

Executive Summary:

The Port of Monroe (POM) approached Prof. Elisabeth Gerber of the University of Michigan's School of Public Policy to find a solution to a conflicting policy with the US Customs and Border Protection (USCBP). The policy in question is the USCBP ban on operating containerized cargo out of Port of Monroe. This policy was enforced recently by the Detroit field office of the USCBP and due to this POM is made to incur significant costs that makes them uncompetitive in comparison to other surrounding ports.

The project was assigned to a team of students from the School of Public Policy and the School of urban Planning. The students worked on the project under the guidance of Prof. Gerber and were assigned mentors to help with their research periodically. The scope of the project was to analyze the economic significance of the policy by enumerating the direct and indirect costs incurred by the stakeholders involved and if necessary, find solutions to the policy question.

The students began their research conducting stakeholder interviews and researched qualitatively seeking the implications of the ban on POM from operating containerized cargo. Since International shipping issues is a large topic to research on, the report focuses on a case study i.e. the Arauco Shipping incident. This report specifically study's the impact of the relationship between the Port and CBP through the lens of one transaction, i.e. the Arauco project.

Through their research the students were able to come to a few conclusions surrounding the Port of Monroe and the rest of the supply chain from the Arauco incident, as well as the CBP. First and foremost, they concluded that the USCBP does not currently have adequate staff or funding to keep up with the growing international shipping demand. The next key finding was that the Detroit Field Office of the CBP does not allow international maritime container shipping into the Port of Monroe.

Over the course of their discussions with the key stakeholders, they found the Detroit Field Office exercised a more stringent approach in regarding inspection then typically experienced by a few stakeholders. Through their interviews they also found that this policy was not exercised uniformly throughout the United States and only the Detroit Field office was stringent in exercising this policy. This discretion exercised by the Detroit Field office, where they chose to implement additional requirements for operating containerized cargo, puts the Port of Monroe, and other similar ports and harbors under the Detroit Field Office at a competitive disadvantage.

Introduction

Port of Monroe

The Port of Monroe is Michigan's only port on Lake Erie. It is located on the deep-draft frontage of the River Raisin, with direct rail Class 1 rail access and immediate adjacency to the I-75. The Port represents the closest confluence of major freight assets anywhere in the region since 1977.¹ The Port has earned the reputation of being the "Mariner's Port" and the "Biggest Little Port" on the Great Lakes and St. Lawrence Seaway System due to its proximity to multimodal transportation, efficient cargo handling, competitive freight rates, and a cooperative management team.

The Port of Monroe offers high-quality service in transportation through rail, vessel or trucking, property management and more. It is experienced in unloading, loading, storing and inventory management of wind tower sections.² The port saw a 123 percent increase in international cargo tonnage moving through the Montreal-Lake Ontario section of the Seaway compared to the 2016 season.³ It also constructed a new Riverfront Dock with \$4 million in state funding, adding to its capabilities.

Port of Monroe is the first port on the Great Lakes to be accepted into the U.S. Customs and Border Protection reimbursable services program (CBP).⁴ It is the first port in Michigan to receive state funding for commercial dock improvements.

Contribution to Michigan's Economy

In 2017, the Port of Monroe's contributions accounted for \$96 million in economic activity in Michigan.⁵ During the year, over 1.75 million metric tons of cargo was handled at the Port of Monroe. The port and maritime commerce supported 1,659 jobs and \$12.1 million in personal income and local consumption expenditures, of which 751 jobs were directly generated by marine cargo and vessel activity at the marine terminals. Additionally, the port has been responsible for \$38.5 million in federal and state tax revenues. In 2017, the direct business revenue received by the firms due to the cargo handling at the port was \$28.3 million. This business included maritime services and inland transportation services for the cargo handled at the marine terminals and the vessels calling at the terminals.

According to Steven A. Fisher, Executive Director of the American Great Lakes Ports Association, these findings "[reflect] the important contributions Port of Monroe provides to the Great Lakes-St. Lawrence Region. The jobs supported by the maritime industry include not only those located directly on the waterfront — shipyard workers, stevedores, vessel operators, terminal employees, truck drivers and marine pilots — but also grain farmers, construction workers, miners and steelworkers. Many of these jobs would vanish if not for a dynamic maritime industry." Furthermore, Michigan as a state has the potential to be a global freight gateway. "Michigan boasts numerous natural and manmade advantages as a center for freight transportation and distribution. These advantages include a location on the Great

¹ Port of Monroe, www.portofmonroe.com.

² Janenne Irene Pung, "Keeping it Nimble and Simple", *Great Lakes Seaway Review*, 2018.

³ Pung.

⁴ Pung.

⁵ "Economic Impacts of the Port of Monroe", Martin Associates, 2018.

Lakes, access to the St. Lawrence Seaway, connections to Ontario and Canada across the Detroit River, and the presence of four Class I railroads.”⁶

Enhancing the Port of Monroe’s maritime operations are the port’s large space to operate and its intermodal capabilities. With two reach stackers and conveyor systems onsite, the port is equipped for more containers, wind turbines and nearly any type of bulk and breakbulk. In addition, maritime shipping is a cost-effective and fuel-efficient means of moving goods domestically and internationally.

How this project came to be

The Port of Monroe has been looking for opportunities for growth and diversification. For example, the Port of Monroe now markets and manages 60,000 tonnes of synthetic gypsum, a byproduct from the DTE Energy plants in Monroe. Another avenue the Port of Monroe has explored is international cargo shipping. One of the Port of Monroe’s first attempts at international maritime container shipping was parts bound for a new Arauco manufacturing facility. However, the Port was not able to receive any shipments. The task for this project was to understand why the Port of Monroe could not receive international containerized shipments for the Arauco contract, determine the costs associated with this incident, and help the Port position itself for future international containerized shipments.

Case Study: Arauco Project

The Port of Monroe has faced issues with CBP that adversely impacts the economic development of the Port. This report will study the impact of the relationship between the Port and CBP through the lens of one transaction, the Arauco project.

Two years ago, the Port began contracts for shipments of containers coming from Europe. The Port of Monroe worked with Spliethoff Lines to ship and handle the majority of components for Michigan’s largest construction project in 2017, the Arauco Fiberboard Plant in Grayling, Michigan. The contract involved components for constructing the \$400 million Arauco Manufacturing facility in Grayling, Michigan. The shipment was intended to be routed through the Port of Monroe. However, due to certain challenges particular to the port, the shipment had to be rerouted through Cleveland, Ohio and Colborne, Ontario in Canada. The following sections will describe these challenges in more detail.

Related Actors

Below are a list of key actors that were directly involved in the Arauco shipment incident. There were several actors that were indirectly related to the incident, yet were impacted by the outcome of the incident as well, which will be discussed in a later section on economic impact.

- **U.S. Customs and Border Protection (CBP):** This is the largest federal law enforcement agency of the U.S. Department of Homeland Security, and is the country’s primary border control organization. It is charged with regulating and facilitating international trade, collecting import duties, and enforcing U.S. regulations, including trade, customs, and immigration.

⁶ Belzer, Michael, “Transforming Michigan into a Global Freight Gateway”, Atlantic Gateway Initiative.

- **DRM Management:** DRM Management acts as the terminal operator of the Port of Monroe. Five years ago, DRM began investing in the port, helping with financing dredging, partnering with DTE Energy, creating more laydown space, constructing an indoor storage facility and purchasing equipment needed for oversized and heavy-haul cargo, such as wind turbine components and a natural gas pipeline. In these five years, DRM's investments are approaching \$4 million. As the Port is building its capacity, cargo handled has increased from 2016 to 2017 by 40 percent; the 2018 increase in overall tonnage is expected to range between 30 to 40 percent.⁷
- **Spliethoff Lines:** Established in 1921, Spliethoff Lines operates a fleet of about 50 modern, Dutch flagged multipurpose vessels. It offers reliable worldwide ocean transport, through its vast network of offices and extensive managed fleet. Spliethoff is also highly experienced in handling all types of bulk and break bulk cargo from concentrates and mineral sands to foodstuffs like wheat, barley and cocoa.
- **ARAUCO:** Celulosa Arauco y Constitución (also called ARAUCO) is a Chilean wood pulp, engineered wood and forestry company, founded in 1979. In 2006, ARAUCO had five pulp mills in Chile and one in Argentina. ARAUCO manufactures the industry's most comprehensive selection of composite panels, premium plywood, millwork, lumber, and wood pulp. With roots in sustainable forest product solutions and a commitment to our customers' success, ARAUCO has grown to become the second largest wood panel producer in the world.
- **BNSF Logistics:** BNSF Logistics was founded in 2002 and is headquartered in the U.S. It is an industry-leading ocean transport intermediary. It handles everything from ultra-complex, multimodal freight movement around the globe to simple, day-to-day transportation freight solutions across North America. Its expertise spans across an array of modes including truckload, project cargo, ocean, rail, air, LTL, and intermodal.

Methods

In order to better understand the Port of Monroe, the U-M Student Team conducted semi-structured key informant interviews by phone with stakeholders and industry experts. Key informants were selected due to their knowledge and expertise in the Port of Monroe, international shipping and trade, and/or the Arauco incident. Ten individuals from nine organizations were contacted and invited to participate in the process, and seven agreed to participate. The following organizations participated: ARAUCO, Detroit-Windsor Truck Ferry, DRM Maintenance, Monroe County Chamber of Commerce, Spliethoff Lines, State of Michigan Governor's Office, and Wayne State University.

Interviews were conducted by phone from November 5, 2018 through December 3, 2018. They ranged from 15-60 minutes in length. Key informants responded to questions about their relationship to the Port of Monroe, the Port's challenges and opportunities, and their perspective on the Port's relationship with the CBP. Stakeholders directly involved in the Arauco incident were asked about their involvement and perspective, as well as economic losses. Each interview included both an interviewer and a notetaker. Interview transcripts and notes were then analyzed for common themes and patterns.

Please see Appendix B for the interview protocol.

⁷ "Economic Impacts of the Port of Monroe."

Limitations

Several limitations should be considered when reviewing the findings in this report. The breadth of primary data findings is dependent on who was selected to be a key informant: the U-M Student Team was constrained in its scope to reach almost only direct stakeholders. Furthermore, it was not allowed to contact CBP, resulting in a narrow perspective of findings. In addition, the availability of selected key informants during the time period of primary data collection additionally limited findings presented.

Key Findings

Key findings were determined through key informant interviews, literature review, and analysis.

In order for the Port of Monroe to ship internationally under current conditions, it would need to invest \$5-6 million in equipment. According to key informant interviews, CBP believed that the Port of Monroe did not have the inspection technologies necessary to receive containers and crates from overseas. Specifically, the CBP stated that the Port of Monroe needed a stationary radiation portal monitor and non-intrusive inspection technology in order to handle these shipments. These two pieces of equipment were estimated to cost approximately \$5-6 million.

The current shipping policy in place has flexibility for interpretation and/or implementation at the discretion of each CBP Field Office. The CBP Detroit Field Office has jurisdiction over the only ports in Michigan, the Port of Detroit and the Port of Monroe. This field office did not allow international maritime container shipping associated with the Arauco contract into the Port of Monroe because it maintains the position that until the Port of Monroe acquires a stationary radiation portal monitor and non-intrusive inspection technology, the Port cannot receive international maritime container shipping. The shipments were instead rerouted to Cleveland, Ohio and Port Colborne, Ontario because the shipments were not allowed into the Port of Monroe. These two ports were under different jurisdictions than the Port of Monroe (Cleveland under the Chicago Field Office of CBP and Port Colborne under the Canada Border Services Agency). The Chicago Field Office of CBP, unlike the Detroit Field Office, did not require the same inspection equipment for the shipment. This implies that the international shipping policy currently in place has room for interpretation and/or implementation at the discretion of each CBP Field Office.

This incident was costly to multiple businesses in Michigan. Because the shipment had to be rerouted, the businesses in the supply chain incurred additional costs. Overall, the estimated direct loss to the businesses involved was at least \$1.9 million. The Port of Monroe lost \$3 million in project fees. Furthermore, the Detroit Field Office of the CBP lost out on \$8.6 million in harbor fees when docking occurred in Canada or Ohio instead.

More generally, according to key informant interviews, CBP does not currently have adequate staffing or funding to keep up with the growing international shipping demand nationally. CBP has attempted to keep up with demand for its services through the Reimbursable Services Program, which allows domestic entities to obtain CBP services by directly paying for additional CBP staffers to support the international shipping and handling processes. The necessity of this program alone indicates that CBP lacks adequate staffing and funding at the federal level to meet public need. Furthermore, this demonstrates its dependence on funding from private entities with sufficient capital to afford this.

In addition, the flexibility in policy implementation puts small ports broadly at a competitive disadvantage. The capital investment costs to meet this are fixed, but would make up a disproportionately larger proportion of budgets for smaller ports if they need to meet this requirement.

Lastly, this policy negatively impacts the economy of the state of Michigan. It is unknown if other field offices implement their policies on international container shipments as rigorously, but because the Detroit Field Office does, shipping in the state of Michigan is automatically more expensive. If the Port of Monroe purchases the equipment to comply with Detroit Field Office standards, then shipments handled by the Port will be more expensive for local businesses. If the Port has inadequate funds and fails to comply with these standards, then businesses in the state of Michigan must turn to other, more expensive modes of transportation (rail, truck) to receive goods. This in turn puts Michigan businesses at a competitive disadvantage because shipping will be more expensive in either alternative.

Implications for State of Michigan

- Economic Impact of Arauco
 - On Port of Monroe (POM)
 - State of Michigan & Local Businesses
- Challenges and Barriers for Port of Monroe
- Future Opportunities

Economic Analysis:

CBP's policy banning the operation of crated and containerized cargo to be operated from the Port of Monroe has caused detrimental economic impacts to the following stakeholders

- a. Port of Monroe
- b. State of Michigan & Local businesses

Our economic analysis is limited to the impact of the CBP policy to the above. Further, our research findings are the direct result of interviewing several other stakeholders impacted by CBP's policy and conducting qualitative research which is the basis of our quantitative findings. The following estimates are conservative figures and the actual costs are predicted to be higher than the ones stated below. The reasoning for choosing this approach is to be cautious in not overestimating the economic impact of the CBP's policy in question.

Port of Monroe: Due to CBP's policy the Port of Monroe cannot operate crated and containerized cargo. Since the implementation of this policy the Port of Monroe has lost out on **\$ 8.6 million** in harbor and docking fees. Due to this, businesses prefer to utilize neighboring port services in others surrounding states as well as to Port Colborne, Ontario. This policy hinders normal business activities of the POM and puts it at a competitive disadvantage to other ports outside Michigan. Since the enforcement of the policy by CBP POM continues to lose business to neighboring ports and these costs aren't enumerated here.

The Arauco shipment incident was the first instance where the CBP enforced the policy of required additional equipment for handling crated cargo. The total project revenue to the POM is estimated to be \$

3 Million. However, the shipment was not able to be unloaded using the current port facilities and was redirected to the port at Cleveland, Ohio and then rerouted to Monroe, Michigan at additional costs.

The implementation of the USCBP's policy requires the purchase of additional machinery and constructing facilities that would cost POM **\$ 5-6 Million** in capital investment costs. This additional machinery and facility requirements include

- a. Radiation portal monitor
- b. Non-intrusive inspection technology
- c. Facilities like bathrooms and gated cargo holding area

Additionally, the POM would be required to use the services of the USCBP, by paying of fees and travel expenses of Border Agents to operate out of POM. These costs are not quantified in our analysis; however, they would be in excess of the \$ 5-6 million stated above.

These additional requirements would mean that the POM would have to recover capital investment & operation costs in fulfilling CBP's policy requirements. The enforcement of the policy requirements to operate crated and containerized cargo out of POM would make it more expensive to operate and provide service to business. This would leave the POM at a competitive disadvantage, as other neighboring ports where this policy is not enforced are providing port services at a cheaper rate.

State of Michigan and Local businesses: The CBP's policy has a ripple effect on the economy of Monroe and in-turn Michigan. Since, Michigan is the only state that the CBP chooses to enforce the policy in question, businesses prefer to transport their cargo out of surrounding ports where this policy is not enforced. The Arauco shipment incident gives us a glimpse of the impact CBP's policy had on businesses as well as the local economy.

The Arauco shipment incident cost businesses to lose money directly as well as indirectly. Direct costs, are costs incurred due to reshipment and redirection of containerized cargo to other ports. The direct costs incurred by all businesses involved in the shipment totaled to **\$ 1.9 million**. A local terminal operator that employs 35 workers lost out on **\$ 3.8 million** in potential revenues after incurring **\$ 300 thousand** in capital investment costs. Another business, an international ship liner that would have potentially done business worth **\$ 400 million** with the Port of Monroe, cancelled its contract after the enforcement of the CBP's policy.

Challenges for the Port of Monroe:

There are a few challenges that the Port of Monroe faces, that hinder economic activity at the port, namely capacity of CBP, and draft restrictions. The refusal of the Arauco shipment has set a bad precedent for future shipments and future business opportunities for the Port of Monroe. Lack of hard border protection and inspection equipment / staff have made it challenging for the Port to expand containerized shipping, both incoming and outgoing, from the Port. This puts the Port in a bad position because it is not able to plan out long-term supply chain movements without certainty that the shipments will be allowed to processed at the Port. As a result, businesses are also hesitant to partner with the Port of Monroe and for fear that their shipment will also be refused, incurring significant losses for the business, in terms of money, time and resources.

Port of Monroe seems to be the only port where CBP has historically been known to refuse shipments due to lack of scanners and labour, and therefore, it is likely that the port will have reduced business until there is evidence to claim that the CBP has sufficient number of scanners and / or staff. Another challenge for the Port is the draft / draught restriction, which is lesser than usual. This makes it challenging for certain size of ships and quantities of cargo to dock at the Port and therefore, limits the extent of economic activity that can be brought to the Port.

Future Business Opportunities

The location and space of Port of Monroe is known to be particularly suitable to businesses, especially vis-a-vis its access to and connection with power services between Midwestern markets, such as Michigan, Indiana, Illinois and possibly even further west. In many respects, the Port takes cargo from big shippers e.g. Ford and General Motors, and takes the load off the railway network.

The Great Lakes also has a good network of ports and has close proximity to manufacturing throughout the region, thereby creating business opportunities for Port of Monroe. The movement of commodities of raw materials into and within the region by boat is known to be a more cost effective mode of transportation, particularly for heavy commodities. It is more efficient from a cost and time perspective for bulk and / or break bulk items to use maritime modes of transportation. Many ports around the region are no more in a position to handle such type of cargo. In addition, as these ports work to upgrade their facilities, they are faced with capacity issues with CBP enforcement. This is where the Port of Monroe could have an edge over neighbouring ports. It is working on strategies to better equip itself and to have better infrastructure in place to handle heavy commodities. In 2017, the Port finished the construction of a \$3.6 million intermodal dock, made possible through a \$3 million loan from the Michigan Economic Development Corp. and Michigan Department of Environmental Quality.⁸ The Port has already had business coming in through the new dock, the sustainability of which will boost several industries. For example, 8,000 tons of steel coils came from Stelco, Ontario, and was unloaded at the dock in April 2018, for onward trucking to automotive plants in Detroit.⁹ Therefore, the Port of Monroe has much to gain from handling containerized cargo from a logistics as well as economic standpoint, especially within the Great Lakes region.

One of the Port's main competitors would be Baltimore, New York and Montreal, with Baltimore being a particularly busy place for break bulk cargo. For businesses wanted to ship to midwest, using Baltimore as their port-of-entry and trucking or railing at Baltimore and taking it through Chicago translates into more rail traffic than rail service. Shippers would be better off routing this shipment through Port of Monroe instead. Contrary to popular opinion, the Port of Detroit is not a competitor of the Port of Monroe, since it doesn't own its land, the infrastructure is lacking, and the access to highways and rail is difficult, giving the Port of Monroe significant competitive advantage over it.

⁸ Danielle Portteus, "Ship First to Use New Dock", *Monroe News*, April 2018, <https://www.monroenews.com/news/20180414/ship-first-to-use-new-dock>.

⁹ Ibid.

Recommendations

Potential Leverage Points

The Arauco incident highlights the need for the standardization of treatment of the Port of Monroe similar to other ports/harbors. There are several key opportunities for the Port:

1. **Increase investment in the Port in the short term:** The current primary barrier is lack of appropriate equipment and staff. In order to overcome these, the Port may seek funding and increase investment in such resources to help the Port meet international shipping requirements. In the short term, investment is likely the quickest option for the Port to establish international shipping.
2. **Negotiate for improved implementation of CBP policies in the long term:** The Port may want to pursue discussions with the CBP Detroit office and other key stakeholders to change the implementation of CBP policies in the long term.
3. **Seek a policy change at the federal level of CBP in the long term:** Alternatively, the Port may also liaise with federal-level representatives of Michigan and seek their advocacy on behalf of the Port to change CBP policies on a federal level. Federal policy change may preclude the variation in implementation that the Port is currently experiencing. The Port may find alignment with other small ports and harbors facing similar hardships or bearing disproportionate burdens due to CBP policies, and thus may have more support for pursuing such policy change.

Future Research Opportunities

Due to the limited scope of the research, the UM Student Team highly recommends that future research:

1. **Examine the relationship between CBP and small ports/harbors:** Current CBP policy may put a higher burden on small ports, depending on variations on implementation, due to the costliness of the equipment required and the limited capital that these ports have compared to bigger ports. Furthermore, sheer geographic distance from CBP regional offices may further hinder small ports' business opportunities. The geographic proximity of regional offices for ports like the Port of Cleveland is advantageous for when officers from the regional office need to physically be present for inspection. In contrast, though the geographical barrier may theoretically be overcome through the CBP Reimbursable Service Program, this again asks for relatively small or non-central ports to bear a large cost burden that other Ports do not have. The capital necessary for these aforementioned technologies or optional programs may hinder these ports' growth by increasing their costs, thereby making them less competitive to companies needing shipping. In addition, the capital could be used for other items that may make these smaller ports more competitive.
2. **Include a greater variety of perspectives in the interview process:** Because the UM Student Team was prohibited from contacting CBP, it was not able to establish a complete report on the Arauco incident, much less draw comprehensive conclusions. Other perspectives that should be considered include CBP, small ports/harbors, and members of the federal political process (U.S. Senate, e.g.). This will enrich conclusions by drawing from both sides of the story.

Conclusion:

The USCBP Detroit Field offices discretion to strictly exercise the policy has left the Port of Monroe at a competitive disadvantage. Since other ports in the neighboring area are not required to comply with this policy and to purchase additional equipment, they can operate cost effectively and attract more clientele due to affordable pricing. The Port of Monroe is severely impaired by USCBP's policy and would require exploring avenues to make a case to the lawmakers to ensure that they can operate containerized cargo in the future.

Appendix A: Bibliography

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Appendix B: Interview Questionnaire

1. Can you tell us about yourself and your position?
2. Describe how you're involved with the Port of Monroe.
3. What are the challenges or barriers for the Port of Monroe?
4. What are future opportunities for the Port?
5. Are there any overlooked current opportunities for the Port?
6. For stakeholders directly involved with Arauco incident:
 - a. Describe your involvement in the Arauco incident.
 - b. What planned investments and expenditures did you incur from the Arauco shipments?
What unplanned investments and expenditures did you incur from the Arauco shipments?
 - c. What is your perspective on what happened with the Arauco incident? What went wrong?
What could have been improved? What were the barriers?
7. What is your perspective on the relationship of the Port with U.S. Customs and Border Protection?
8. Do you have any other thoughts that you'd like to share?