

America Last

The Grim Reality of
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By Mario Loyola

Executive Summary

The Jones Act requires any ship traveling between two U.S. points to be U.S.-manufactured, -owned, -flagged, and -crewed. This heavy-handed protectionist measure was enacted in 1920 with the stated purpose of ensuring a strong merchant marine to support America's commerce and the nation's preparedness for war and national emergency. A century later, the evidence is clear: The law has not only failed to accomplish any of those objectives, it has systematically undermined each of them.

Today the Jones Act mostly covers well over 30,000 tugs and barges plying America's inland waterways, and its punitive restrictions mainly benefit railways and trucking companies.¹ As for America's once mighty oceangoing merchant marine, the law has protected it to death: Less than 100 oceangoing vessels remain in the Jones Act fleet. As of 2019, the few American shipyards that can build commercial oceangoing vessels are being kept afloat by defense contracts.

The law's supporters argue that because its costs are difficult to quantify, it is not clear that it costs anything. This is highly misleading. The law is designed precisely to restrict the supply of domestic shipping so that American domestic ship operators and shipbuilders can charge more. Shipping rates on

Jones Act routes are typically several times more expensive than rates in the competitive international market, especially in terms of cost per nautical mile traveled for a standard container. The Jones Act's proponents are fervent supporters of "buy American" but the law favors imports over domestic commerce. It is protectionism for foreigners.

The law has also failed its national security mission. The military utility of the Jones Act fleet has faded faster than the Jones Act fleet's dwindling numbers. Modern warfare requires transport ships that are fast and flexible, while the global maritime industry is heading in the other direction, with transport ships that are increasingly slower, bigger, and less maneuverable. As for national emergencies, every time one requires sealift, the Jones Act needs to be *waived* so victims can get the relief they need from ships that are actually available.

According to one study, the Jones Act is equivalent to a 64.6 percent tariff on domestic seaborne trade. For Alaska, Hawaii, and especially Puerto Rico, the impact is particularly onerous. The impact of the Jones Act on American energy is also notable, and difficult to justify in today's world of globally dominant North American oil production and falling prices.

While repeal of the Jones Act would be ideal, at a minimum, significant reforms are long overdue.

Introduction

Federal laws protecting U.S. shipping date back to the First Congress in 1789. The current coastwise law governing the transportation of merchandise between U.S. ports was first established by Section 27 of the Merchant Marine Act of 1920, sponsored by Senator Wesley L. Jones—hence its name, the “Jones Act.”² The law requires any ship traveling between two U.S. points to be U.S.-manufactured, -owned, -flagged, and -crewed, to a substantial extent.

Because of this provision, any vessels that are foreign-flagged, foreign-built, or foreign-owned are prohibited from transporting any merchandise from one U.S. “point” to another. (A precursor of the Jones Act referred to U.S. “ports,” but companies then found inventive ways to skirt the law by avoiding ports, so now the Jones Act applies to “points” which is more expansive and has a particular impact on the energy sector as will be seen below).

The Jones Act was enacted in June 1920 with the purpose of ensuring a strong merchant marine to support America’s commerce and the nation’s preparedness for war and national emergency. The law’s supporters argue that it has served those purposes. In fact, it has done the opposite.

With a focus on seaborne traffic, this report examines several ways in which the Jones Act has proven counterproductive. First it looks at the economics of government-created cartels and demonstrates that the Jones Act is a classic instance of such a cartel. Next, it examines how the Jones Act undermines its stated purpose of support for U.S. commerce, the U.S. merchant fleet, and national security priorities. It then looks at two special situations where the Jones Act has proved particularly damaging to U.S. interests: first, the case of Puerto Rico, and second, the impact on the U.S. energy sector. Finally, the report makes a series of recommendations for alleviating the worst of the Jones Act’s negative effects.

For 100 years, the Jones Act has poisoned America’s maritime industry and imposed hidden costs on U.S. consumers. Its chief beneficiaries are foreign exporters into the United States, whom the law in effect protects from American competition. Its only American beneficiaries are a small number of decrepit shipyards and shipping companies that depend entirely on the slow poison of its cartel restrictions and the government officials who find short-term political benefit in subordinating the public interest to those special interests.

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Cartel Economics and the Costs of the Jones Act

Estimates of the costs of the Jones Act for American consumers range from hundreds of millions to billions of dollars per year.³ Precise quantification of the costs associated with cartelization of any sector of the economy are inherently speculative to some extent, because there are so many sources of social loss, and because much of the loss inheres in transactions that never occur. A proper policy analysis begins with an understanding of cartel economics and of the major ways in which government-sponsored cartels hurt the public and the very industries they seek to protect.

A cartel, such as OPEC or a criminal price-fixing conspiracy, typically aims to reduce output in order to raise prices and thereby capture profits significantly above competitive levels—the price that would result from competition on the basis of marginal cost alone. In the United States, absent government sponsorship, such arrangements are typically prosecuted as criminal violations of Section 1 of the Sherman Act because of the coercive and unfair costs they impose on the public.

In a competitive open market, cartel arrangements typically disintegrate thanks to price competition, which results in greater output and lower prices, for two reasons. First, there is no way to exclude new entrants from

coming into the market and capturing market share at a price between marginal cost and the cartel price. Second, there is no way to enforce cartel discipline in the face of strong economic incentives to cheat by undercutting the cartel price.

Government sponsorship can solve both of these challenges for cartels, by increasing entry costs, outright prohibiting potential competitors from entering the market, making it illegal for cartel members to compete on price—for, example through mandatory production quotas—or a combination of these measures. Hence, a government-created cartel does not tend to disintegrate as a result of price competition, and its impact on consumers is best understood as a species of legal monopoly.

The Jones Act is a classic example of such a government-created cartel because it excludes potential competitors, namely U.S. or foreign companies sailing foreign-flagged or foreign-built vessels between two U.S. ports. And while the government does not set a cartel price, the exclusion of competitors incentivizes cartel pricing by, among other things, creating an uncompetitive cost structure among the small number of competitors. Not surprisingly, freight rates on Jones Act routes are closely guarded and difficult to obtain, while international freight rates are widely available.

The Jones Act lobby has seized on the difficulty of precisely estimating the law's full costs to cast doubt on the accuracy of any attempt to clarify those costs.⁴ While it may be difficult to estimate precisely by how much the Jones Act increases prices, that does not make significant costs any less of a certainty as a matter of basic economic theory. The Jones Act is designed to cartelize the shipping industry and restrict its output. The jury is not "out" on whether such market structures entails added costs.⁵

By restricting the available supply of shipping on domestic routes, the Jones Act hurts consumers and the economy in several ways. First, the costs of the higher levels of taxation and costs of regulation are passed directly on to consumers, who are deprived of shipping alternatives. To the extent that demand is inelastic,⁶ the restricted supply creates higher prices, which are also passed on to consumers, along with significant losses arising from the inefficiency of a highly distorted market sector. One major result is systematic overcapacity, which reduces consumer surplus and benefits nobody. To the extent demand is elastic,⁷ higher shipping costs result in less shipping taking place than would otherwise, resulting in what economists call "deadweight loss," which is the cost of inefficiency caused by transactions that do not take

place when supply and demand are out of sync.

Precisely estimating these various costs is difficult for a variety of reasons, including the difficulty of estimating the supply and demand curves—what consumers and producers might do in different situations. But the fact that such costs exist, and are significant, is an inescapable result of the market structure created by the Jones Act, as well as of the underlying high levels of regulation and taxation to which the U.S.-flagged fleet is subjected compared to other seafaring nations.

In a 2010 U.S. Department of Transportation Maritime Administration (MARAD) study of U.S.- and foreign-flagged vessels in international trade, U.S.-flagged vessels faced a 2.7 times higher daily operating cost than equivalent foreign-flagged vessels.⁸ The differential appears to have increased significantly since then, by more than 25 percent according to one study.⁹ The largest disparity was in crew costs, which were 5.3 times higher for U.S.-flagged vessels, and which may be even higher due to outdated crew requirements. These costs largely reflect the differential in tax and regulatory levels between U.S. and foreign jurisdictions.

However, the 2010 MARAD study only looked at U.S.-flagged vessels

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engaged in foreign commerce, not those plying routes protected by the Jones Act. U.S. vessels in foreign commerce are not subject to the American-build requirement, among other restrictions imposed by the Jones Act. Therefore, the 2010 MARAD study almost certainly underestimates the added costs of a Jones Act vessel compared to the foreign vessels that would be allowed to compete on domestic routes if the Jones Act were liberalized.

In a series of reports during the 1990s, the U.S International Trade Commission (USITC) estimated the added costs of the Jones Act to American consumers to be in the billions, with the 1991 estimate as high as \$9.8 billion.¹⁰ In 1998, the Government Accountability Office (GAO) assessed the USITC's methodology and approach as "reasonable."¹¹ But it noted the difficulty of estimating the cost differential with a high degree of precision because much of the data was proprietary and because of uncertainty about which U.S. laws would apply to the foreign shippers if they were allowed access to the U.S. coastwise trade.

In 2013 the GAO reiterated that observation when it concluded that "it is not possible to measure the extent to which rates in this trade are higher than they otherwise would be because the

extent to which rules and regulations that would apply to international carriers' vessels that may serve this trade are not known, and so many factors influence freight rates and product prices that the independent effect and associated economic costs of the Jones Act cannot be determined."¹²

However, as has been noted, a proper comparison of different policy approaches does not require a precise estimate of the cost differential. The systematic disadvantages of a cartel market structure subject to government protection have been well understood for decades and are not a matter of substantial debate. In fact, the lack of precise estimates of how much the Jones Act costs is likely hiding many downstream impacts and costs. One study suggests that more than half of the consumer price increase in coastal states between 1997 and 2016 was due to the Jones Act.¹³

In addition, the Jones Act imposes significant environmental costs. These arise from several sources. First, the Jones Act makes waterborne traffic more expensive than would be the case in a competitive market, so the law encourages greater use of trucks, trains, and airplanes. To the extent these alternative modes entail greater environmental externalities, the Jones Act has significant environmental costs as well.

Second, the law encourages the use of older and less efficient ships. In a recent Cato Institute study, Timothy Fitzgerald, former chief international economist at the White House Council of Economic Advisers, estimates that these environmental costs could exceed \$8 billion annually.¹⁴ This figure includes the upper range of various estimates of the cost of carbon emissions, where estimates vary widely, but as the paper also shows, water transport has by far the lowest level of carbon emissions per ton-mile traveled.¹⁵ These environmental costs have not been considered in studies of the law's economic welfare costs. Fitzgerald notes: "None of these studies have attempted to enumerate the external costs, and so they potentially represent an underestimate of the burden of this law by measuring only direct cost differences."¹⁶

In addition, by pushing freight onto the nation's roads, the Jones Act aggravates highway congestion and motor vehicle accidents.¹⁷ The Jones Act also puts the nation's industry at a competitive disadvantage. In the Cato study, Fitzgerald gives one particularly illustrative example:

By limiting domestic shipment of time-insensitive bulk commodities such as scrap steel, the Jones Act unwittingly and unintentionally increases global emissions by diverting industry to foreign soil.

The U.S. steel industry is among the cleanest in the world. When electric arc producers are unable to economically ship the scrap feedstock to their mills, foreign producers are only too happy to commission foreign-flagged vessels to export steel scrap to fuel their industry. The leading class of U.S. steel exports is scrap. Some steel smelted from U.S. scrap is reimported, further undercutting the American steel industry. Local and global environments lose out on the trade. If affordable short-sea shipping could move scrap steel to steel minimills or even legacy producers, there would be a double dividend for marine carriers and the domestic steel industry.¹⁸

Another source of environmental harm is the average age of the Jones Act fleet. A third of the Jones Act ocean-going fleet is 20 years old or older, and that share is much improved since 2007, when it was two-thirds.¹⁹ In 2015, one of the ships on the Jacksonville, Florida, to Puerto Rico route, the 40-year-old *El Faro*, sank in a hurricane, with the loss of all aboard—a disaster that some attributed to the age of the ship and its complement of older lifeboats.²⁰ In February 2019, a 46-year-old container vessel, *Matsonia*, leaked oil

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into Oakland harbor through cracks in its hull. While such incidents are anecdotal, they demonstrate another drawback of the Jones Act, namely the disincentive to innovate and modernize.²¹

Another related consequence of this cartelized market structure is an overwhelming incentive to collude on price, in violation of the antitrust laws. This was seen in 2011, when executives of two Jones Act companies, Sea Star Lines and Horizon Lines, were convicted of criminal price-fixing in shipping to Puerto Rico.²² A third, Crowley, pleaded guilty to criminal price-fixing the following year.²³ Indeed, one of those companies, Horizon Lines, subsequently shut down its Puerto Rico operations because of sustained operating losses, despite charging prices several multiples higher than world prices for comparable shipping services.

Impact on U.S. Commerce

Cabotage laws similar to the Jones Act existed for most of the 19th century. In 1893 and again in 1898, Congress amended the precursor of the Jones Act to prohibit the then-common practice of avoiding cabotage laws by routing cargo through a foreign port so foreign vessels could be used on both legs.²⁴ In response, U.S. shipping companies on the Alaska trade then switched to transshipment by rail

between Vancouver, Canada, and points south in the U.S. The Jones Act was designed to prevent all such expedients, hence the extraordinary heavy-handedness of its proscriptions.

But if the objective was to protect American commerce from foreign competition, the targets of the law's increasing sweep were not foreign shipping companies but American ones. Proponents of protectionism instinctively defend the Jones Act, but by raising the cost of domestic shipping, the law in effect creates a preference for imports and exports over domestic commerce. The Jones Act is, in that sense, protectionism for foreign exporters to the U.S. According to the USITC, costs imposed by the Jones Act amount to the equivalent of 64.6 percent tariff on domestic shipping services.²⁵

A comparison of shipping among Jones Act routes and competitive international routes is illuminating. A systematic comparison is difficult because there may be more demand for freight moving in one direction than the other along any particular route. Moreover, rates for shipping on Jones Act vessels are generally not published and are difficult to obtain—a curious fact, given the ready availability of rates for international freight. As one recent study notes:

The lack of publicly available information of freight rates results

in a huge advantage to carriers at the time of negotiating freight contracts with importers and opens the door to possible price coordination among shippers. In contrast, the behavior of shipping rates from China to different locations around the world can be traced using the Shanghai Containerized Freight Index (SCFI).²⁶

Nevertheless, a few examples suffice to show how much more expensive it is to ship on a Jones Act vessel than to ship internationally. It costs around \$3,000 to ship a container from Jacksonville to San Juan, Puerto Rico, but only about half as much to ship that same container to nearby Dominican Republic or Jamaica, apparently on the same carriers.²⁷ The carrier Crowley charges about 50 percent more to ship a car from Jacksonville to Puerto Rico than to Costa Rica or Panama, despite the much smaller volume of cars and significantly longer distance on the latter routes.²⁸ According to the *Journal of Commerce*, as of 2014 rates from Jacksonville to San Juan ranged from \$2,600 to \$3,400 for a 20-foot container.²⁹ The firm iContainers, which offers rates and bookings for shipping services to Puerto Rico from Europe and the mainland United States, currently posts rates as low as \$3,385 from Jacksonville to San Juan, and

nearly \$5,000 from Houston to San Juan.³⁰ By contrast, the cost of shipping the same container from Barcelona to San Juan can be as low as \$1,700.

The disparity is especially striking considering that the voyage from Jacksonville to San Juan is just over 1,400 nautical miles, while the voyage from Barcelona to San Juan is over 4,700 nautical miles, more than three times farther.³¹ The firm also currently posts rates close to \$1,300 for a 20-foot container from Shanghai to Los Angeles and just under \$1,400 from Shanghai to the Port of Seattle, more than 6,000 miles in the “loaded” direction of those routes, where demand is highest.³² Meanwhile, you can ship a container in the other direction, from Los Angeles to Shanghai, for as little as \$400. In terms of the cost per mile traveled for a standard container, the freight rates of the oceangoing Jones Act fleet are several multiples higher than the global average.

These dramatic disparities make sense given that, as mentioned above, the Jones Act and related regulations attached to U.S.-flagged vessels make it almost three times more expensive to operate an American ship than a foreign ship.³³ The law functions as a substantial tariff on domestic trade, the economic equivalent of a tax subsidy for foreign exporters into the

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U.S. Puerto Rico, for example, is free to import whatever it wants from any foreign country, but if it “imports” anything from elsewhere in the U.S., it must pay a significant penalty.

Sometimes, the penalty is shared with Americans on the mainland. Firms like Target and Walmart have standard prices for many products, usually published on their websites. Such pricing equalizes the regional differences in transportation and other costs for those products, which means that residents in states such as Arkansas and Texas are almost certainly paying higher prices in order to absorb the added costs of shipping to Puerto Rico.

Other products are sold locally at prices that reflect such regional cost differentials. Energy is one example. As a result of the Jones Act, Puerto Rico gets jet fuel for its busy international airport from Venezuela, natural gas for its power sector from Trinidad and Tobago, and gasoline from anywhere except the United States.³⁴ And this is at a time when U.S. energy exporters are drowning in a glut of product and desperate to expand export markets.

Among the perverse impacts of the Jones Act is the de facto prohibition on maritime “transshipment.” This is the practice whereby large container ships stop at major ports to unload cargo that is then loaded onto smaller “feeder” vessels for transshipment to smaller ports and anchorages—and

vice versa. Outside the United States, maritime transshipment is a virtually universal practice. According to the German maritime investment firm Marvest, “The feeder vessels are the backbone of maritime logistics and account for a large part of the cargo.”³⁵

In the U.S., however, the coastwise container transshipment business has been priced almost entirely out of existence. Instead, the Jones Act in effect requires all such “transshipment” to be done by rail or truck. This is another example of the Jones Act protecting a U.S. maritime sector that does not even exist—because of the Jones Act.

It is also another reason the World Economic Forum has rated America’s shipping industry regulations as the most restrictive in the world:

For centuries, nations have invoked their sovereign rights to restrict the movement of passengers and goods—or cabotage—within their borders. Although the historic justification for these restrictions has been national security, the clear intent of many cabotage regulations today, particularly those affecting transportation of goods by water, is to protect local industries and labour interests.

The most restrictive example is the United States Jones Merchant

Marine Act of 1920, which states that merchandise can only be moved between American ports by vessels that are US-owned, US-crewed and US-built. China has similar restrictions (though it does not require ships to be of Chinese construction).

Despite the benefits to flag carriers or local shipyards, such barriers actually damage local economies and saddle businesses and consumers with significant costs. Lack of competition forces businesses to use high-cost logistics suppliers and requires international export/import businesses to use inefficient trans-shipment operations—which come with high environmental costs.³⁶

A cardinal purpose of the Jones Act is to “support American commerce.” It hard to see any way in which it has not done exactly the opposite.

Impact on the U.S. Maritime Industry

Proponents of “Buy American” will be disappointed by the Jones Act when it comes to shipbuilding as well. Of the over 30,000 vessels in the Jones Act fleet, only about 99 were large oceangoing vessels as of 2019.³⁷ According to MARAD, this includes 24 container ships, two dry bulk ships, nine general cargo ships, seven roll-on/

roll-off vessels, and 57 tankers.³⁸

According to the Congressional Research Service (CRS), the 57 tankers include 11 tankers that carry crude oil from Alaska to the West Coast of the U.S. and 44 are smaller tankers that mostly distribute refined gasoline to points on the East Coast. The 24 container ships are substantially dedicated to the Puerto Rico, Hawaii, and Alaska routes, where shippers have no practical options. Only a small number of tankers carry crude oil from the U.S. Gulf Coast to other U.S. points, an astonishing fact considering East Coast refineries process about 1 million barrels of crude oil every day.³⁹

The small number of oceangoing Jones Act vessels is a direct result of the increased costs of the domestic-build and domestic-crew requirements when compared to the merchant fleets of other nations. That cost differential began to widely dramatically almost as soon as the Jones Act was passed. According to the Congressional Research Service, by the late 1920s, U.S.-built ships cost 20 percent more than those built abroad, increasing to 50 percent more in the 1930s and 100 percent more in the 1950s. By the 1990s, U.S. shipyard prices were three times as expensive as those of foreign yards. Today, a U.S.-built tanker costs four times the foreign equivalent; a U.S.-built container ship may cost up to five times more.⁴⁰

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The result is predictable. In the century since the passage of the Jones Act, demand for U.S.-built ships has nosedived. As orders for new seafaring vessels dropped, the per-unit costs of shipbuilding rose. The U.S. shipbuilding industry then became the victim of its competitors' economies of scale, and now has been almost completely wiped out. In 2018, more than 90 percent of the world's new propelled large seafaring vessels were built in China, South Korea, or Japan, while the U.S. built just 0.35 percent.⁴¹ Nor can the difference be blamed on lower wages abroad: During much of the 1980s, when U.S. shipbuilders were losing market share fast to the Japanese, income per capita (expressed as purchasing power parity) was nearly the same in both countries, and for much of that time shipbuilding labor costs were actually higher in Japan.⁴²

Meanwhile, whole categories of ships, such as heavy lift, liquefied natural gas (LNG) transport, and offshore construction vessels are no longer made in the U.S. because of the Jones Act and related U.S. regulations.⁴³ Any American who needs to use such a ship domestically must lobby Congress for a statutory exemption, which can take years or even decades in the rare cases where lobbying is successful at all.

The number of U.S. shipyards making commercial oceangoing vessels had dwindled from 64 after World War II

to just three, General Dynamics, VT Halter, and Philly Shipyard, all of which depend on defense contracts to stay afloat. Two small, specialized, LNG-powered container ships are currently being built by Keppel AmFELS, a Gulf Coast offshore oil rig manufacturer that is also a defense contractor, for the Hawaii trade route.⁴⁴

Philly Shipyard was the last American shipyard to make only commercial vessels. It is now almost purely a defense contractor. In 2018 it lost \$40 million on operating revenue of \$130 million and in 2019 it lost \$20 million on operating revenue of just \$28 million. But in 2019, with no orders for new commercial ships, it shifted to reliance on government maintenance and repair contracts to stay afloat. In the second half of 2019, its principal activity was repairing a vehicle-transport vessel in the U.S. Ready Reserve Force (RRF), the *FSS Antares*, and it is currently repairing another RRF vessel of the same class, the *FSS Pollux*. Both these RRF ships were built at the Bremen shipyards in Germany.⁴⁵ As of December 31, 2019, Philly Shipyard had just 119 direct employees, plus 20 subcontracted personnel.⁴⁶ In April 2020, Philly Shipyard won a contract to build a new class of training vessels, the National Security Multi-Mission Vessel.⁴⁷ Such is the paltry industry that the Jones Act is protecting, at

enormous cost to American consumers and vital American interests.

U.S. shipyards have lobbied hard to be able to buy foreign components, so the domestic-build requirement is far from comprehensive. Philly Shipyard uses South Korean engines and designs, which, along with other important ship components, can be foreign-built under the Jones Act. And ironically, while Jones Act ships must be built in America and owned by Americans, federal law does not require American shipyards to be owned by Americans. Philly Shipyard, which according to its most recent annual report has produced around half of all oceangoing Jones Act ships since 2000, is the operating subsidiary of a Norwegian company. VT Halter and Keppel AmFELS are both majority-owned by Singapore companies. And the American-owned requirement is less comprehensive than it seems. Even though the Jones Act requires 75 percent domestic ownership of vessels on the coastwise trade, the law still allows foreigners to own substantial minority positions.⁴⁸

The Jones Act’s defenders cannot seriously claim that the law is working. The state of the U.S. maritime shipbuilding industry literally could not be worse. The Jones Act has protected it to death. As noted, Philly Shipyard was the last purely commercial manufacturer of oceangoing vessels in the United States. Now there are none. The oceangoing Jones Act fleet has dwindled from more than 400 in 1950 to less than 100 today, and most of the remaining U.S.-flagged ships are on routes where the shippers have no choice because of “cargo preference” and similar laws.⁴⁹

A historical comparison to other transportation modes is illuminating. Since 1980, the amount of freight carried on the seaborne Jones Act fleet has continued to fall, while the amount of freight carried by all other modes has soared. This is especially surprising considering that ships globally have much lower cost per ton-mile than any other transportation mode, and will often be the preferred mode of freight transportation when carefully planned supply chains minimize the cost of slower travel time.

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U.S. Ton-Miles of Freight by Transportation Mode, 1980-2017⁵⁰

Mode	1980	2017	% Change
Air	4,528	14,417	+220%
Truck	1,266,631	2,023,456	+60%
Railroad	932,000	1,674,784	+80%
Jones Act Seaborn	631,149	176,000	-82%

When it comes to oceangoing vessels, there is no longer any such thing as “America’s domestic shipbuilding industry.”

Almost half the oceangoing Jones Act fleet distributes gasoline along the Atlantic seaboard. About 20 Jones Act ships form America’s lifeline to Alaska, where oil production is falling because of much lower production and transportation costs for Texas and North Dakota producers.

Nor is manufacturing cost the only competitive disadvantage facing the U.S. shipbuilding industry. Because of labor-union and other labor protections, U.S. crews are much more expensive than foreign crews, making oceangoing Jones Act ships significantly more costly not only to buy but also to operate—nearly three times more expensive, according to MARAD.⁵¹

One 2017 article in *The Maritime Executive* illustrated the political staying power of the Jones Act:

The Jones Act is politically sacred, as it protects America’s domestic shipbuilding industry from competition in areas of domestic maritime transportation. It assures continued industrial activity and economic opportunity at American shipyards.⁵²

The Jones Act’s defenders seem almost impervious to reality. When it comes to oceangoing vessels, there is no longer any such thing as “America’s domestic shipbuilding industry.”

The domestic transport-manufacturing

sectors that enjoy robust industrial activity and economic opportunity—such as airlines, trains, and automobiles—are precisely those that do not suffer from the poisonous protection of laws like the Jones Act.

Few people nowadays remember those who predicted doom if America’s airline industry was deregulated. Yet it is in part because of the deregulation of the airline industry in the 1970s that Boeing is today the world’s dominant aircraft manufacturer. More than half the world’s jetliners are built by Boeing, and Boeing aircraft carry a staggering 90 percent of the world’s air cargo.⁵³ The same applies for America’s railways, which were saved from ruin by deregulation in the early 1970s.⁵⁴

We cannot say we were not warned. The minority report to a 1919 House of Representatives committee report on the Jones Act predicted that it would raise the costs of American shipping and make it more difficult for American shippers and carriers to compete successfully:

[I]n order to build up and sustain an American merchant marine it is absolutely necessary to remove every restriction against American merchants acquiring ships, whether built in the United States or out of the United States, at the lowest possible price, in order to enable them to compete with other nations in the transportation

of the commerce of the world. ... On the other hand, if the American merchant shall be permitted to buy ships only from American builders in order to engage in our coastwise trade, it necessarily follows that every ship built in the United States will command a higher price than any foreign-built ship. Our American iron and steel manufacturers were unable to compete until they had to. When they had to they did compete successfully. Our shipbuilders can and will do likewise.⁵⁵

After the number of ships in the U.S. merchant marine began to drop precipitously in the 1950s and 1960s, the Johnson administration took aim at the Jones Act. Secretary of Transportation Alan Boyd testified in Congress that, “you do not revitalize an industry by flooding it with Federal dollars and imprisoning it within a wall of protection.”⁵⁶

The Jones Act’s destructive impact on the U.S. shipbuilding industry was prominently predicted when the law was enacted and has been well understood since. The only surprise would have been if the U.S. shipbuilding industry had managed to flourish under the Act’s protections.

Impact on National Security

Even if the Jones Act had some marginal defense utility in the middle

of the 20th century, it has none today. The Defense Department has said that it prefers foreign-built transport ships because of their much lower cost.⁵⁷ The vast majority of the vessels chartered for sealift during the Gulf War and Iraq War were foreign. Even if U.S. commercial ships were affordable, their military utility is fading fast in era of ultra-high-tech warfare with a premium on transport ships that are fast, flexible, and specialized for modern military operations. As for national emergencies, virtually every time one requires sealift, the Jones Act needs to be waived so victims can get the relief they need from ships that are actually available. In short, the Jones Act today serves no real military purpose, and in many ways undermines military readiness and the nation’s ability to respond to emergencies.

The Jones Act was enacted in the aftermath of World War I, when the U.S. Merchant Marine was relied on to supply food and materiel to U.S. allies in Europe, as well as to transport and supply U.S troops, though it often fell short. The oceangoing Jones Act fleet was activated for World War II and played an indisputably heroic role, suffering heavy losses transporting troops and critical supplies to both the European and Pacific theaters of the war. The Merchant Marine again played a major role in the Korean War and was also prominent in the Vietnam War.

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Through all these conflicts, the domestic industrial base for the shipping industry was able to substantively supply both commercial and military naval needs. Since the Vietnam War, however, the U.S. military, including its approach to maritime transport, have evolved significantly. Modern U.S. military strategy calls for supply ships with much more flexible capabilities, such as the ability to unload at underdeveloped ports and even directly onto shallow shorelines.⁵⁸ They must be fast, light, highly maneuverable, and not substantially dependent on deep-water harbors and major ports in the case of a conflict.

Meanwhile, the trend in commercial shipbuilding is precisely in the opposite direction. Both competition and tighter environmental regulations are pushing the trend in commercial shipbuilding toward increasingly larger and slower-moving vessels that require more depth below the waterline than most ports can provide.⁵⁹

In the second half of the 20th century, the capacity for rapid response and readily deployable strategic sealift became a crucial priority. That led to the creation in 1976 of the Ready Reserve Force as a subset of the National Defense Reserve Fleet (NDRF). During the Reagan administration, the U.S. abandoned the merchant marine model for all

practical purposes, investing heavily in fleets of specialized sealift vessels for times of war or national emergency. The trend accelerated after the Gulf War, as the ability to project force globally and rapidly became a pillar of American defense strategy.⁶⁰

The transition in U.S. naval transport capabilities was largely accomplished during the defense buildup of the 1980s, after the Navy formally recognized strategic sealift as a major naval function along with sea control, power projection, and strategic deterrence.⁶¹ As a result, the United States actively owns and maintains a much larger proportion of the transport ships it might need in case of national emergency than was the case in earlier periods. The core active-duty sealift capability is composed of 32 ships operated and maintained by the U.S. Navy's Military Sealift Command for combatant command support, including fast sealift ships, prepositioned stocks, and specialized tankers and container ships, and not including the sealift and prepositioning assets the Navy needs for itself.⁶²

In reserve, the NDRF, which is maintained by the Department of Transportation's Maritime Administration, now consists chiefly of the RRF. As of January 2020, the RRF was comprised of 46 ships, of which 30 are foreign-built. Beyond the RRF, NDRF currently has and plans to

retain about an additional 30 ships, but those are maintained for a variety of roles, and only some of them would be available for sealift in case of national emergency.⁶⁴

In a 1992 report published almost immediately after the Persian Gulf War, the Government Accountability Office confirmed the success of the U.S. military's transition to a smaller fleet of specialized and readily deployable transport vessels.⁶⁵ At the time the report was issued, the NDRF consisted of the newly built-out RRF, alongside a larger reserve fleet of older, largely World War II-era transport ships. None of the latter were activated. The GAO reported:

The utility of DOD's sealift capability expenditures during the 1980s was clearly demonstrated during the recent deployment of U.S. forces to the Persian Gulf, which resulted in the largest concentrated sealift activity since World War II. However, the non-RRF ships were not needed or used during this crisis.⁶⁶

The GAO concluded, "Given the increased capabilities of other, quicker-response types of sealift assets, including the RRF, the non-RRF are no longer needed." In fact, given the increased capabilities of other, quicker-response types of sealift assets, including the RRF, the

Jones Act fleet of merchant marine ships is likely never to be needed again. This is fortunate, considering the speed with which the Jones Act fleet continues to diminish.

Thankfully for the U.S. defense budget, the military is not required to buy transport ships made in America, so most of the reserve sealift fleet is foreign-built. In the crucial RRF, for example, about two-thirds of the ships are foreign-built.⁶⁷ That is arguably a direct result of the Jones Act and related laws, which have made U.S.-built ships globally uncompetitive.

A 1995 report of the Chairman of the Joint Chiefs of Staff and the U.S. Transportation Command detailed the vital role of commercially chartered transport ships to augment the U.S. military's own sealift ships during the Persian Gulf War.⁶⁸ Rather than activating the U.S. Merchant Marine fleet under the Sealift Readiness Program (SRP), ships were chartered on the basis of a worldwide Request for Proposal (RFP), with no need to use even the older NDRF reserve fleet, much less activate the Merchant Marine. The U.S. military preferentially chartered as many American-flagged and American-owned ships as were offered in response to the RFP, and then turned to allied and friendly foreign sources of shipping.⁶⁹ This was done partly out of concern for the financial distress that forcibly activating private ships under the SRP

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would have had on those shipping companies.

Out of a total of 359 sealift assets used in the Persian Gulf War, 180 were foreign-flagged charters. By comparison, only 167 were U.S. ships, and of those 135 were owned or controlled by the U.S. government. Only 32 were privately owned by Americans.⁷⁰ Hence, of the 191 private vessels chartered for sealift in the Gulf War, only about 15 percent were U.S.-flagged vessels, almost all of which appear to have been of foreign build, and consequently not part of the Jones Act fleet. The other 85 percent were foreign vessels, even though the Defense Department gave preference to U.S. ships.⁷¹ Moreover, in keeping with their strategic purpose, the sealift assets owned and controlled by the Defense Department were deployed far faster than were privately owned vessels.

This pattern was repeated in the Iraq War. In the first five months of Operation Iraqi Freedom, the vast majority of the sealift relied on the Defense Department's own ships, which delivered more than 20 million square feet of cargo.⁷² This was supplemented by chartered foreign vessels, which carried 3.3 million square feet of supplies, and U.S. flag charters, which carried 1.3 million square feet. Again, few of those U.S.-flagged vessels appear to have been

part of the Jones Act fleet.⁷³ Foreign charters carried 185 million gallons of fuel, U.S. tankers only 21 million gallons.⁷⁴

With respect to the industrial and technological base for U.S. naval shipbuilding, the trend has been toward specialization. As a result, an increasingly large part of the cost of naval shipbuilding is incurred in connection with systems and capabilities that are not part of the commercial shipbuilding industrial base. A large and increasing proportion of the industrial and technological base for U.S. naval shipbuilding is programmatically maintained as part of the National Defense Authorization process.

The Defense Department may have moved away from Jones Act ships for crisis sealift, but it still needs mariners to sail the hundreds of sealift vessels that are currently propositioned, manned with minimal crews, or in dry dock. Unfortunately, the Jones Act has diminished the U.S. maritime fleet to the point where the number of mariners is no longer sufficient for reserve requirements.

This is one way that the Jones Act actually puts national security at risk. The U.S. merchant marine has dwindled to the point that it could supply at most 30 percent of the nearly 12,000 mariners required to man the

reserve fleet of government-owned ships if activated.⁷⁵ Half of the mariners planned for in the defense sealift strategy are “civil service mariners” employed by the U.S. Navy to man the reserve fleet.⁷⁶ The rest are in the Maritime Administration’s Maritime Security Program, which enrolls U.S.-flagged commercial vessels on the international trade, virtually all of which are foreign-built.⁷⁷

Again, the Gulf War vividly illustrated of these shortcomings. The Jones Act failed to produce anywhere near the number of mariners needed for the supply effort—and once again the failure was due to the Jones Act itself, for two reasons. First, the Act has reduced the overall size of the seafaring merchant marine. Second, the mariner profession has become more specialized. During the Gulf War, the U.S. military had trouble finding enough radio operators and senior steam propulsion engineers for all its maritime needs and had to adjust operations accordingly.⁷⁸

In short, the elevation of sealift into a major strategic naval function has substantially obviated the national security purpose of the Jones Act, in at least two ways. First, it has resulted in a reserve sealift capability that is largely owned and maintained by the U.S. government, as is a large part of the needed manpower. Second, it has guaranteed that, in times of crisis,

the Defense Department will have flexibility to charter whatever ship might be available, regardless the country of build or registry.

Whatever its part in the military strategy of 100 years ago, the Jones Act now has to be circumvented in order to safeguard vital national security interests. The naval technological base still requires the cost-effective technologies that only a vibrant *commercial* technological base can provide. The Jones Act increasingly deprives the military of this vital need. That partly explains why warship procurements consistently run late and far over budget—another way in which the Jones Act imposes unnecessary costs on Americans and undermines its own purposes.⁷⁹

As for national emergencies, almost every time there is a natural disaster requiring emergency sealift capabilities, the Jones Act needs to be waived so victims can get emergency supplies. That is what happened after Hurricanes Katrina, Rita, Sandy, and Maria.⁸⁰ In the case of Maria and Puerto Rico, an exemption arguably was not necessary. The Jones Act fleet dedicated to serving Puerto Rico operates with a structural excess capacity of more than 50 percent, which is a major reason that using its services cost at least twice as much as on competitive routes.

The Jones Act costs Puerto Rico \$568.9 million in added shipping costs compared to global freight rates.

In Focus: Puerto Rico and the Jones Act

Puerto Rico is the only U.S. territory that is subject to the Jones Act. Hence, in the case of Puerto Rico, the Jones Act is arguably a highly regressive and exploitative form of taxation without representation. According to one recent study, the Jones Act costs Puerto Rico \$568.9 million in added shipping costs compared to global freight rates, along with secondary effects results in consumer prices that are \$1.1 billion higher in Puerto Rico than would be the case without the Jones Act.⁸¹ The study estimates that because of the Jones Act, there are 13,250 fewer jobs, and \$1.5 billion less in economic activity in Puerto Rico.⁸² These costs are particularly unconscionable in the wake of Hurricane Maria, which itself struck Puerto Rico during a time of prolonged economic and fiscal crisis.

Between 1996 and 2006, Section 30A and Section 936 of the U.S. Internal Revenue Code—which created major federal tax incentives for business on the island and helped sustain its employment levels—were phased out. This sent the economy of Puerto Rico into a downward spiral even before the financial crisis of 2008. A decade later, the economy had shrunk by more than 10 percent of GDP, and labor force participation rate had sunk to below 40 percent, among the lowest in the world. A massive exodus of

predominately working-age Puerto Ricans to the mainland had reduced Puerto Rico's population by more than 10 percent in just 10 years, a figure comparable to the exodus of Cubans after the Communist revolution there.⁸³ The global financial crisis accelerated the local government's descent into a crushing fiscal spiral of dwindling revenue and soaring debt—and then the hurricane hit.

In an economy where median income is half that of Mississippi, the poorest U.S. state, federal policies such as the full minimum wage and welfare benefits set close to mainland U.S. levels have helped to create an unsustainable economic situation. Wages and labor force participation are significantly lower than on the U.S. mainland, while the prices of many goods and services are higher than on the mainland.⁸⁴ According to Puerto Rico's Institute for Statistics, the cost of living in Puerto Rico is 13 percent higher than on the mainland U.S., while Puerto Rico's income per capita is half that of the poorest state.⁸⁵

Puerto Rican families are particularly sensitive to hidden costs of policies such as the Jones Act. A 2012 World Bank study found that the minimum wage, relative to the value added per worker, is nearly twice as high in Puerto Rico as it is in the Bahamas and Jamaica.⁸⁶ This results in massive unemployment, likely because much

of the Puerto Rican labor force's hourly product is below the federal minimum wage. Puerto Rico has the lowest average wage of any state or territory subject to the federal minimum wage, which means that the unemployment effects of the federal minimum wage could be larger there than anywhere else in the United States.

Estimates vary as to how much more Puerto Rico pays for food and other necessities than it would in a competitive market. But we know both that the costs are significant and that Puerto Rico is particularly vulnerable to them. Puerto Rico relies on seaborne transport of many necessities from the mainland U.S. By implication, demand is to some extent rigid and there is a relatively small deadweight loss. If so, then there must be a substantial hidden transfer from Puerto Rico's consumers to the Jones Act companies that service the Port of San Juan. According to one study, the Jones Act costs the average household of three in Puerto Rico around \$300 per year.⁸⁷

There is nearly no end to the ways the Jones Act imposes added costs on Puerto Rico. The GAO reports that some foreign carriers' longer trade routes allow them to spread their costs out over more containers or cargo and achieve economies of scale that are not available to Jones Act carriers providing dedicated service between

the United States and Puerto Rico.⁸⁸ The GAO study of the specific impact of the Jones Act for Puerto Rico cites the 2010 MARAD study as the basis for concluding that foreign carriers typically have lower operating costs than U.S.-flagged carriers.⁸⁹

The benefits of modifying the Jones Act for Puerto Rico could be considerable. Puerto Rico's economy is heavily reliant on products produced offshore and delivered to the island—mostly by ship. Puerto Rico has no fuel resources, so all fuel for transportation and electricity generation are shipped in. Because of the high cost of shipping energy resources from the U.S. mainland to Puerto Rico, the island purchases 97 percent of its energy resource supplies from foreign countries.⁹⁰ Puerto Rico gets jet fuel for its busy international airport from Venezuela, most its natural gas for power generation from Trinidad and Tobago, and gasoline from anywhere except the United States.⁹¹ Puerto Rico has also imported LNG from Russia, France, and Belgium.⁹²

About three-fourths of the energy used in Puerto Rico comes from petroleum products, which are all imported.⁹³ Puerto Rico imports about 1.6 million short tons of coal annually from Colombia to supply its single coal-fired power plant (at 454 megawatts).⁹⁴ In other words, not only does the Jones Act make Puerto Rico almost totally

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Puerto Rico could become a strategically significant consumer of, and hub for, U.S. global energy exports.

reliant on foreign sources of energy, it is also serving to preserve a power-generation fuel mix that is extraordinarily carbon-intensive.

Puerto Rico is slowly shifting from oil and coal to natural gas for power generation, albeit slowly. Beginning in 2012, Liquefied Natural Gas imports through Peñuelas in the island's southwest increased to support the Puerto Rico Electric Power Authority's conversion of the nearby oil-fired Costa Sur (South Coast) generating station to dual-fuel capability with natural gas.⁹⁵ (The utility is better known by its acronym, PREPA.) Even there, however, nearly all natural gas Puerto Rico imports come from Trinidad and Tobago in the form of LNG.⁹⁶ Puerto Rico has asked for a 10-year waiver so it can import LNG from the mainland U.S. instead, but the Jones Act lobby has blocked that, too.⁹⁷

Exempting Puerto Rico from the Jones Act could turn Puerto Rico into a major international trade hub and open up a large new market for U.S. energy producers. Moreover, as the U.S. has risen to become the world's largest energy producer, with significant LNG exports that were nonexistent just a decade ago, Puerto Rico could become a strategically significant consumer of, and hub for, U.S. global energy exports.

Puerto Rico also relies heavily on offshore sources for food. Before

Hurricane Maria's landfall, imports accounted for about 85 percent of its food, a figure that rose substantially after the hurricane due to crop damage.⁹⁸ Although the favorable tropical climate offers some agricultural opportunities, only 6.6 percent of land is arable.⁹⁹

In the aftermath of Hurricane Maria, the Jones Act fleet touted its ability to serve Puerto Rico without significant interruption, and here the major problems cannot be blamed on the Jones Act. Supply blockages occurred because of distribution problems unrelated to the Jones Act, particularly in areas away from the coast where the landscape is heavily forested and most roads were impassable for miles after the hurricane. Many towns were cut off from all supply routes for weeks and had to be supplied by helicopter.

The Jones Act fleet was able to add capacity quickly because, as a cartelized sector, it carries a structural overcapacity. But that is hardly a selling point, especially given the exorbitant costs of Jones Act transport. The global supply of shipping services has the scale, diversity, and flexibility to meet virtually any contingency at much lower cost, and could easily have supplied Puerto Rico in the aftermath of Hurricane Maria. Moreover, this is an argument the U.S. routinely pushes on other countries in

order to get them to open up their markets, China being the cardinal example.

Federal law permits a waiver of the Jones Act by the Secretary of Homeland Security, under two circumstances.¹⁰⁰ First, the requirements of the Act may be waived upon request if the Secretary of Defense determines it to be “necessary in the interest of national defense.”

Alternatively, the requirements of the Act may be waived where the Secretary of Homeland Security considers it necessary in the interest of national defense, but only if the Maritime Administrator, an official within the Department of Transportation, determines that qualified U.S.-flagged vessels are not available to meet national defense requirements.

On September 28, 2017, Acting Secretary of Homeland Security Elaine Duke issued a 10-day waiver of the Jones Act for products shipped from U.S. coastwise points to Puerto Rico in response to a request from Secretary of Defense James Mattis.¹⁰¹ Mattis concluded that a 10-day waiver of the Act was necessary in the interest of national defense given the “devastation” to Puerto Rico caused by Hurricane Maria, which inflicted “widespread damage to its infrastructure.”

These waivers did little good under the circumstances. The problems of

the Jones Act are long-term and structural. At a minimum, it would take months to rearrange the relevant supply chains, and shippers would only spend the time and money required to do that if they had some certainty that the new supply chains would last. In other words, waiving the Jones Act for Puerto Rico would be helpful if, at a minimum, the waiver were to be granted for a number of years.

U.S. domestic producers that would like to sell to Puerto Rico are also affected, as Puerto Rico substitutes foreign imports for things it would get from the mainland U.S. if not for the Jones Act. Shipping animal feed from Canada by a foreign carrier is much cheaper than sourcing it from the U.S. According to the GAO, “this cost differential is significant enough that it has led to a shift in sourcing these goods from Canada.”¹⁰² Staples such as corn and potatoes are also sourced from foreign countries rather than the mainland U.S. because of higher shipping costs on Jones Act carriers.¹⁰³ According to one estimate, exempting Puerto Rico from the Jones Act would result in \$341 million increased annual revenue for U.S. companies.¹⁰⁴

A modification to the Jones Act for Puerto Rico would reduce the number of U.S.-flagged ships and mariners available to support national security sealift requirements. However, the

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total number of Jones Act ships currently engaged in Puerto Rico trade, around a dozen counting oceangoing barges, is too small to have significant impact on national security. The Ready Reserve Force, which the U.S. is supposed to maintain in a high state of readiness, is several times larger, while the military operations of the last several decades have amply demonstrated the availability of preferable alternatives to the Jones Act in case of emergency.

In Focus: U.S. Energy Production and the Jones Act

The impact of the Jones Act on American energy is particularly indefensible. The Act is in effect a prohibitive tariff on shipping American energy from one American port to another. If not for the Jones Act, America might be able to cut its imports of crude oil by half.

For instance, New England states are forced to import energy from countries like Russia and Nigeria, while America's own Gulf Coast suppliers drown in an ocean of cheap oil and gas, desperate for markets. It is cheaper to send crude oil from the Gulf Coast to Canadian refineries by sea, or move it by rail, than to ship oil by tanker to New England refineries, which would be the most economical option for many producers in an efficient market. Shipping a barrel of oil from the Gulf

Coast to the northeastern U.S. on a Jones Act ship can cost \$5 or \$6 per barrel, while shipping the same barrel all the way to Canada costs only about \$2 per barrel.¹⁰⁵ With West Texas Intermediate crude currently trading at less than \$20 per barrel, the added cost of the Jones Act is prohibitive for many shippers. This explains why, since the start of the shale boom, much more of the new oil production in Texas has gone to Canadian refineries than to American ones.¹⁰⁶

Puerto Rico has sought a long-term exemption so that it can import LNG from the U.S. instead of from Trinidad and Tobago, but the Jones Act lobby has successfully blocked the exemption so far, despite the absence of any American interest to protect. There are no LNG tankers in the Jones Act fleet nor are any likely to ever be.

The Jones Act disproportionately impacts the energy sector at multiple stages in the supply chain. In most of these cases, one key question for Customs and Border Protection (CBP), the main regulator for the Jones Act, is whether the relevant offshore point is a "point in the United States" such that a voyage between and the mainland must be Jones Act-compliant. Notable impacts of the Jones Act in this regard include problems related to "lightering," supply vessels for offshore drilling and production platforms, the effect of fuel blending

at an intermediate foreign port between U.S. points, and wind farms.

“Lightering” is the common practice of transferring oil near offshore from a large tanker to a smaller one capable of harbor navigation. CBP has determined that if the larger tanker is anchored to the seabed within three nautical miles of shore (the extent of U.S. territorial waters), then it constitutes a U.S. point and therefore the smaller tanker must be Jones Act-compliant.¹⁰⁷ As the Congressional Research Service explains, this has highly disparate regional impacts. Most lightering areas in the Gulf of Mexico are 60 to 80 miles offshore, while many of those in the northeastern U.S. are within the three-mile territorial limit.¹⁰⁸ As a result of this simple geographical distinction, it is generally legal to lighter in the Gulf of Mexico but not in the vicinity of New England.

The geographic reach of the Jones Act sometimes depends on the impact of other laws. For example, for purposes of the Outer Continental Shelf Lands Act, “U.S. waters” reach the whole exclusive economic zone under the U.N. Convention on the Law of the Sea, which extends 200 miles from shore. As a result, virtually all offshore drilling platforms and most offshore production platforms, as well as wind farms, are considered “U.S. points” for the purposes of the Jones Act.¹⁰⁹

This has created numerous problems for offshore energy infrastructure developers. First, CBP’s determination of whether such an oil platform is a U.S. point depends upon what type of rig it is. If it is anchored to the seabed, then it is a “U.S. point,” but if it is a mobile semisubmersible and uses propellers to hold its position, it is not. The latter rigs may be serviced by foreign vessels operating from U.S. ports, but the former may not.¹¹⁰ Another problem arises because of the distinction between vessels transporting supplies or workers to the rig as opposed to vessels that supply equipment necessary for its operation. The former must be Jones Act compliant, while the latter need not be.¹¹¹

Similar problems impact offshore wind farms. All such wind farms are located within the 200-mile exclusive economic zone, which corresponds roughly with the continental shelf, and anchored to the ocean floor. Hence, all are assumed to be “U.S. points” for purposes of the Jones Act, and the ships servicing them must therefore be Jones Act-compliant, including the specialized vehicles used to install the towers—none of which are made in America. Therefore, wind farm developers must use installation vehicles from foreign countries, and as a result also import the equipment they need from that country, despite

the fact that the U.S. is among the world's top producers of wind turbine equipment.¹¹²

Yet another way the Jones Act benefits foreign companies over their American competitors has to do with the restriction on transporting fuel from one U.S. point to another. As mentioned previously, the Jones Act is written so as to prevent circumnavigation of its requirements by stopping at an intermediate foreign port between two U.S. points. However, CBP has ruled that if that the product aboard is transformed into a new product at the foreign port, then the voyage is not between two U.S. points for purposes of the Jones Act.¹¹³ As a result, at least one oil producer has resorted to stopping at storage facilities in the Bahamas to blend its cargo of domestic oil with a significant amount of foreign oil, so that the voyage between Texas and New York will not be prohibitively expensive as a result of Jones Act requirements.

One major impact of the Jones Act in the energy sector is that it forces many refineries to seek out foreign sources of oil because of the much higher costs of shipping from domestic sources on tankers. Because the U.S. Virgin Islands were exempted from the Jones Act early on, by the 1970s the largest refinery in the U.S. was located there.¹¹⁴ In 2014 refiners in the northeast sought an exemption from the Jones

Act so that they could have oil shipped from Texas, but the Jones Act lobby was characteristically effective in fending off any reform.¹¹⁵

In 2019, according to the Energy Information Administration, the U.S. imported about 5 million barrels of crude oil per day and exported almost 3 million barrels per day, all of it on foreign-built tankers.¹¹⁶ Only a small number of tankers carry crude oil from the U.S. Gulf Coast to other U.S. points, an astonishing fact considering East Coast refineries process about 1 million barrels of crude oil every day.¹¹⁷ In 2019, tankers and barges carried an average of just 60,000 barrels per day from the Gulf Coast to east coast refineries.¹¹⁸ According to American Shipping Company (a subsidiary of the same Norwegian company that owns Philly Shipyard), oil picked up in Houston needs to be \$1.50 cheaper than oil picked up in Africa to be competitive for purchase by East Coast refineries.¹¹⁹

North America's flows of crude oil are structured to avoid Jones Act restrictions, which has resulted in a highly distorted pattern. Canada is the world's fourth largest oil exporter, with 96 percent of its exports going to the U.S. It is by far the top source of U.S. crude oil imports. But Canada is also the top *importer* of U.S. crude oil. Despite the fact that Canada consumes barely 1.7 million barrels per day, a

third of the oil it produces, Canada imports nearly 1 million barrels per day from the United States in some years. That is chiefly because it is far cheaper for the U.S. to ship oil to from the Gulf Coast to Canadian refineries and reimport the refined gasoline than to ship directly to northeastern U.S. refineries. According to CRS, shipping a barrel of oil from the Gulf Coast to Canada costs only about \$2, while shipping it to the northeastern U.S. can cost three times more.¹²⁰ Not surprisingly, U.S. refineries on the East Coast of the U.S. imported nearly 700,000 barrels of crude oil per day in 2019, much of it from Canada.¹²¹ This distorted pattern of crude oil flows in North America was exacerbated a

decade ago at the start of the fracking boom. The Jones Act makes it illegal to deploy foreign tankers to move any of the new oil production to American ports by sea. As production spiked, there was a significant increase in construction of pipelines and orders for new Jones Act tankers. However, domestic tanker construction capacity was small—only two shipyards in the U.S. can build them—so not many orders could be filled. By the time the few new Jones Act tankers were built, the U.S. had hit the mid-decade slump in production, and with the lifting of the ban on U.S. oil exports making it cheaper to export oil abroad than to ship to American customers, demand for the new tankers dried up. Now,

The Jones Act makes it illegal to deploy foreign tankers to move any of the new oil production to American ports by sea.

Top Sources of U.S. Crude Oil Imports, 2019¹²²

Country	Bbs/day
Canada	3.8 million
Mexico	600,000
Saudi Arabia	500,000
Iraq	331,000
Colombia	318,000

Top Destinations for U.S. Crude Oil Exports¹²³

Country	Barrels/day
Canada	459,000
South Korea	426,000
Netherlands	281,000
India	256,000
United Kingdom	241,000

The Jones Act creates enormous distortions in the patterns of U.S. domestic and foreign trade.

according to an industry source, there are once again not enough Jones Act tankers to go around.¹²⁴

By eliminating the supply of foreign tankers available to move oil between U.S. ports, and by reducing U.S. shipbuilding capacity to just a few shipyards, the Jones Act has left many U.S. producers and refiners with no option but to export and import instead of doing business with each other.

Recommendations

The vast majority of the Jones Act fleet consists of vessels traveling inland waterways—well over 30,000 vessels, most of which are river barges. The main effect of the Jones Act on inland waterways is to favor airways, roadways, and railways. But there is no rail or truck alternative to most of the seaborne traffic subject to the Jones Act. Therefore, the maritime component of the Jones Act must be considered separately from the vast fleet of Jones Act vessels on inland waterways.

The maritime Jones Act fleet is tiny, and the related shipbuilding industry all but nonexistent. And yet, to protect those tiny special interests, the Jones Act creates enormous distortions in the patterns of U.S. domestic and foreign trade, favors foreign competitors over American businesses, undermines the

maritime industrial base, hampers national security, imposes abusive costs on Puerto Rico, and cuts U.S. oil production off from many potential domestic markets. Therefore, reforms of the Jones Act should focus on the maritime sector.

This report makes the following recommendations.

- ***Exempt shipping sectors from the Jones Act where the relevant vessels do not exist in the Jones Act fleet.*** As noted above, several kinds of vessels used by other developed industrial countries are no longer made in America partly because of the Jones Act and do not exist in the Jones Act fleet. LNG tankers are one notable example. Relatedly, sectors that do not exist at all in American domestic trade—such as coastal transshipment—should be exempted from the Jones Act.
- ***Exempt ships owned by Americans from the Jones Act, regardless of nationality of build or nationality of crew.*** American-owned oceangoing vessels—the vast majority of which are foreign-built and foreign-flagged¹²⁵—should be exempted from the law so they can sail between American ports.

- A more politically palatable version of this would be to eliminate the domestic-build requirement in the Jones Act, but maintain the U.S.-flag (and therefore U.S.-crew) requirements. Under this option, the Jones Act fleet would still be far more expensive to operate than other world fleets—because of the much higher costs of an American crew—but U.S. companies would be able to compete on those routes with newer and much less expensive ships.

- ***Exempt commerce to Puerto Rico from the Jones Act.*** Puerto Rico is the only U.S. territory that is fully subject to the Jones Act. Because Puerto Rico has no voting representation in Congress, the federal government cannot impose taxes on Puerto Rico. But the Jones Act functions as a highly regressive and exploitative tax on Puerto Ricans. Puerto Rico could be a hub for U.S. energy and other exports to the rest of the world. It has several large deep-water ports and is well positioned in the far northeast corner of the Caribbean, where

it can dispatch shipping easily to Europe, Africa, South America, and points beyond.

- A more politically palatable version of this would at least exempt energy shipments to Puerto Rico, as the Jones Act currently makes it prohibitively expensive for any form of energy to be shipped from the mainland U.S. to Puerto Rico.
- This could be done by executive branch waiver, but the waiver would have to be in effect for at least five or 10 years to make a difference.

- ***Exempt shipments of U.S. energy and energy-related infrastructure between U.S. points.*** The Jones Act makes shipping oil and gas from the Gulf Coast to other U.S. points prohibitively expensive, constricting the supply of crude oil to U.S. refineries and cutting millions of Americans living in Puerto Rico off from American energy sources completely. At a time when U.S. energy producers are in particular distress, the Jones Act's burdens on producers

and consumers of energy are unjustifiable.

The purpose of all government-created cartels is the same. It is to restrict supply and impose higher prices on consumers.

Conclusion

If there is any sector in which American firms are internationally uncompetitive, the lower labor costs of foreign competitors may be part of the explanation. But in one sector after another, American firms and American workers have been able to overcome the disadvantage of higher labor costs through much greater productivity. Boeing, for example, is the world's dominant manufacturer of airplanes.

The Jones Act has turned out to be a significant competitive disadvantage for both the American shipping industry and its potential customers, but it is not the only source of that disadvantage. Where American industry is threatened by foreign competition, the most likely culprit is uncompetitive levels of regulation and taxation. Most Chinese ports, for example, are fully automated, while American ports are prevented from innovating because of powerful stevedore unions and laws similar to the Jones Act. In many sectors, most of America's higher labor costs are due to inefficient wealth-transfer schemes that impose the costs of protecting some American jobs on other Americans, with significant losses due to the inefficiency of such schemes.

If uncompetitive regulation and taxation are self-inflicted wounds, the Jones Act is suicidal for its proponents in the maritime industry. Americans don't know what they are missing because they don't remember what things were like when the U.S. maritime industry was globally dominant.

The law's supporters argue that because its costs are difficult to quantify, it is not clear that it costs anything. But the whole purpose of the law is to restrict the supply of shipping so that American maritime shippers can charge more. Unfortunately, this has succeeded only in putting most of America's maritime industry out of business—while making it pointlessly difficult for Americans to buy American.

The purpose of all government-created cartels, from the U.S. sugar program to laws that restrict the number of car dealerships in a city to the Jones Act, is the same. It is to restrict supply and impose higher prices on consumers, who suffer major losses in order to provide a small benefit to politically powerful special interest groups.

Yet, laws like the Jones Act do their worst damage to the protected industries themselves, who become less and less competitive with each passing year. The Jones Act has already protected the U.S. oceangoing

shipbuilding industry to death. Proponents of the protectionist Jones Act should realize that it has left them with nothing to protect—while shipbuilding flourishes as an industry among many of our industrial competitors.

The net effect of the Jones Act today is to help buttress the trading power of America’s commercial competitors, especially China. Its supposed national security benefits are demonstrably fictional. And at a time when U.S. oil and gas producers are desperate to find export markets, the law forces many Americans, including those living in Puerto Rico and Hawaii, to import oil and gas from other countries instead of the United States.

The time has come to reform the Jones Act and launch a renaissance of the U.S. shipping industry that will benefit all Americans. It is also time for American politicians to show more intelligence, principle, and responsibility in the face of a special interest lobby that seeks a small benefit to itself while imposing enormous costs on the rest of society. American politicians have proven very adept at protecting special interests. Reforming the Jones Act is a good opportunity to show that they can protect the public interest, too. Government cannot create new competitors, but it can prevent their emergence by imposing barriers to market entry.

Government cannot create new competitors, but it can prevent their emergence by imposing barriers to market entry.

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