American Shipper

Commentary: Cato's Jones Act numbers wrong

The Cato Institute's methodology is less solid than quicksand, says John McCown, the co-founder and former chairman and CEO of U.S. flag carrier Trailer Bridge Inc.

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The Cato Institute is a well-regarded Washington, D.C.-based think tank known for its research on a wide range of policy issues. Since June 28, 2018, when it issued a report entitled "The Jones Act: A Burden America Can No Longer Bear," it has been on a tear criticizing the Jones Act in numerous events and commentaries.

On the one hand, the Cato folks have a firm grasp of the obvious. You don't have to have an MBA from Harvard to realize when America's per capita income is five times the world average, there will be cost differences related to the labor component in shipping. On the other hand, they have done an incredibly poor job of defining those cost differences, putting them into proper context and identifying the real-world consequences of repeal.

Whether resulting from Cato's subject matter unawareness or purposely misleading spin, its Jones Act efforts are hardly its proudest moments.

On April 30, I attended an event titled "Unnatural Disaster: Assessing the Jones Act's Impact on Puerto Rico" held at Cato's Washington headquarters. With that title, a balanced discussion wasn't on the agenda. However, as co-founder and former CEO of one of the carriers serving Puerto Rico, I knew the economics of the sector and believed my attendance could be constructive. The highlight was a presentation by a consultant on the findings of his just-published 40-page study. Its key conclusion was that container rates to Puerto Rico would decline 88.9% if there were no Jones Act.

I had reviewed the study prior to the conference. It was based on a methodology that net revenue to the ship, arrived at by deducting non-ship costs, should be comparable on a per-nautical-mile basis across all container lanes going into Puerto Rico. The study included three U.S. mainland origins and seven international origins and developed net revenue per nautical mile estimates for each based on claimed rates and distances into San Juan. Using the international origins and applying that methodology to the Jacksonville-San Juan lane, where the majority of Puerto Rico containers move, the study found that without the Jones Act, rates should be 88.9% lower.

Mistakes don't make the cut.

In the Q&A session, I said my experience in container shipping in general and the Puerto Rico trade in particular had me challenging the methodology as flawed in several respects in terms of estimating the Jones Act impact. I first noted the geometric difference in container capacity between the vessels used in the international examples and the Puerto Rico market. For instance, from Asia vessels up to 14,000 TEUs transit the Panama Canal and would be the first leg on selected moves to San Juan. Those vessels are almost six times bigger than the largest 2,400-TEU vessels in the Puerto Rico market. The current average 9,300-TEU vessel in those Asia lanes also is six times bigger than the average Puerto Rico vessel.

The cost per unit mile at sea economics of such different size ships is geometric and those striking differences certainly impact rates. Those scale economies after all are why such large ships are used. The ship sizes in the other international examples aren't quite as large, but they are still much bigger than the Puerto Rico ships.

In addition, a big flaw is the difference in trade lane imbalances. Puerto Rico has a 4-to-1 southbound imbalance, which by itself will drive different rates than the 2-to-1 Asia-North America or the almost balanced South America-North America examples. The Europe-North America examples are actually backhaul lanes and to use those rates to estimate headhaul rates leads to skewed results.

Another major flaw was that the study underestimated the non-ship-related costs in container shipping. In a convoluted manner, the study had those costs averaging around one-third of revenue. In actuality, those costs are typically two-thirds of revenue. That error exacerbated the differences resulting from using this methodology.

There were other issues with the study — each of the port pair distances being off by varying percentages hardly inspired confidence — but just the divergence in ship sizes and trade lane imbalances along with the inaccurate depiction on non-ship costs make any output coming out of the study fatally flawed.

The video of the April 30 event is available on the Cato Institute website. You'll be able to see all the presentations and comments, except for those referenced by me above, which were completely edited out. Fair enough. It was Cato's facility, event and video and my observations didn't fit with its agenda. That being said, that indicated to me that on this issue Cato is not just acting as a fact-based, research-oriented policy advocate.

Analytical gobbledygook.

In the interest of transparency and educating the Cato folks on the economics of the Puerto Rico trade, I expanded a worksheet I had developed while reviewing their study. That expansion included adjustments to their non-ship cost and ship size assumptions to see what their methodology would show with these real-world factors.

One discrepancy that had me puzzled was exactly where Cato's 88.9% figure came from. By applying its methodology with all of the assumptions and numbers to the Jacksonville rate would result in just a 47.3% reduction in that rate. In digging into that, I learned that the headline decline figure the report touted was based on two math errors. It first used 68.9%, which is the average difference in net revenue per nautical mile between Jacksonville and the international examples. By not calculating the change on the full rate including the assumed non-ship portion (which would result in 47.3%), Cato overestimated the difference.

This rookie modeling error inexplicably was compounded by adding 20% to it based on the average difference in net revenue per nautical mile between Jacksonville and the two other origin

U.S. ports. I have no words to explain this contortion other than to say it is analytical gobbledygook.

Cato Institute was provided with my detailed worksheet so it could see that the study data only supported a 47.3% decline and not the nonsensical almost twice as high 88.9% figure. The worksheet then showed that including a realistic non-ship cost assumption, its methodology would result in a 19.4% decline. Further adjusting for ship size differences, the methodology would result in a 9.1% decline.

In other words, the study Cato promoted at its April 30 event was off by a factor of 10 when it was adjusted for clear math and logic errors.

Keeping up.

In my event follow-up communication to Cato, I expressed surprise that it linked itself to such an erroneous and misleading study. I questioned whether it ever believed that $2,453 per 40-foot container rates from Jacksonville to San Juan would really decline 88.9% to $283 if the Jones Act were repealed, particularly given previous analyses I had provided.

In detailed emails and worksheets, while acknowledging that U.S. crew and building costs were 3X and 3.9X higher, I concluded that when those were put into context with all the costs of the container operators, my analysis pointed to a 12% overall difference. Cato's tepid response was that costs don't matter and it will focus only on the rate impact, implying a view of extraordinary profit margins in the Puerto Rico market. I've provided Cato with factual information disabusing any such notion.

One cost difference, however, that Cato has repeated countless times since it began criticizing the Jones Act is the U.S. construction cost difference. It consistently referred to a 6-8X multiple. When I challenged Cato on this and provided examples in the 3-4X range, it referred me to a May 2017 Congressional Research Service report that included the higher range.

Cato said it was comfortable using the 6-8X multiple, but if the author of the government report retracted that figure, it would no longer refer to it. An overriding concern I repeatedly expressed to Cato was that using any build cost multiple alone gives the impression to many that rates are proportionately affected and that in all cases the 6-8X suggestion is ludicrous.

I engaged the author of the CRS report in a series of communications in which I provided detailed examples that included size and feature adjustments necessary to result in apples-to-apples comparisons of containership building costs. In an April 25 email, the author agreed that the 6-8X multiple was now too high. I forwarded this email to the Cato Institute, which acknowledged it. My assumption was it would not be using that figure again.

In a June 4 event titled "Keeping Up with the Jones Act" and available on the Cato Institute website, I was therefore very surprised to see the initial presenter refer to the 6-8X multiple in the CRS report. As usual, that figure wasn't put into context of all the costs involved in container shipping. If a listener wanted to think that meant rates were also 8X higher, I'm sure Cato would be comfortable with that inference.

Coincidentally, such an inference would be consistent with a view that repealing the Jones Act reduces rates 87.5%. Striking, but no more real than the math- and logic-challenged 88.9% figure promoted at Cato's April 30 event. Despite the detailed information I've provided Cato that completely discredits everything that came out of that study, I've yet to hear whether it agrees or disagrees with any of my points. Perhaps it wants to reserve the ability to roll out the study's 88.9% figure to folks who don't realize it is all built on a foundation less solid than quicksand.

While my own analysis shows a total repeal of the Jones Act would likely result in a 12% decline in rates in the Puerto Rico container trade, that assumes the current gap between foreign and domestic crewing and building costs doesn't change. As I've highlighted to Cato, that gap could narrow from both existing laws and regulations that would apply to foreign ships involved in domestic commerce as well as new laws and regulations that may come with any repeal.

I have no idea whether that will be a minimal or major mitigation, but foreign ships operating in domestic commerce certainly will not be able to operate oblivious to our laws and regulations. Those real-world factors obviously could affect foreign costs and the current gap.

Credibility essential.

The repeal of the Jones Act will likely result in an immediate shift in the Puerto Rico market to one served exclusively by foreign carriers. More specifically, South American carriers stopping en route to Brazil and Argentina will quickly dominate the market. With this change, the mostly empty northbound leg in the current shuttle services and the very low rates resulting from that disappear.

Large employers like Bacardi and Goya that send their products to the mainland could see rates going from $300 per 40-foot container to more than $3,000 to match the rates South American shippers now pay. The worse case would be if this tenfold rate increase led any Puerto Rico rum makers to reallocate production to other Caribbean islands as what had been a shipping benefit was now a shipping detriment.

Beyond the direct impact, such a transition would impact the $400 million in federal excise taxes on rum produced in Puerto Rico and sold on the mainland that is rebated entirely to the government of Puerto Rico. How to balance the likely beneficial impact on southbound rates with the likely detrimental impact on northbound is for policymakers to determine, but I have repeatedly highlighted to Cato that this predictable consequence should be put on the table for discussion.

In summary, the most relevant numbers and facts point to a moderate reduction in southbound container rates and a consequential increase in northbound rates if Puerto Rico was exempt from the Jones Act. Even if the overall impact is in the 10 to 15% reduction range, I for one think that is hardly a reason to scrap a law and an industry that has served our country well.

If Cato were more aware of the postwar development of the modern worldwide shipping industry, it would realize that most of the key advances came out of America. The Jones Act was the birthplace of container shipping and supertankers, among other innovations, during that period. As American innovations were adopted internationally, economic benefits still flowed back to us.

Even today, we're at the forefront of innovations such as LNG-powered ships. The thought leadership from naval architects and the array of professionals in a large supply chain network who are directly and indirectly supported by the Jones Act still flows back as economic benefits to our country in countless ways. Why would anyone want to rip away at this fabric for moderate, or even minimal, identifiable cost savings?

I imagine the Cato Institute realized that moderate cost savings weren't going to be a salable reason to scrap the Jones Act. So instead it chose to cherry-pick selected points and promote dubious studies, even if and after it realized they weren't factually accurate. The slapdash manner in which Cato has tossed around unsupportable and inaccurate numbers is surprising for a research-driven organization.

To have any credibility on the subject of the Jones Act, it should acknowledge that the conclusions reached in the study presented at the April 30 event were erroneous. If Cato is philosophically against the Jones Act, if it sees any additional cost, it should say so and stop engaging in ridiculous hyperbole that has morphed into misleading spin. This is too important an issue to have anything but the most credible numbers and facts put on the table for policymakers.