NACD Shipping Survey – Results

Key Takeaways

- A survey of members of the National Association of Chemical Distributors (NACD) showed that shipping bottlenecks and logjams at US seaports and other ports of entry have led to increased costs and delays.

- With businesses still reeling from the COVID-19 lockdowns, inventories of chemicals have been falling, something that last occurred during the great recession. This means that shipping delays could soon lead to shortages, particularly of those chemicals imported via the west coast. According to the survey of the 43 companies utilizing west coast ports, 36, or about 83.7 percent, were experiencing average delays of 11 days or more.

- Even more importantly, international shipping has become much less reliable, with delays for some shipments reported to be as much as 150 days. The average length of the longest delay that respondents had experienced was nearly 46.5 days, and 15.8 percent of the companies responding had experienced delays of three months or more.

- In addition to delays, chemical distributors have been experiencing shipping price increases. In particular, 34 of the 61 companies reporting shipping data (55.7 percent) stated they were being charged additional premiums by carriers above the normal tariff or contract rates.

- According to the reporting companies, shipping costs are up an average of 80.5 percent since the outbreak of the COVID-19 virus. Firms experiencing the highest changes in shipping costs since the outbreak tend to be located in the western part of the country.

- Delays in shipping do not only result in inconvenience, but cost money as well. Of the 61 carriers reporting data, 52 (85.2 percent) stated that they had lost revenue as a result of delays. Of those reporting lost revenue, half lost more than $100,000.

Introduction

The National Association of Chemical Distributors (NACD) sent a survey to its 273 members, requesting information on the current state of the maritime logistics system as it relates to their products. The survey was sent on March 13, 2021, and 88 responses were collected meaning that the survey is significant with a range of +/- 8.62 percent.

Bottlenecks in shipping cargo to and from the west coast ports has been in the news lately, as imports to the United States have surged following the release of trillions of dollars in coronavirus related relief, while at the same time, a shortage of shipping containers has led to reduced shipping capacity. As *the Wall Street Journal* reported on March 18, 2021, *logjams at U.S. ports are spreading beyond Southern California's choked gateways, and shipping officials are projecting the backups will continue into the summer*.[1]

Not only are the docks congested, but delays are spreading throughout the entire logistics system causing disruptions in supply chains nationwide. But the major delays have been the result of capacity constrains

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[1] Paris, Costas, *Shipping Logjams Spread on Crush of Imports*, Wall Street Journal, March 18, 2021, at: https://www.wsj.com/articles/shipping-logjams-spread-on-crush-of-imports-11616089979

at the major ports of Los Angeles and Long Beach. According to the same *Wall Street Journal*, the number of containers handled by the Los Angeles port is up 47 percent from a year ago, while it is up by 43.9 percent at Long Beach.

The recent incident in the Suez Canal will likely delay cargo on the Atlantic trade as well.

<u>Survey Results</u>

A total of 88 companies answered at least part of the survey. These companies included manufacturing distributors, brokers, importers, and full-line chemical distributors. They were located throughout the country. Table 1 outlines the types of distributors that responded to the survey by location.

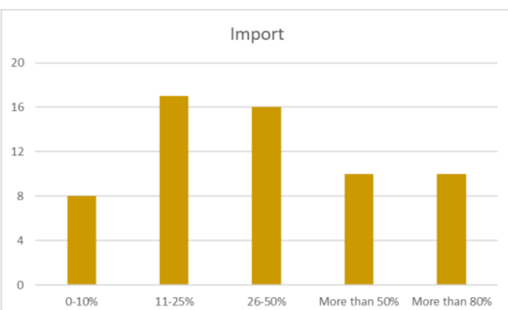
Table 1
Respondents by Type and Location

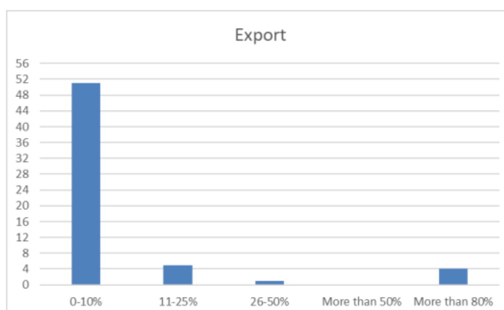
Firm Type	Number	Percent	Western States	Percent	Central States	Percent	Eastern States	Percent	Southern States	Percent	Multiple Geographies	Percent
Manufacturer	8	5.0%	2	25.0%	2	13.3%	1	4.3%	1	14.3%	2	5.7%
Full Line/Factory Pack Distributor	46	28.8%	5	62.5%	5	33.3%	16	69.6%	3	42.9%	17	48.6%
Trader/Broker/Importer/Agent	18	11.3%	1	12.5%	5	33.3%	3	13.0%	0	0.0%	9	25.7%
Other	88	55.0%	0	0.0%	3	20.0%	3	13.0%	3	42.9%	7	20.0%
Total	160	100.0%	8	100.0%	15	100.0%	23	100.0%	7	100.0%	35	100.0%

<u>International Cargo Shipping</u>

Of the 88 firms that responded to the survey, 61 (69.3 percent), reported on the reliance of their business in terms of cargo shipped. All these firms relied on both the importation and the export of cargo for their business activity. The weighted average response to the question *How much of your business relies upon importing/exporting products via ocean shipping?* was 49.2 percent in regard to exports, and 15.1 percent in regard to imports. Figure 1 shows the breakdown of firms by the magnitude of reliance.

Figure 1
Importing and Exporting





The reliance on exports and imports depended greatly on the physical location of the responding firms. While the average number of containers exported was 1,155, firms located in the southern states (and reporting that they were located in multiple geographies) tended to export more than those in other locations. Likewise, firms in the central states, and those located in multiple geographies tended to export more containers on average than the overall population (737). See Table 2.

Table 2
Average Number of Containers Exported/Imported by Respondent Location

	Western States	Central States	Eastern States	Southern States	Multiple Geographies	Total
Exports	54.3	275.0	29.1	775.0	2,763.2	1,154.7
Imports	390.4	974.6	533.6	10.5	949.8	737.1

Even though the firms that tend to ship and receive more cargo are not concentrated in the western part of the country, the seaports that they rely on are. Of the ports used by respondents, 38.1 percent were west coast ports, 44.2 percent east coast ports, and 17.7 percent on the Gulf Coast. One respondent receives cargo via the inland waterway system. Los Angeles/Long Beach was the port most mentioned by respondents, followed by the Port of New York/New Jersey.

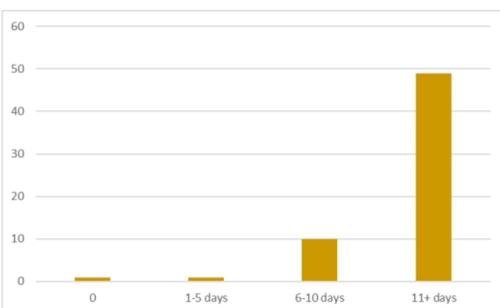
Table 3
Seaports Used by Responding Firms

Seaport	Western States	Central States	Eastern States	Southern States	Multiple Geographies	Total	Percent
Los Angeles	5	3	7	1	18	34	15.0%
Long Beach	5	4	5	1	19	34	15.0%
Seattle/Tacoma	-	2	2	-	6	10	4.4%
Houston	-	1	6	3	21	31	13.7%
New Orleans/Baton Rouge	-	-	2	2	5	9	4.0%
Jacksonville	-	-	-	-	2	2	0.9%
Charleston	1	1	4	-	12	18	8.0%
Norfolk/Hampton Roads	-	1	2	-	12	15	6.6%
Baltimore	-	-	2	-	2	4	1.8%
New York/New Jersey	-	4	16	-	20	40	17.7%
Boston	-	-	1	-	6	7	3.1%
Savannah	-	-	2	2	6	10	4.4%
Oakland	2	-	-	-	1	3	1.3%
Canada	-	1	2	-	2	5	2.2%
Other	-	-	2	-	2	4	1.8%

Logistics Issues

Chemical distributors have been seeing significant delays in ocean freight. This coincides with reports from across industries that shipments are being both delayed and refused due to the lack of available containers, congestion at port facilities, and a shortage of longshore workers, particularly on the west coast. According to the survey, only one of the 61 companies that reported on their shipments was not experiencing delays, with over 80 percent of respondents reporting delays of 11 days or more. (Figure 2)

Figure 2
Reported Average Increase in Transit Times



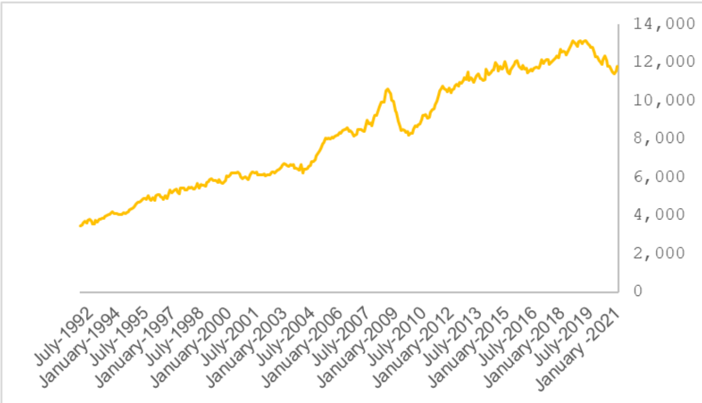
Even more importantly, international shipping has become much less reliable, with delays for some shipments reported to be as much as 150 days. The average length of the longest delay that respondents had experienced was nearly 46.5 days, and 15.8 percent of the companies responding had experienced delays of three months or more.

With businesses still reeling from the COVID-19 lockdowns, inventories of chemicals have been falling, something that last occurred during the *great recession*.[2] This means that shipping delays could soon lead

[2] *Monthly Wholesale Trade Survey*, US Department of Commerce, Bureau of the Census, March 24, 2021.

to shortages, particularly of those chemicals imported via the west coast. It should be noted that of the 43 companies utilizing west coast ports, 36, or about 83.7 percent, were experiencing average delays of 11 days or more. This compares with 13 of the 17 companies (76.5 percent) of those companies that did not report that they used any west coast ports, including those ports located in Canada.

Figure 3
Chemical Inventories



In addition to delays, chemical distributors have been experiencing shipping price increases, in particular 34 of the 61 companies reporting shipping data (55.7 percent) were being charged additional premiums by carriers above the normal tariff or contract rates. Of these, half (17 respondents) utilized only west coast ports for their freight, while another 12 (35.3 percent) utilized west coast ports along with others. Only 5 of the 17 companies (29.4 percent) that did not use west coast ports reported that they were being charged premium rates.[3]

While companies experiencing higher demurrage charges tended to be located predominantly in the western states, higher service fees were more predominant in southern states, and higher premiums were spread across geographies. Table 4 below shows the number of companies reporting each of these charge increases by geography.

Table 4
Increases in Charges by Geography

	Western States	Percent	Central States	Percent	Eastern States	Percent	Southern States	Percent	Multiple Geographies	Percent	Total	Percent
Increased Premiums	3	37.5%	3	20.0%	10	43.5%	2	28.6%	16	45.7%	34	38.6%
Increased Demurrage	5	62.5%	3	20.0%	6	26.1%	2	28.6%	17	48.6%	33	37.5%
Increased Service Fees	2	25.0%	2	13.3%	8	34.8%	3	42.9%	12	34.3%	27	30.7%

The increased costs resulting from congestion and delays need to be examined in the context of the higher shipping costs. The current bottlenecks in shipping have been mounting for some time, and shipping costs have been rising since the advent of the government-imposed shutdowns in relation to COVID-19. Of the 88 companies responding to the survey, 50 (56.8 percent) reported that their shipping costs have risen, while just two companies reported a decrease in costs. Table 5 on the following page shows average cost increases by company location.

3 While the survey asked respondents to report on the size of the rate increases, the response was open-ended and the resulting data were too inexact and diverse to develop a reasonable average cost relative to normal tariff or contract rates. The same is true for the responses to a question relating to demurrage charges (charges relating to cargo held at the port facility longer than the allotted number of days). A total of 23 responses were provided in percentage terms, and these averaged 56.1 percent with a median of 25.0 percent. This suggests that demurrage charges have been increased by at least 25 percent for many shippers.

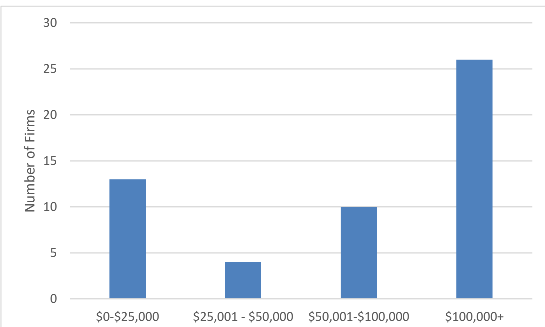
According to the reporting companies, shipping costs are up an average of 80.5 percent since the outbreak of the virus. This is skewed by some very large increases (as high as 400 percent), but the median increase (the middle value of the data) is still 50.0 percent. Firms experiencing the highest changes in shipping costs since the outbreak are located in the western part of the country, as well as firms with multiple geographic locations.

Table 5
Shipping Cost Increase Since Outbreak of COVID-19

	Firms	Rate Increases	Rate Decreases	Average Reported Increase	Maximum
Western States	8	6	0	59.4%	300.0%
Central States	15	3	0	41.7%	400.0%
Eastern States	23	14	0	45.7%	300.0%
Southern States	7	1	0	3.6%	25.0%
Multiple Geographies	35	23	2	55.2%	300.0%
Total	88	47	2	80.5%	400.0%

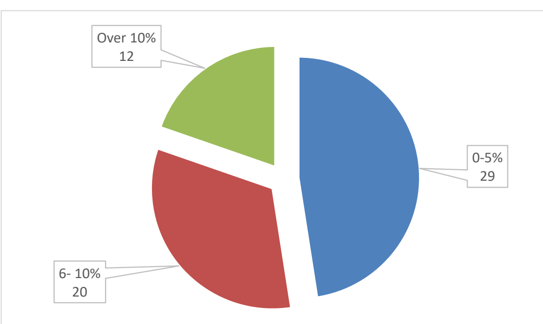
Delays in shipping do not only result in inconvenience, they cost money. Of the 61 carriers reporting data, 52 (85.2 percent) stated that they had lost revenue as a result of delays. This is 59.0 percent of all survey respondents. Of those reporting lost revenue, half lost more than $100,000.

Figure 3
Lost Revenue Resulting from Delays



This is a significant loss considering that shipping makes up a relatively small share of company operating costs. Nearly half of the 61 percent of firms reporting data (29) spend less than 5 percent of their expenses on shipping. Meanwhile for 12 firms (19.7 percent) shipping accounted for over 10 percent of their expenses.

Figure 4
Shipping Costs as a Percent of Expenses



Conclusions

A survey of members of the National Association of Chemical Distributors (NACD) showed that shipping bottlenecks and logjams at US seaports and other ports of entry have led to increased costs and delays. These shipping delays could soon lead to shortages, particularly of those chemicals imported via the west coast. According to the survey, of the 43 companies utilizing west coast ports, 36, or about 83.7 percent, were experiencing average delays of 11 days or more. Delays in shipping do not only result in inconvenience, they cost money. Of the 52 companies reporting data, half lost more than $100,000.