trap diplomacy, other issues surrounding Chinese lending remain, including lack of transparency, economic viability, social and environmental concerns, and wielding debt for political leverage.

Additional concerns remain about China's port infrastructure due to its potential dual use for commercial and military purposes. Out of the 70 commercial port projects in the Global South, an estimated **55 projects** have the potential for naval use as well. That said, naval use is more likely to occur in ports where China owns the majority share—currently **10 port projects**.

There is growing reason for concern as Chinese port projects become more ambitious in terms of uses and strategic location. In 2017, China established its **first overseas military base** in Djibouti at the entrance of the Red Sea, one of the world's busiest shipping lanes, **six miles** from a U.S. military base. There are concerns about similar attempts to establish a military presence in other parts of the Global South. U.S. officials suspect that China and Cambodia made a deal allowing Chinese armed forces to use **Ream Naval Base**, strategically located on the country's southern coast facing the Gulf of Thailand, on the heels of elevated conflict with the Philippines and others in the South Sea. The Cambodian government has denied these accusations. Similarly, in the United Arab Emirates, China is accused of attempting to construct a **clandestine military facility** in the port of Khalifa, outside Abu Dhabi. **China** is also attempting to build a military base on the Atlantic coast of Africa.

In addition to commercial and military use, port infrastructure could also be used for **spying and intelligence gathering**. With access to the business trade hubs, China could spy on U.S. commercial and military movements. A 2024 congressional probe showed **communications equipment** in Chinese-made cranes at U.S. ports, suggesting vulnerabilities to supply chains, trade data, and other sensitive information. China has secured a commanding position through Logink (also known as the National Transportation and Logistics Public Information Platform), a Chinese state-owned digital logistics platform. At least **24 ports** worldwide have adopted the Logink system, which could allow China to access significant amounts of confidential information related to transportation, pricing, and management of goods (including military equipment), threatening U.S. **economic and military security**.

China is also exporting **container cranes** from Shanghai Zhenhua Heavy Industries Company Limited (ZPMC). ZPMC dominates the global market for container cranes with a staggering 70 percent market share. For example, ZPMC manufactures 80 percent of the cranes used in U.S. ports; this includes **10 strategic seaports**. These cranes come equipped with **sensors** that can track container details, which raises concerns about Chinese access to information about shipped goods, including U.S. military equipment.

U.S. Activity in Port Infrastructure

Today China strongly outperforms the United States in the financing, building, and management of ports. The United States has a limited number of ports, and its infrastructure is deficient and vulnerable to inclement weather. Currently, the United States has 208 commercial ports—up from **178 in 2010**. U.S. ports are either privately owned and operated, or they are managed by federal, state, or local government or quasi-governmental authorities. The owner of a U.S. port might lease port infrastructure to a terminal operator in charge of maintaining equipment and buildings. In comparison, China has over **2,000 commercial ports** domestically and nearly 100 ports abroad. Furthermore, U.S. port companies do not score well in global rankings. None of the world's **top 10 shipping companies** or **top 10 seaport operators** are American, and only four U.S. ports are among the top 50 busiest ports in the world. None of the U.S. ports make it into the Container Port Performance Index top 20 list.

In addition, U.S. port infrastructure is largely outdated. The 2021 Report Card for American Infrastructure by the American Society of Civil Engineers gives a **B-minus** to U.S. port infrastructure. According to the ***Freight Intermodal Connectors Study***, 91 percent of U.S. ports have a fair, mediocre, or poor rating: 35 percent are fair, 19 percent are mediocre, and 37 percent are poor. At the same time, U.S. ports have been increasingly vulnerable to climate. In 2022, Hurricane Ian forced temporary closures of seven major U.S. ports. Droughts in the Panama Canal disrupted vessels serving U.S. East Coast ports. Besides, many U.S. ports have **infrastructure limitations** that do not allow them to receive larger vessels, according to the U.S. Department of Transportation.

In terms of overseas ports, the United States severely lags China, as the United States does not manage or own any commercial ports outside its territories. The U.S. International Development Finance Corporation (DFC), however, is beginning to invest in some port infrastructure abroad. In May 2023, the DFC announced a $150 million commitment to Yilport Terminal Operations to expand and modernize the Puerto Bolívar container port in Ecuador. This is a significant step forward, but a more robust pipeline of projects must be developed.

In November 2021, the White House announced the **Biden-Harris Action Plan for America's Ports and Waterways**, recognizing that U.S. ports are underfunded and that poor infrastructure has important costs for the U.S. economy and global competitiveness. The administration under President Joe Biden developed the Bipartisan Infrastructure Deal (BID) and the Port Infrastructure Development Grant (PIDG) program, which both allocate investment to improve port infrastructure. The U.S. Department of Transportation will award $230 million to the PIDG, and the Biden administration committed $17 billion to the BID. While this is a good start, much more funding should be allocated, with a specific strategy focusing on the Global South. Currently, the U.S. government does not consider the **commercial maritime industry** as critical infrastructure, making it even more difficult to prioritize the sector.

Moreover, the United States could also draw on the financing and expertise of multilateral development banks (MDBs) and international financial institutions (IFIs) when it comes to ports infrastructure. These institutions provide financing and technical assistance to the private sector in middle- and low-income countries, help de-risk investments, and catalyze private capital. In 2021, MDBs were the second-largest financier in these countries and financed **9 percent** of the total value of private investment in infrastructure projects. From 2010 to 2021, the largest share of MDB financing of private investment in infrastructure projects went to the transport sector and represented **38 percent** of all financing. In 2023, a total of 18 port projects in 11 countries received investments worth $4.9 billion, twice the amount in 2022, according to a **World Bank report**. The Latin America-Caribbean region had the highest level of private investments for ports, reaching $1.5 billion in five ports in Brazil and $975 million in one port in Peru.

However, the U.S.-led multilateral lending process has discouraged developing countries. Compared to Chinese lending under the BRI, Western MDB loans tend to be less attractive, as they are more difficult to apply for and are contingent on more rigorous vetting requirements and standards for bankability. China, by contrast, is often involved in predatory lending, which imposes unfair terms on the borrower and makes its deals look more attractive on the surface. To compete with China, Western MDBs must streamline their services and strike a better balance between managing risk and delivering results.

China also has a **growing influence** in these traditionally U.S.-led institutions. China now has the second-highest aggregate voting power in the IFIs it supports, even though it significantly trails the

United States. Despite many Chinese firms being sanctioned or **debarred** from the World Bank for fraud and corruption, China has consistently ranked among the top countries receiving MDB contracts, and Chinese firms easily outperform firms of other countries in securing contracts, according to the **Center for Global Development**.

Recommendations

The United States cannot respond on its own to the increasing Chinese presence in Global South ports; it must rely on the MDB system, a strong interagency process, and allies and partners to offer better terms and financing to counter China's growing influence in port infrastructure in the Global South. Some initial recommendations are put forward in this paper, but further dialogue and research are needed to devise specific actions so the United States can lead on this important infrastructure.

1. Devise a Clear National Security Strategy on International Ports

The next U.S. presidential administration should develop a clear port infrastructure strategy to convey why a Global South port infrastructure presence is in the U.S. security interest. The strategy should focus on immediate concerns and a long-term vision for working with allies and becoming an effective competitor and alternative to Chinese investments. This strategy must be followed by a streamlined interagency approach throughout the whole government. Currently, U.S. government efforts on the matter are siloed, but the administration can fix this situation if it provides a clear strategy and elevates ports to a top priority. Consolidated interagency efforts will provide more focus and avoid redundant efforts.

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The strategy should focus not on the hundreds of ports across the Global South but on the top 15-20 most strategic locations and then establish a U.S. strategy on how to better compete in each of those ports in the long run. The United States should then use all its available soft-power tools to establish a strong presence in those ports and the surrounding region.

2. Partner with Allies and Locals

The United States needs to develop a strategy and partnerships with allies to secure safe access to ports abroad while also ensuring allies have a stake in building new ports for the Global South (see annex). For example, in Rijeka, Croatia, the United States **used diplomacy** to sway Croatia to negotiate a contract with Maersk instead of a Chinese operator. Rijeka is strategically valuable because the U.S. military and NATO use the port to move equipment, and it provides access to central European markets.

The United States should further rely on **commercial diplomacy** to engage in government-to-government trade assistance with foreign officials on behalf of U.S. companies' interests. The **Advocacy Center**, part of the International Trade Administration, offers support to U.S. businesses to win foreign government procurements. The **Transaction Advisory Fund** (TAF), a function of the Infrastructure Transaction and Assistance Network (ITAN), launched in 2018, provides support to government agencies in the Indo-Pacific region, the Western Hemisphere, and sub-Saharan Africa for developing sustainable, transparent, and high-quality infrastructure. International legal funds like the TAF are vital in helping ministries negotiate transparent and fair contracts. TAF funding helped **Myanmar renegotiate** the Kyaukphyu port, a prime example of promoting transparency and quality in instances where the U.S. private sector does not offer a competitive alternative.

3. Envision New Tools and Streamline Financing for Port Infrastructure

Competing with China within the global port infrastructure does not mean owning, building, and financing every port. Instead, U.S. companies can become shareholders or board members at international ports. Alternatively, the United States can offer attractive deals that are not directly related to a port but within the same city, thereby providing more value to the municipal government. Other strategies for effectively competing with China's influence in the region include buying land surrounding the ports, engaging the private sector, and financing alternative ports in the surrounding region.

In this regard, U.S. corporations often hesitate to invest in ports because there is limited commercial return—unless the government can guarantee access to capital. This is where the U.S. government can step in. The U.S. Agency for International Development (USAID) can play a role in catalyzing **private sector investment** in critical infrastructure. The DFC and U.S. Export-Import Bank can also be valuable tools in countering China's influence. For example, DFC agreed in November 2023 **to fund** Colombo West International Terminal Pvt. Ltd. (CWIT), a consortium of India's largest port operator, Adani Ports and SEZ Ltd., for $553 million in Sri Lanka. In 2019, the United States and the Socialist Republic of Vietnam signed the **Cooperation Framework to Strengthen Infrastructure Finance**, aimed to support infrastructure development through market-oriented and private sector investment. The governments committed to remove regulatory, market, and legal barriers to private sector investment and prioritize development of financial instruments, project finance, the local debt market, capital markets, and analysis of government liabilities.

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The United States can increase the overall funding available for the private sector to invest in the space by pulling together resources within capital markets. The United States should incentivize IFIs and MDBs, such as the Inter-American Development Bank and the International Finance Corporation, to invest in Global South port projects, which will attract U.S. companies and other private sector engagement. Teaming up with other countries will allow the United States to pool funding through a consortium focused specifically on Global South ports.

4. Establish Procurement Best Practices

The United States should strive to promote transparency in global port infrastructure procurement. The rule of law, transparency, public engagement, and better awareness about how to govern ports will inform the public and ensure ports follow best practices. The United States and its allies can establish a market standard by picking 10-15 ports and reforming them thoroughly. For example, most economic coercion comes out of port terminal operating contracts and procurement. After reforming a select group of ports, companies will be more interested in operating in the ports that are more transparent.

China is quick with financing port construction and maintenance, but its BRI contracts lack transparency and impose questionable and opaque **confidentiality clauses** that are predatory in nature. In a **report** analyzing 100 debt contracts between China and foreign governments, 100 percent of China Development Bank contracts and 43 percent of contracts held by the Export-Import Bank of China required such clauses. Unfortunately, the U.S.-led multilateral lending process does not offer attractive counteroffers, as they tend to be less user friendly and have more rigorous vetting requirements and standards for bankability, leaving developing countries vulnerable to using China as a **lender of last resort**.

The U.S. government could use platforms such as the Customs Trade Partnership against Terrorism to enable the private sector to share information on unfair practices with governments suffering from predatory circumstances. The Department of Justice could offer technical legal assistance to foreign countries to help litigate such matters. The United States helped the Congolese mining company **Gécamines** reach a settlement with a Chinese mining company over royalties owed over a copper and cobalt mine.

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Furthermore, the role of investigative journalists is crucial in exposing corruption within the ports sector. The market does not have the best reputation, and it is important to expose collusion, human trafficking, and monopoly. Also, the United States can support public financial management education within the governments that oversee port infrastructure so they can identify deals that are too good to be true.

5. Provide Cutting-Edge Technology

The maritime sector is dangerously reliant on the PRC for equipment and technology. The U.S. Select Committee on the Chinese Communist Party released an **investigative report** that showed extreme vulnerabilities in ZPMC crane control systems produced in the PRC, software used at U.S. maritime facilities, and other maritime infrastructure components. The United States has a competitive advantage over China in advanced technology, such as within the green energy transition, that can be applied within the port infrastructure space. If the United States can transform a port through technology that improves efficiency and saves on transaction costs, then it can offer something China cannot.

The United States' advantage over China should be its ability to compete for better maintenance and product quality. ■

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Annex: Strength of U.S. Allies

While the United States lacks prominent companies and good port infrastructure, several of its allies have strategic ports, as well as construction, shipping, and port operator companies the United States could partner with. Here are a few notable examples:

- **Australia.** Australia has funded several infrastructure projects and has worked with many Pacific Island countries on improving their transportation networks. After the Asian Development Bank, Australia is the **top infrastructure financier** to Pacific countries. As of June 2023, the Australian Infrastructure Financing Facility for the Pacific (AIIFP) has allocated finances for 13 projects that span 8 countries in the Pacific.
- **Japan.** Overall, Japan has built a successful transportation industry and is an increasingly active player in the financing of port infrastructure abroad, specifically in the **Indo-Pacific**. Japan is collaborating with India to develop the **Matarbari port** in Bangladesh, off the coast of the Bay of Bengal, by 2026. As the shipment of oil from the Middle East to Japan flows through this route, the Bangladeshi port is highly strategic. Moreover, the Japan Bank for International Cooperation (JBIC) and Nippon Export and Investment Insurance are financially supporting the Namibe Bay Integrated Development project in Angola, which was among the **10 most expensive port construction projects** worldwide in 2022. Japanese firm TOA Corporation was responsible for the port's construction. In addition to financing port development, Japan holds **significant shares** in the ports it constructs. For example, Japanese companies currently hold a **35 percent** share in Thilawa port, a project in Myanmar that was **finalized in 2018**.
- **Taiwan.** Taiwan-based **Evergreen Marine Corporation** (EMC) is one of the top 10 port operators worldwide. It operates three major transshipment hubs, two of which are in Taiwan (Taichung Container Terminal and Kaohsiung Container Terminal) and one of which is in Panama (Colon Container Terminal). The Taiwanese firm is also active in the United States, Europe, and Asia. Taiwan's Yang Ming Marine Transport Corporation is the **ninth-largest shipping company** in the world, offering international logistics and shipping services. It operates across 170 ports in more than 80 countries, including the Netherlands, Belgium, the United States, and Taiwan.
- **Germany.** Hamburg is Germany's **main port** and the third largest in Europe in terms of tonnage traffic. The port completed **renovation of its fairway** in 2022 to accommodate **megamax ships**, the largest container ships in the world, up to 62.50 meters wide and 400 meters long. Hapag-Lloyd, a German container shipping and **logistics** company, is one of the **10 largest shipping companies** worldwide, with 265 ships operating between 600 ports within 130 countries.
- **The Netherlands.** The **third-largest port operator** worldwide, APM Terminals is headquartered in The Hague and is an international container terminal operating company. APM Terminals operates in 75 ports and terminals across 42 countries. It handles more than 30,000 vessel calls and more than 11 million moves annually. **Rotterdam port** is the largest European seaport and the first fully automated port of the continent, with four terminals. It also has the highest container capacity in Europe's northwest and can welcome the world's biggest container ships thanks to its depth. Hutchison Port Holdings (HPH) and MSC subsidiary Terminal

Investment Limited (TIL) are planning to develop a fifth fully automated container terminal that should be completed in 2027.

- **South Korea.** South Korea has a strong transportation industry. It hosts Busan port, the **sixth-largest container port** in the world in terms of tonnage traffic. Recently, the port has been upgraded with a seventh **fully automated container terminal**. Busan ranks **twenty-second** on the World Bank's 2022 Container Port Performance Index. South Korea's Hyundai Merchant Marine is the **eighth-largest shipping company** globally and operates a fleet of over 160 vessels, serving more than 100 countries and owning container terminals in South Korea, China, and the United States. Bilateral engagement between the United States and South Korea has increased in the past few years and has led to several joint initiatives, including ones between the DFC and the **Export-Import Bank of Korea** (KEXIM).
- **United Kingdom.** The **UK ports industry** is the second largest in Europe, hosting 120 commercial ports and providing transportation for **95 percent** of the country's imports and exports. The United Kingdom also has the **ninth-largest shipping fleet** worldwide. Associated British Ports (ABP) is the **leading port operator** in the country, responsible for 21 ports across Britain. The port of Felixstowe is the **busiest container port** in the country and handles **48 percent** of the country's container trade.