

Overcoming Barriers to U.S.-South Korea Shipbuilding Cooperation

By J. James Kim and Lydia Shanklin Roll

The U.S. shipbuilding industry reached its zenith during World War II, after which it has been in a precipitous decline. The United States' current global market share in commercial shipbuilding is 0.04 percent, an output insufficient to meet commercial and military shipbuilding needs.¹ Senator Roger Wicker (R-MS) could not have said it better: "If we threw a zillion dollars at the Department of the Navy today, we could not build the ships because we do not have the industrial base."² Recently, however, some policymakers and analysts have concluded that working with allies may offer the best path to rebuilding the U.S. maritime industry.³ Discussions around how the United States and South Korea might collaborate to address these issues have been fueled by Hanwha Group's purchase of the Philly Shipyard in late 2024 and multiple mentions of U.S.-South Korea shipbuilding cooperation by U.S. President Donald Trump. The first such mention occurred during a phone call with then South Korean President Yoon Suk Yeol on the day after the 2024 U.S. presidential election.⁴ Since last November, President Trump has issued an executive order laying out his plan for "Restoring America's Maritime Dominance," praised the South Korean shipbuilding industry, and discussed South Korea's "Make America Shipbuilding Great Again" proposal with South Korean President Lee Jae Myung in the Oval Office.⁵

Increasing U.S. shipbuilding capacity for both commercial and military vessels is seen by policymakers and analysts as a key national security priority, particularly vis-à-vis any potential future conflict with China, which leads the world in shipbuilding output.⁶ South Korea, a key U.S. ally, has the second-largest shipbuilding industry globally, built on a high-efficiency, high-output model that is known for its innovative approaches.⁷ As such, South Korea provides perhaps the best opportunity for allied cooperation in shipbuilding; however, this paper argues that for this partnership to succeed, South Korean shipbuilding investments need to overcome several significant hurdles related to labor, supply chain, and market demand. The paper concludes with several policy recommendations for enhancing the likelihood that this partnership succeeds.

Foreign Investments in U.S. Shipyards

Though Hanwha's acquisition of Philly Shipyard marked the first purchase of a U.S. shipyard by a South Korea-based company, foreign direct investment (FDI) in U.S. shipbuilding is not new. Prior to the Hanwha acquisition, Philly Shipyard was owned by Aker ASA, a Norwegian

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industrial investment company.⁸ Austal USA—based in Mobile, Alabama—is a subsidiary of Australian shipbuilder Austal.⁹ Italian shipbuilding company Fincantieri owns three shipyards in Wisconsin.¹⁰ Singapore-based Seatrium announced in September 2025 that it was selling its shipyard in Brownsville, Texas, to Turkey-based Karpowership.¹¹ While these investments from various foreign companies have yielded benefits, South Korea is best positioned to address U.S. shipbuilding needs.

South Korea is the most logical ally to help rebuild the U.S. maritime industry, given its previous track record of cooperation with U.S. shipyards.¹² As mentioned above, South Korea has the second-largest shipbuilding industry in the world, behind China. Shipyards in South Korea are large-scale, high-producing facilities known for specialized vessels, innovation, advanced technologies, and streamlined workflows.¹³ South Korean design and manufacturing processes could be implemented in U.S. shipyards to modernize and streamline production in the United States. Additionally, South Korea—including both government and industry representatives—has clearly demonstrated its desire and enthusiasm for collaborating with the U.S. shipbuilding industry, particularly through FDI.

During his recent visit to the United States, President Lee discussed South Korea’s Make America Shipbuilding Great Again proposal and commitment to investing in the U.S. maritime industry with President Trump and championed U.S.-South Korea shipbuilding cooperation at the christening ceremony for a training ship at Hanwha Philly Shipyard.¹⁴ All of the “Big Three” South Korean shipbuilders—Hanwha, HD Hyundai, and Samsung—have already committed to invest in and collaborate with the U.S. maritime industry. In addition to Hanwha’s initial USD 100 million investment to acquire Philly Shipyard, the company announced plans for an additional USD 5 billion investment in shipyard infrastructure.¹⁵ HD Hyundai announced plans to establish a shipbuilding industry joint investment program, in collaboration with U.S.-based investment firm Cerberus Capital Management.¹⁶ Samsung signed a memorandum of understanding (MOU) with Oregon-based Vigor Marine Group to collaborate on maintenance, repair, and overhaul (MRO) of U.S. naval support vessels.¹⁷ These efforts all point to future collaboration. However, additional investment in U.S. shipyards will inevitably require aligning conditions to guarantee success for South Korean companies.

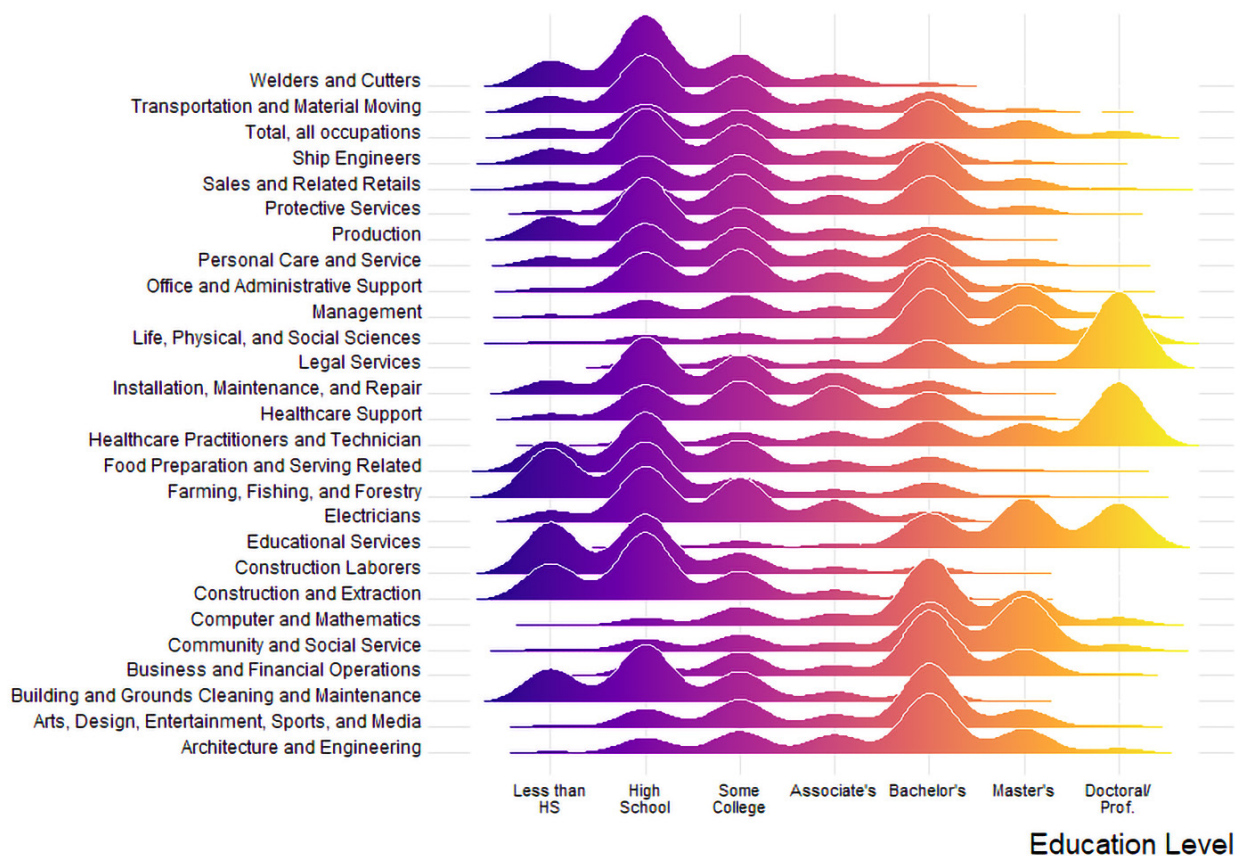
Three Challenges to Revitalizing U.S. Shipbuilding

Thus far, much of the effort at shipbuilding cooperation has focused on attracting more South Korean investment into the U.S. maritime industry to ramp up domestic production. While substantial investment is needed to rebuild and modernize domestic shipyards to meet the vision laid out in Trump’s executive order, “Restoring America’s Maritime Dominance,” there are three structural challenges to domestic production and new investment that should be addressed.

One challenge is the labor shortage. The fact that the average age of the labor force in this sector is between forty-one and fifty-five, which is higher than the national median of forty-one to forty-two, shows that both workforce recruitment and retention are significant concerns.¹⁸

Regarding recruitment, it is important to keep in mind that shipbuilding work requires specialized skills and technical training in trades such as welding, electrical work, and marine engineering.¹⁹ Luckily, the industry workforce’s baseline education level is not a significant problem. Looking at the average education level of various workers, a typical worker at a U.S. shipyard (e.g., welder, cutter, or electrician) is likely to have a comparable level of schooling as workers in manufacturing production or food preparation services (Figure 1). Our estimate of the weighted average years of education for a welder, for instance, is just shy of completing a high school education (11.7 years), in contrast to ship engineers (12.4 years) or electricians (12.3 years), who are likely to have a comparable level of schooling as a worker in food preparation services (12.1 years) or installation and maintenance (12.3 years).²⁰

Figure 1. Educational Attainment Across Occupation for U.S. Workers Twenty-Five Years or Older, 2022–2023 (Unit: %)



Note: Except for “Welders and Cutters, Ship Engineers, Electricians, and Construction Laborers,” all other distributions are weighted averages of all workers in the aforementioned sector(s).

Source: Bureau of Labor Statistics.

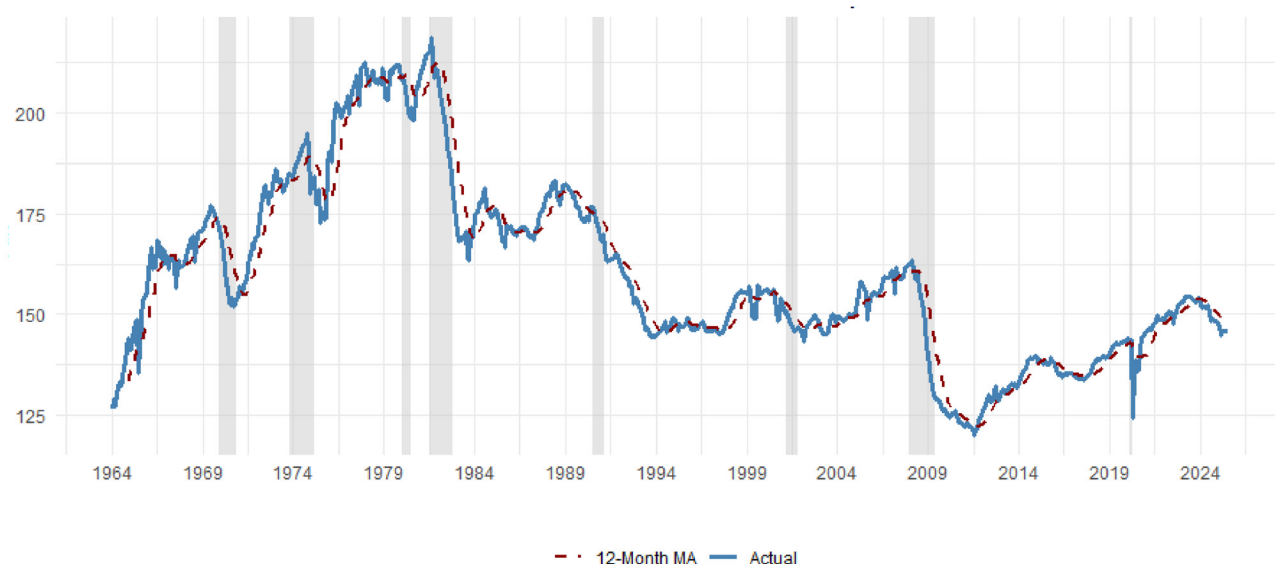
The main challenge is the specific and unique skills workers must have to work in a shipyard. For instance, general welders are typically asked to bond steel plates that are 0.25 inches (approximately 6 mm) to 0.5 inches (just under 13 mm) thick in open or accessible environments.²¹

In shipbuilding, marine welders use specialized techniques to bond steel plates that can be as thick as 0.8 inches (20 mm) to 6 inches (150 mm) in confined spaces or underwater.²² These skills require additional training, which tends to be both costly and time-consuming. According to the Bureau of Labor Statistics (BLS), occupations such as welding require more on-the-job training than other entry-level positions with comparable levels of education.²³

Both industry and government have tried to address this issue by investing in training and vocational education.²⁴ Hanwha Philly's new USD 5 billion investment commitment, for instance, includes a significant training component.²⁵ Companies like HD Hyundai and Fincantieri have recently announced joint partnerships with universities to train the next generation of naval architects and engineers.²⁶ The U.S. Department of Labor and the Maritime Administration have also committed to providing funds that support training and education for shipyard workers.²⁷

It is encouraging to see signs of a post-pandemic recovery in the shipbuilding labor force (Figure 2). But recovery has been slower than in other sectors, and the long-term trend still shows that the recent uptick is hardly enough to make up for the general workforce decline dating back to 1980, suggesting that there is still a long road ahead.

Figure 2. Workers in U.S. Ship and Boat Building Sector, January 1964–July 2025 (Unit: Thousands of Persons)



Note: The shaded areas indicate recessions.

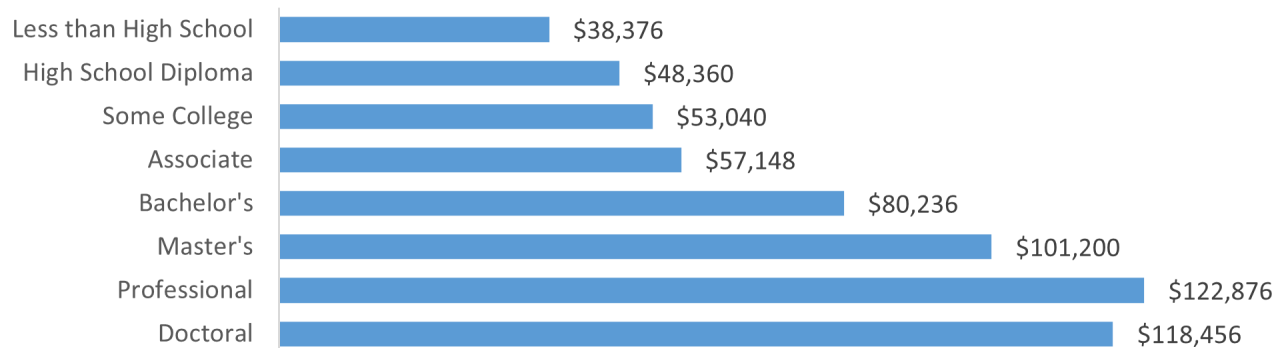
Source: Federal Reserve Bank of St. Louis.

Regardless, training and skill upgrades are only a small part of the labor challenge; the bigger problem is retention.²⁸ The industry average for labor turnover in shipbuilding is approximately 20 to 30 percent, while first-year employee attrition is about 50 to 60 percent.²⁹ One recent report noted that the South Korean-owned shipyard in Philadelphia had a turnover rate

approaching “nearly 100 percent,” with on-the-job drug use being a significant problem for management.³⁰ As a comparison, the average labor turnover rate for the overall U.S. economy is closer to 13 percent.³¹

Education and training matter little if newly trained workers end up leaving within their first year of employment. This is why many experts have highlighted the importance of addressing wage differentials and working conditions. As noted by one keen observer of the industry, it is difficult to attract workers when an air-conditioned fast-food restaurant advertises jobs for USD 18 per hour plus benefits—adjacent to a shipyard offering USD 21 per hour for entry-level positions.³² The Government Accountability Office (GAO) also noted in its latest report that five of the seven surveyed U.S. shipbuilders stated “a shrinking gap between wages for the service industry and manufacturing jobs, like shipbuilding, was a driver” behind the challenge of recruitment and retention.³³ The sprawling nature of the manufacturing process in shipbuilding means workers are exposed to the elements under relatively more dangerous working conditions, leading them to question the value of the increasingly shrinking wage gap.³⁴

Figure 3. Median Annual Earnings in the United States by Educational Attainment, 2024



Source: Bureau of Labor Statistics.

Compensation data from various sources suggest that the average pay for a shipyard laborer without a high school degree falls between USD 34,000 and USD 53,000 per year, while the industry-wide average across all skill levels in the United States is about USD 62,000 to USD 83,000.³⁵ Incidentally, the lower range is comparable to the median salary for high school graduates, whereas the industry average is slightly above the national median earnings of approximately USD 62,000, suggesting that shipyard work is not significantly more attractive than other comparable jobs in terms of wages (Figure 3).³⁶

It is worth noting that the 2025 average annual wage for shipyard workers in South Korea is approximately KRW 89 million (approximately USD 63,000), but most general South Korean shipyard laborers received between KRW 42 and 47 million (between USD 32,000 and USD 33,500), comparable to South Korea’s national median of KRW 42 million (USD 32,000).³⁷ The relative distribution does not look significantly different from the U.S. case, yet productivity

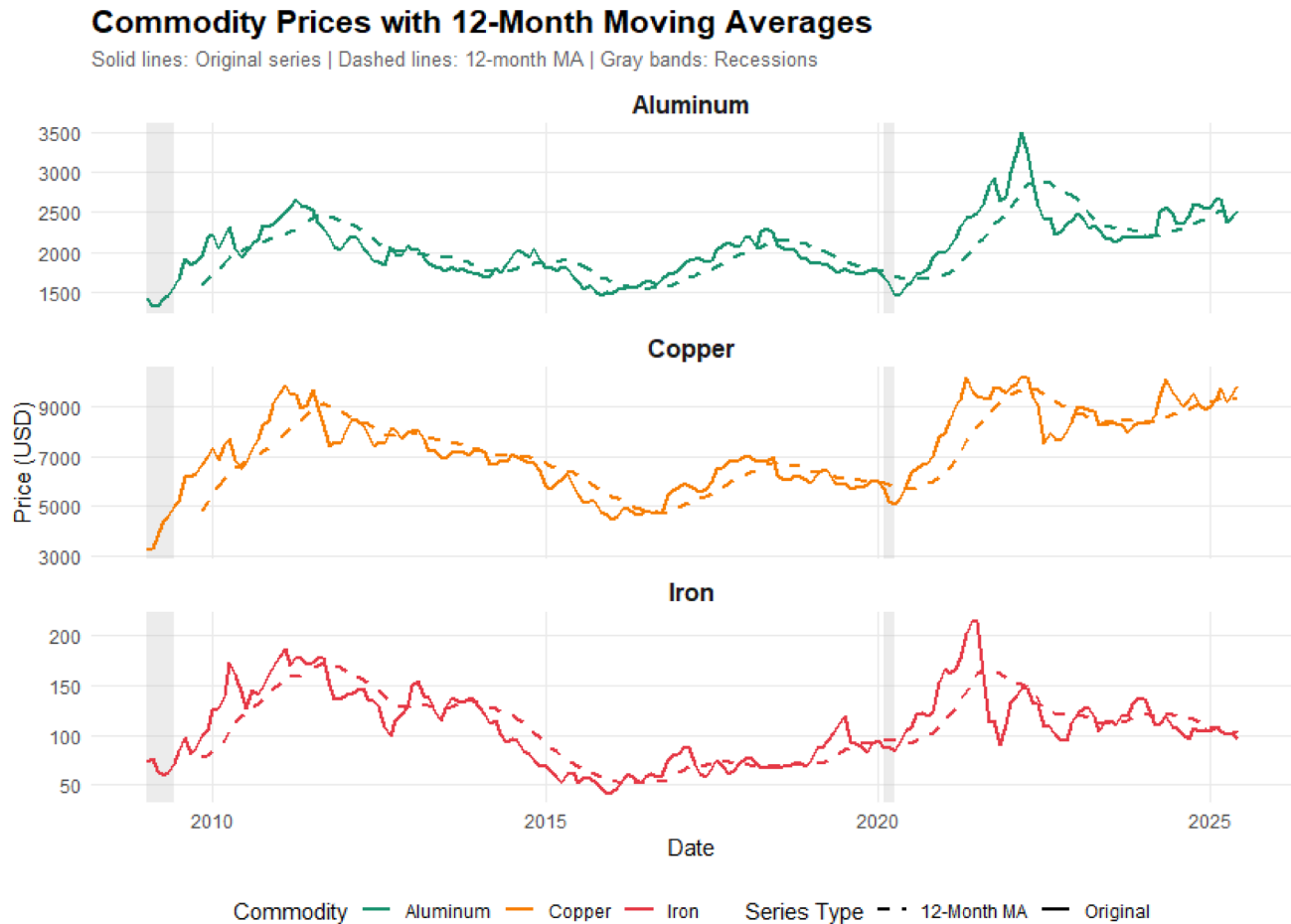
among South Korean shipyards far outpaces that of U.S. shipyards, suggesting that wages are not the only factor explaining the difference in productivity.

While raising worker pay in the industry may help, the labor challenge in U.S. shipbuilding is influenced by more than wages and benefits alone. As mentioned by Eric Laps of the Congressional Budget Office (CBO) and Ronald O'Rourke of the Congressional Research Service (CRS), labor supply, quality of life, and quality of work should be considered as a package, and addressing that package will require a coordinated effort between companies and local governments when thinking about recruitment and retention.³⁸ This means providing better working conditions, along with affordable housing, hospitals, schools, and other social services, to enhance the work and living standards of workers in this industry.³⁹

The second structural challenge is an adequate supply of affordable, high-quality inputs (i.e., raw materials, parts, and components)—or the lack thereof. The top three South Korean shipbuilders each have anywhere between 1,300 and 2,400 suppliers (HD Hyundai: 2,420; Samsung Heavy Industries: 1,430; Hanwha Ocean: 1,334) near their shipyards that can be called upon at any given moment to provide needed parts or labor within days, if not hours.⁴⁰

Although the supply network for prime yards in the United States is not as clear, the National Marine Manufacturers Association (NMMA) boasts a membership of 1,220, of which only about 39 are engine manufacturers and 565 are marine accessory and component producers.⁴¹ There are 1,552 suppliers of marine equipment and supplies in North America, but many of these establishments supply components and parts for small recreational boats, which means the supply network in the United States is likely substantially smaller than in South Korea, except in the case of special vessels (e.g., nuclear submarines).⁴² In fact, Japanese shipbuilders have cited poor supply chains as a major reason for passing on the opportunity to invest in the United States.⁴³

Figure 4. Global Price of Aluminum, Copper, and Iron/Steel, September 2009–June 2025 (Unit: USD per Metric Ton)



Note: Global price of commodities, U.S. dollars per metric ton, monthly, and not seasonally adjusted.

Source: Federal Reserve Bank of St. Louis.

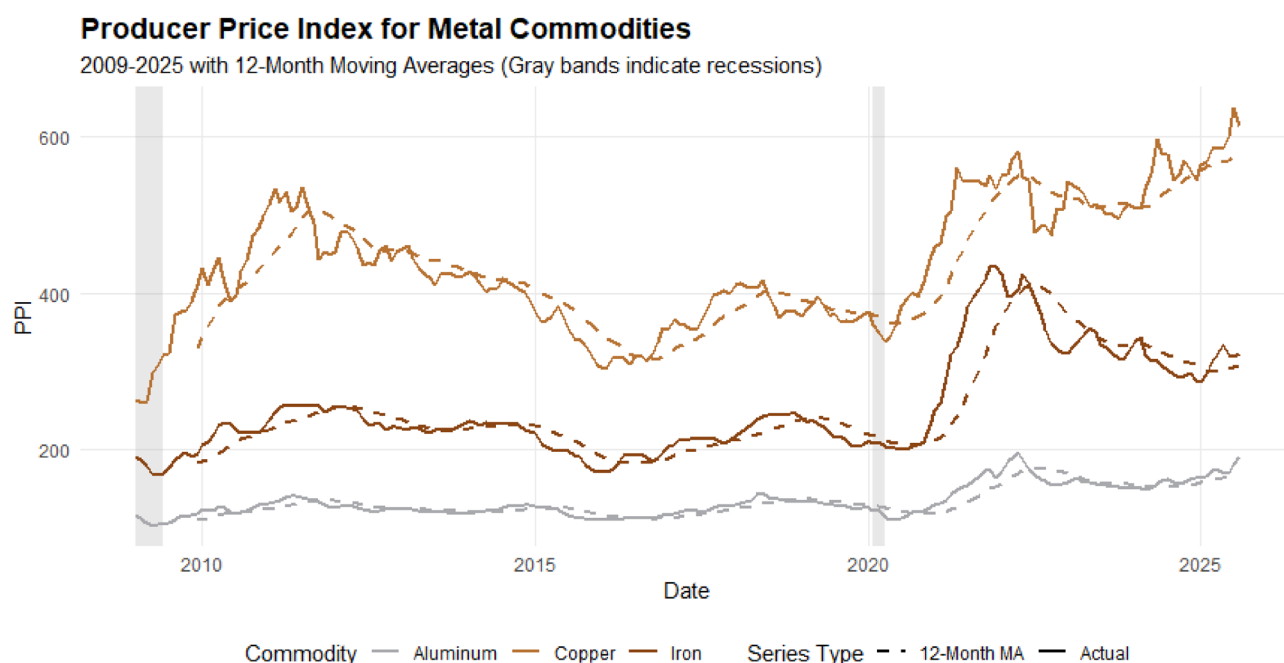
The supply and price of raw materials such as iron, copper, and aluminum are also important considerations for U.S. shipbuilding. Escalating trade tensions have pushed the global market price of base metals upward, but continued weakness in China’s property sector appears to have moderated global demand for these goods (Figure 4).⁴⁴ Demand also remains low if the stronger dollar reduces the buying power of metal importers using other currencies.⁴⁵

When we look at the monthly global prices of these commodities, all of them show modest growth and possibly even signs of consolidation.⁴⁶ For instance, the year-over-year (YoY) change in the price of iron in June 2025 shows an 11 percent decline, while copper increased by 1.9 percent and aluminum by 1.1 percent. The World Bank expects demand for these commodities to decelerate in the near term due to slowing global industrial activity, particularly in China.⁴⁷

Some observers, however, see continued electrification and AI data center expansion as tailwinds for base metals in the long run.⁴⁸ It is important to note that the impact of these drivers depends on the business environment, as the scale and pace of development in these areas

vary widely across markets. For instance, when observing the Producer Price Index (PPI) for iron and other base metals in the United States, prices have grown more rapidly than in the global market (Figure 5).⁴⁹ The YoY increase in PPI for iron and steel shows 9.2 percent growth in August 2025. PPI for copper and aluminum also shows strong upward movement, with YoY increases of 12.4 percent for copper and 21.1 percent for aluminum during the same period.

Figure 5. Producer Price Index of Aluminum, Copper, and Iron/Steel, September 2009–August 2025 (1982 = 100)



Note: Producer Price Index by commodity, Index 1982=100, monthly, and not seasonally adjusted.

Source: Federal Reserve Bank of St. Louis.

Another explanation for this trend is higher tariffs and increased volatility from policy uncertainty.⁵⁰ For instance, the U.S. tariff on aluminum increased from 25 to 50 percent in two phases in 2025, causing the U.S. Midwest premium to spike by nearly 300 percent within six months.⁵¹ A 50 percent tariff on copper, imposed in August this year, appears to have contributed to the increase in its domestic price as well. Iron and steel prices in the United States have also increased following the doubling of Section 232 tariffs from 25 to 50 percent.

Rising prices are especially problematic for U.S. shipbuilders as large ocean vessels are almost entirely made of these materials. U.S. aircraft carriers, such as the USS *Ronald Reagan*, require about 70,000 tons of steel—more than nine Eiffel Towers put together.⁵² Any marginal increase in input prices would significantly raise the cost of building ships.

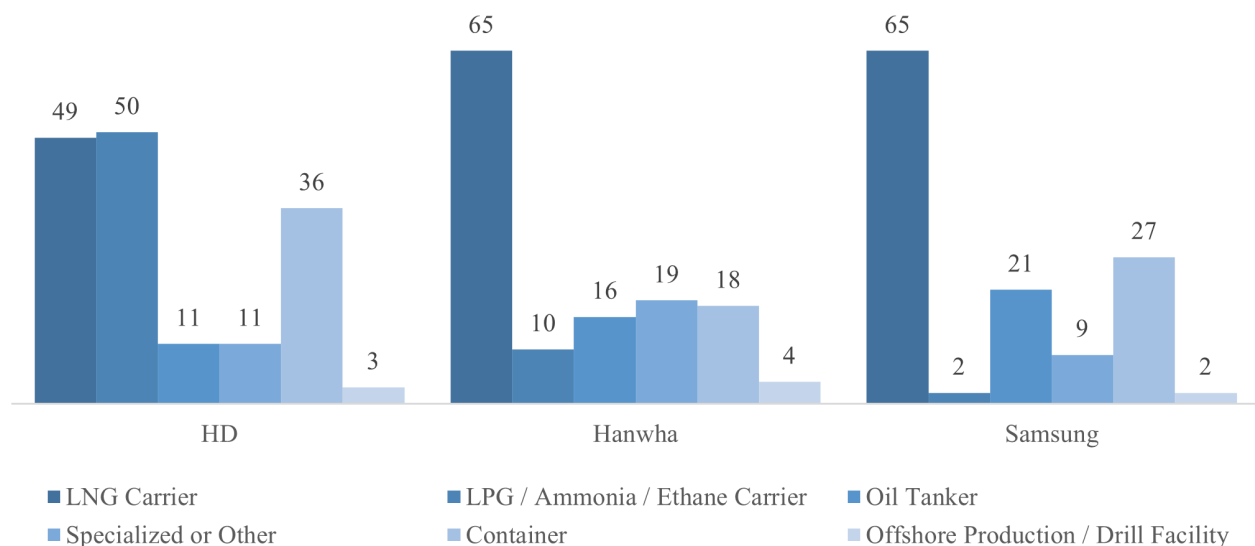
Periodic disruptions in transportation and logistics can also create regional price divergence.⁵³ The recent federal government shutdown, for instance, has led to furloughs of support staff in U.S. Customs and Border Protection, causing delays in key ports of entry. During the shutdown

from 2018 to 2019, delays in the Port of Los Angeles-Long Beach increased port stoppage time by 15 to 20 percent.⁵⁴ As such, domestic price pressure is likely to trend higher than global market prices due to disruptions from domestic factors and U.S. government trade and industrial policies. These disruptions do not bode well for the shipbuilding industry's access to an adequate supply of affordable inputs.

The final structural challenge is demand. Even if South Korean shipbuilders can address challenges related to the workforce and supply chains for domestic U.S. shipyards, there must be sufficient demand to justify the long-term investment by guaranteeing profit margins.

The BRS Shipbrokers' Annual Review reports that 5,468 large cargo vessels were on order globally in 2024.⁵⁵ Chinese shipbuilders held 3,419 of these, while South Korea and Japan combined for 1,398. The United States only accounted for three. Looking more closely at the order books of the top three South Korean shipbuilding companies through Q2 and Q3 of this year, each one has over 120 ships or offshore platforms backlogged (Figure 6). Given that each company has delivered about thirty to fifty platforms a year, the size of this order book translates to about three to four years of work, depending on the yard.

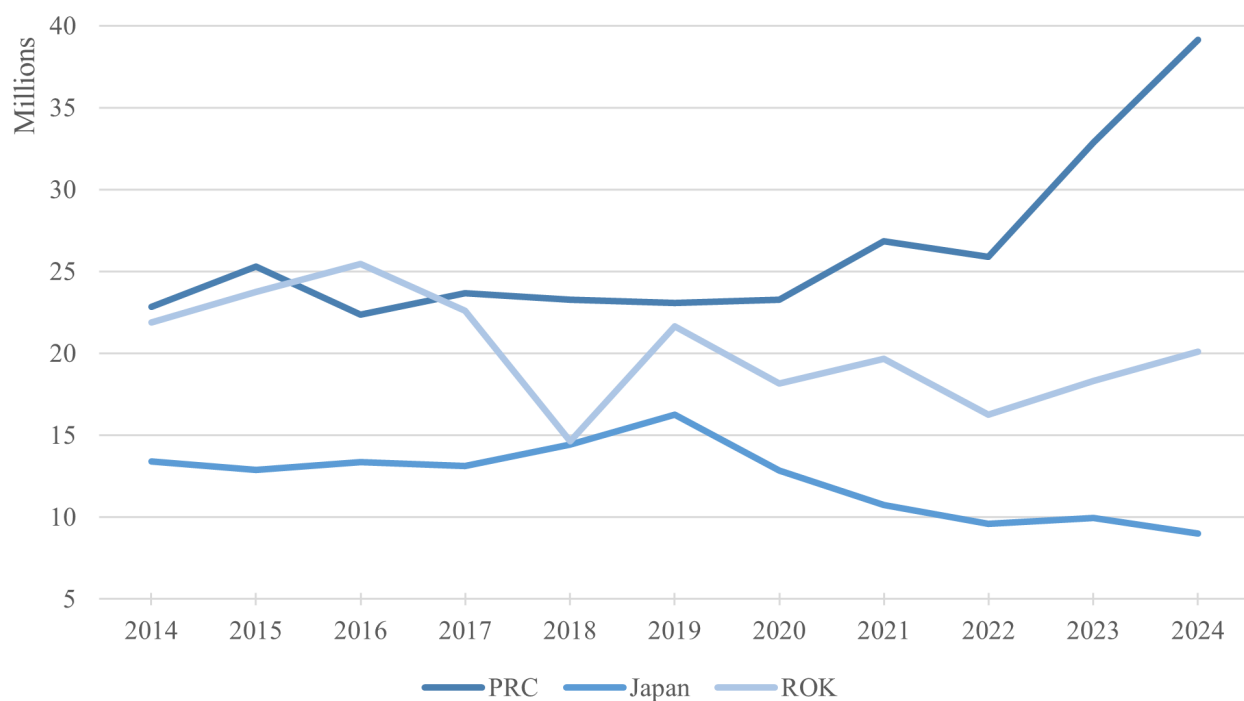
Figure 6. Backlogged Orders for Ships up to Q2 and Q3 2025 (Unit: Number of Ships)



Source: HD Hyundai Heavy Industries, Hanwha Ocean, and Samsung Heavy Industries.⁵⁶

Recording the deliveries from last year, UN Trade and Development (UNCTAD) data (Figure 7) shows that East Asia accounted for nearly 98 percent of all ships delivered globally in terms of gross tonnage (72 million tons), with China accounting for about 55 percent (39 million tons), South Korea 28 percent (21 million tons), and Japan approximately 13 percent (9 million tons). The United States accounted for only about 0.04 percent (31,000 tons), a record low.

Figure 7. Ships Built by Country, 2014–2024 (Unit: Gross Tonnage)



Source: UNCTAD.

Weak demand can explain the gap between orders and deliveries. From a cost standpoint, ships built in the United States are prohibitively more expensive than ships built in other countries. For example, the Aloha-class 3,600 twenty-foot-equivalent-unit (TEU) vessel being built in Philadelphia costs about USD 334.5 million, while a ship with twice the capacity produced in South Korea can be purchased for only USD 120 million.⁵⁷ Maersk’s 22,000–24,000 TEU EEE-class (nearly eight times the size of Aloha-class) vessel, built by Hanwha Ocean, costs only about USD 270 million.⁵⁸ Finally, a tanker built by Hanwha’s Philly Shipyard costs over USD 220 million, nearly five times the cost of the same vessel built in China or South Korea (approximately USD 47 million).⁵⁹

Putting aside cost, U.S. shipyards simply have no track record for building certain types of ships. For instance, there is no demand for container ships larger than the Aloha-class, which is not that large by global standards. For some perspective, an Organization for Economic Cooperation and Development (OECD) study from 2018 forecasted that by 2025, the transpacific trade lane would have an average container ship size of about 10,000 TEUs (2.7 times Aloha-class), while the Far East-Europe trade would have an average container ship size of about 16,000 TEUs (4.4 times Aloha-class).⁶⁰ U.S. shipyards lack experience building complex commercial vessels, such as liquefied natural gas (LNG) carriers, liquefied petroleum gas (LPG) tankers, very large ammonia carriers (VLACs), and very large ethane carriers (VLECs). This means that the demand for commercial ships in the United States may be rather limited.

This brings us to naval ships, where demand signals have been more consistent. While the United States touts having some of the most sophisticated naval vessels in the world, the delivery of these ships is often delayed and more costly than originally budgeted by the U.S. Navy. The CBO's latest report points out that Constellation-class frigates are "three years or more behind [schedule]."⁶¹ The first of the latest-designed guided-missile destroyers (DDG Flight III), the USS *Jack H. Lucas*, took ten years from the time of the original awarding of contract in 2013 to commissioning and delivery in 2023.⁶² The recently launched USS *Ted Stevens* is expected to be commissioned in 2026; the original contract was awarded in 2018, meaning that the ship will take eight years to deliver.⁶³ On average, the time from start to finish for a complete build-out of DDG Flight III has been about nine years, with each ship costing over USD 2.5 billion.⁶⁴

In comparison, the first of the latest South Korean DDG or KDX-III Batch II, ROKS *Jeongjo the Great*, cost about USD 510 to USD 630 million and took about five years to complete from the time of contract award in 2019 until official commissioning in November 2024.⁶⁵ The second, ROKS *Dasan Jeong Yak-young*, launched in September 2025 and is expected to be delivered and commissioned by 2026.⁶⁶ There are many reasons why similar ships in the United States take nearly twice as long and cost about four to five times more to build than in South Korea, some of which can be attributed to poor logistics and coordination in the design and procurement of parts.⁶⁷

Another explanation is that the protective regulations around shipping and shipbuilding have kept the domestic industry protected from competition and allowed U.S. shipyards to continue business as usual within a captive domestic market.⁶⁸ This argument applies to both commercial and naval shipbuilding.

Overcoming Barriers

While the above hurdles are not insurmountable, they are difficult to overcome without some much-needed help from the U.S. government. One solution is regulatory reform. If stringent regulations are standing in the way of developing an efficient shipbuilding industry, then the time may be ripe for some changes to the status quo.

Regulations, such as Section 27 of the Merchant Marine Act (1920), also known as the Jones Act, require shipping between U.S. ports to be conducted on vessels built in the United States, owned by U.S. citizens, and crewed predominantly by U.S. citizens or permanent residents.⁶⁹ Title X of U.S. Code 8679 prohibits federal government funds from being used for the construction of vessels for the armed forces in foreign shipyards, and Title XIV of U.S. Code 1151 applies the same restrictions on Coast Guard vessels.⁷⁰ In all of these instances, the statutes have provisions for exemptions and waivers, but their application is strict and narrow.

One approach is to eliminate or revise the domestic build-out requirement for all commercial ships used in intra-U.S. transport under the Jones Act. While there may be sovereignty, public safety, and even national security rationales for maintaining cabotage rules on the domestic commercial transport of goods and people, the requirement that ships for all domestic

transport be *built* in the United States may need some review, especially given that this rule does not apply to air or ground transport. If wholesale reform is difficult, then loosening waiver and exemption requirements for non-contiguous territories (e.g., Guam and Puerto Rico) and states (i.e., Hawaii and Alaska) or for the transport of certain products, such as LNG or LPG, is a sensible measure.⁷¹ This argument makes even more sense when we consider the numerous congressionally enacted exemptions and national security waivers that have already been applied to the Jones Act.⁷²

While the national security justification carries more weight for naval and Coast Guard vessels under Titles X and XIV, respectively, loosening the waiver requirements or even broadening the exemption provision can help lower costs for the Navy and Coast Guard. For instance, Title X of U.S. Code 8679 permits exemptions for “inflatable boats” or “rigid inflatable boats.” The U.S. government can expand these provisions to include certain types of non-combatant auxiliary or support vessels, for which waivers previously allowed the use of ships not in compliance with the Jones Act requirements.⁷³ The recent effort by the Trump administration to allow the Coast Guard to purchase icebreakers from Finland is an example of the kinds of ships for which such exemptions can be applied to help the administration exercise greater discretion and flexibility.⁷⁴

Another possibility is to identify specific parts of the vessel that can be exempted from Titles X and XIV to enhance shipbuilding cooperation with allied shipyards without compromising national security. Certain components of the vessel, such as hulls, can be built in foreign shipyards at a fraction of the cost and more quickly, thereby reducing the cost and time of final assembly in U.S. shipyards if modular construction can be integrated into the domestic shipbuilding process. Such an approach would require broadening O’Rourke’s notion of “federated shipbuilding” to apply more broadly to a *confederated shipbuilding alliance*.⁷⁵

The challenge with any legislative reform is that there are strong vested interests linked to the status quo that have concerns about the adverse effect of policy change. In this case, these vested interests can be linked to the existing domestic shipbuilding industry. Furthermore, despite the enthusiastic members of Congress who introduced the SHIPS for America Act, questions remain as to the congressional will to promote change in opposition to these interests. This realization is also why some South Korean shipbuilding companies have decided to invest in the United States to help revitalize the U.S. shipping and shipbuilding sectors.

An approach to addressing these concerns while also revitalizing U.S. shipping and shipbuilding capacity may be a phased, combined approach. Such an approach would acknowledge both the immediate need for ships in the United States and the time required for South Korean investments to yield a more robust U.S. shipbuilding industry with the capacity to fill orders efficiently.

The first phase involves purchases of a limited number of Coast Guard or naval logistics ships (e.g., oilers, support ships, and hospital ships) from allied shipyards that are also investing in U.S. shipyards. This would be part of a broader arrangement in which yards in South Korea can

meet the limited, short-term demand for both commercial and military vessels while investment in domestic shipbuilding capacity could proceed in earnest.

This initial step would also allow the United States and South Korea to collaboratively tackle three issues simultaneously. First, it would address immediate needs in naval readiness by building ships more efficiently in allied shipyards. Second, it would free up U.S. shipyard capacity to build more sophisticated combat ships, thereby minimizing the impact on domestic shipyards and the U.S. shipbuilding workforce. Third, it would provide an immediate return on investment for South Korean shipbuilding companies that are actively investing in U.S. shipyards, thereby incentivizing more capital investment in domestic capacity build-out.

It is important to emphasize that this phase of cooperation would not apply to the full spectrum of vessels needed by the U.S. government or private commercial shipping sector. While South Korean shipyards are certainly qualified to construct many types of ships, there are some ships, such as nuclear-powered carriers or submarines, that U.S. shipyards are more experienced and better-equipped to build.⁷⁶ Although this issue was raised during the second summit between Trump and Lee, none of the South Korean-owned shipyards are fitted to begin constructing these types of ships.

The shipyard modifications and certification requirements and the engineering expertise required to construct these types of ships, not to mention the domestic and international opposition to having a military-purposed nuclear facility in shipyards other than those equipped to do this in the United States, would make this prohibitively difficult for South Korean shipbuilders in the near future.⁷⁷ Hence, the focus during this initial phase of cooperation should be limited to ships that U.S. shipyards have not built or are less efficient in producing.

The second phase begins when South Korean investments in U.S. shipyards expand domestic capacity. This step involves purchasing some components or modules from South Korean shipyards for final assembly in U.S. shipyards. Again, this medium-term cooperation would address capacity concerns while simultaneously minimizing any adverse impact on domestic shipyards and workers.

The third phase occurs when U.S. shipyards operated by South Korean subsidiaries have established updated and globally competitive shipyards that are operational at full capacity. In this final phase, the entire shipbuilding process can move to shipyards on U.S. soil, which can compete globally to fill orders for commercial and military ships. Thus, this phase realizes the promises of the Restoring American Maritime Dominance Executive Order and the SHIPS for America Act.

On the issue of labor shortage, South Korean shipbuilding companies have already made several important commitments to expand their training programs and increase the number of skilled workers in U.S. shipyards.⁷⁸ In addition to providing financial support for these programs, the U.S. government can further expand the annual quota for skilled worker visas in the shipbuilding industry, enabling more experienced South Korean workers to be recruited to

train workers in U.S. shipyards. One such vehicle for reform is the Partner with Korea Act, which would increase the number of temporary, non-immigrant E4 visas for skilled South Korean workers.⁷⁹ Establishing a division (i.e., a “Korea Investor Desk”) at the U.S. Embassy in Seoul dedicated to serving the needs of the private sector for immigration support would further support such efforts.⁸⁰

In addition to these regulatory and logistical fixes, the shipbuilding sector still needs sufficient incentives to attract more investment. While the South Korean government can certainly support shipbuilding cooperation with the United States, the U.S. government can also do more to create favorable conditions that encourage South Korean investment in U.S. shipyards. The Building Ships in America Act, introduced by Senator Mark Kelly (D-AZ) alongside the SHIPS for America Act on April 30, would expand financial and tax incentives for the construction of shipyard facilities in the United States.⁸¹

The U.S. government must also weigh the consequences of rising trade tensions with China for South Korean companies investing in the United States. Trade policy uncertainty and tariffs increase supply chain risks, leading to delays, higher costs for inputs, and reductions in profitability for shipyards.⁸² Changing trade policies also force shipbuilders and their suppliers to constantly reevaluate sourcing strategies, adding to the complexity and cost of shipbuilding.⁸³ On the demand side, ship owners and operators will have to think twice before placing new orders and purchases given the long lead times and high costs of ships.⁸⁴ This can cause sharp swings in demand and order volumes, delaying or scaling back shipbuilding output for the yards. To address this challenge, the administration should work closely with the shipbuilding industry to consider their concerns when making major policy changes. It would also help to consider selective waivers, sectoral-based quotas, or a phased tariff schedule that would either shield or help the shipbuilding sector establish a more resilient domestic supply chain.

The Trump administration must also address the collateral risk of a more contentious trade environment as it manages trade relations with other countries. The recent announcement by the Chinese government imposing trade bans against U.S. subsidiaries of a South Korean shipbuilding company—after the United States announced its decision to move ahead with the implementation of port fees for Chinese ships—serves as a stark reminder to the South Korean government and corporate entities that sizable investment and business in the United States can come at a price to both their business interests in the United States and their facilities around the world.⁸⁵ Such threats can have a chilling effect on both current and future South Korean investment, as well as on other partners that are contemplating additional investment and cooperation with the United States. The United States can only address these risks of industry disruptions through safeguards and a more resilient supply chain. In the absence of a more resilient supply chain, the United States should think through the scope and pace of trade measures that would impact the global economy.

Finally, South Korean companies interested in investing in U.S. shipyards could also use more direct demand signals from the U.S. commercial and military sectors to support the business

case for continued capital expenditure. This demand would largely come in the form of naval contracts and subsidies to buttress commercial orders. The call to build a Strategic Commercial Fleet of 250 ships within the next ten years, as outlined in the SHIPS for America Act, is a good start, but South Korean companies will need to see sustained demand for ships comparable to global demand if they are to increase their investments.⁸⁶

Conclusion

At present, the U.S. shipbuilding industry is plagued by massive time and budget overages.⁸⁷ While the United States can address some of these problems through bold reforms and targeted investment, revitalizing the U.S. shipbuilding industry will require a combination of political will, time, and resources. The most important first step is recognizing the reality of this challenge and establishing a baseline consensus on how to address the problems with U.S. shipbuilding. This article offers concrete ideas for moving forward constructively in the coming months and years. The discussion suggests a series of difficult decisions ranging from selective deregulation to the adoption of a confederated shipbuilding alliance or staged revitalization campaign that takes advantage of allied shipbuilding while also considering U.S. national security concerns. The discussion also suggests boldly moving forward with government support on tax incentives and subsidies for commercial shipbuilding and the expansion of professional visas and selective sectoral waivers, quotas, or phased-in tariffs to form a more resilient supply chain.

The good news is that the United States is not alone in this endeavor; there is an eager partner and ally in South Korea, which has a track record for delivering world-class ships on time and at cost. The question is whether U.S. leadership has the courage to take the necessary steps to create the conditions that will make American shipbuilding great again.

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⁷¹ Puerto Rico is exempt from the Jones Act for passengers but not for cargo (except for LNG), while vessels traveling between Guam and other U.S. points must be U.S. owned and crewed but not U.S. built. The U.S. Virgin Islands, American Samoa, and Northern Mariana Islands are exempt from the Jones Act. See John Frittelli, *Shipping Under the Jones Act: Legislative and Regulatory Background*, CRS Report No. R45725 (Congressional Research Service, 2019), <https://www.congress.gov/crs-product/R45725>; Colin Grabow, “Jones Act Loophole Allows Puerto Rico to Finally Access American Natural Gas,” Cato Institute, March 25, 2025, <https://www.cato.org/blog/jones-act-loophole-allows-american-lng-flow-puerto-rico>; Colin Grabow et al., “Assessing the Jones Act: Perspectives from the Noncontiguous States and Territories,” Cato Institute, September 16, 2025, <https://www.cato.org/events/assessing-jones-act-perspectives-noncontiguous-states-territories>.

⁷² Frittelli, *Shipping Under the Jones Act*.

⁷³ Joint Chiefs of Staff, *So Many, So Much, So Far, So Fast: United States Transportation Command and Strategic Deployment for Operation Desert Shield/Desert Storm* (Joint Chiefs of Staff, 1992), <https://www.jcs.mil/Portals/36/Documents/History/Monographs/Transcom.pdf>. Colin Grabow points out that the head of the U.S. Transportation Command stated during a congressional testimony in 2021 that domestic commercial fleets would not be available for military sealift during U.S. engagement in overseas conflicts. See Colin Grabow, “Protectionism on Steroids,” Cato Institute, April 29, 2024, <https://www.cato.org/commentary/protectionism-steroids>.

⁷⁴ Steve Holland et al., “Trump and Finland’s Stubb Approve Deal for Icebreaker Ships,” Reuters, October 9, 2025, <https://www.reuters.com/world/us/trump-finlands-stubb-expected-reach-icebreaker-deal-2025-10-09/>.

⁷⁵ O’Rourke, *Navy Force Structure and Shipbuilding Plans*.

⁷⁶ Reginald Davey, “Constructing a Nuclear Submarine,” AZoM, January 26, 2022, <https://www.azom.com/article.aspx?ArticleID=21261>; “Mission,” BuildSubmarines.com, accessed 2025, <https://www.buildsubmarines.com/mission>; AJ Mitchell, “How Do Nuclear-Powered Submarines Work? A Nuclear Scientist Explains,” *The Conversation*, September 16, 2021, <https://theconversation.com/how-do-nuclear-powered-submarines-work-a-nuclear-scientist-explains-168067>.

⁷⁷ U.S. Nuclear Regulatory Commission, “Regulations, Guidance, and Communications for New Reactors,” last modified February 22, 2024, <https://www.nrc.gov/reactors/new-reactors/how-we-regulate/regs-guides-comm.html>; “Nuclear Submarine,” MadeHow: How Products Are Made, <https://www.madehow.com/Volume-5/Nuclear-Submarine.html>; Francis Duncan, *Rickover and the Nuclear Navy: The Discipline of Technology* (Annapolis: Naval Institute Press, 1990), 47, https://www.energy.gov/sites/default/files/2018/04/f50/DuncanRickoverandtheNuclearNavyComplete_1.pdf; Min-hee Park, “Xi Reportedly Invited Korea’s Lee to Visit China Next April, Same Month as Trump,” *Hankyoreh*, November 5, 2025, https://www.hani.co.kr/arti/english_edition/e_national/1227584.html; Seoc Woo Kim et al., “South Korea’s Risky Quest to Build Nuclear-Powered

Attack Submarines,” *Bulletin of the Atomic Scientists*, November 18, 2020, <https://thebulletin.org/2020/11/south-koreas-risky-quest-to-build-nuclear-powered-attack-submarines/>. It bears mentioning that Pillar One of AUKUS, which was announced in 2021, will allow the sale of three used Virginia-class submarines to Australia in the early 2030s, and Australia will not get to see a newly-built, UK-designed nuclear submarine until the 2040s, about two decades after the deal’s announcement. Existing research also suggests that the U.S. nuclear submarine industrial base is unique in its complexity compared to other types of vessels. For instance, CRS points out that the two U.S. shipyards with the capability to produce nuclear submarines have 16,000 suppliers across 50 states, with labs and research facilities, and 70 percent of the critical suppliers are “sole source.” Just the conditional set-up for the industrial foundation required for building out this type of shipbuilding facility will be a significant undertaking. See Ronald O’Rourke, *Navy Virginia-Class Submarine Program and AUKUS Submarine (Pillar 1) Project: Background and Issues for Congress*, CRS Report No. RL32418 (Congressional Research Service, 2025), <https://www.congress.gov/crs-product/RL32418>.

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⁸¹ Building Ships in America Act of 2025, S.1536, 119th Cong. (2025), <https://www.congress.gov/bill/119th-congress/senate-bill/1536>; SHIPS for America Act of 2025, S.1541, 119th Cong. (2025), www.congress.gov/bill/119th-congress/senate-bill/1541. The SHIPS for America Act of 2025 (S.1541) creates the Maritime Security Trust Fund (MSTF), which would be funded by customs duties, port fees, penalties, tariffs, and taxes collected by the U.S. Customs and Border Protection, to allocate USD 250 million annually for shipyards and facilities that produce critical shipbuilding components and USD 100 million annually for the Assistance for Small Shipyards Program to build the Strategic Commercial Fleet (SCF) of 250 U.S. built, flagged, and crewed vessels. The Building Ships in America Act provides a 33 percent investment tax credit for shipowners constructing U.S. built and U.S. flagged vessels and a 25 percent tax credit for investments into shipyards.

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