Survey set-up

The IAPH-WPSP survey on the impact of COVID-19 is conducted with the aim of monitoring the current situation in world ports and trends compared to previous weeks. The first survey results were collected in week 15 of 2020 (April 6). The IAPH-WPSP Port Economic Impact Barometer Half Year Report was presented in mid-September, providing a detailed global and regional analysis of the impact of COVID-19 on ports during the period of April to September 2020. Since September, the survey has been sent out on a monthly basis. The report presented here goes back to the regular barometer report format and deals with the situation in week 50 (December 7, 2020).

A total of 65 valid answers were received which is a small decrease compared to the 73 responses in November. Europe remains the leading region with 46% of the total. With 15% of the answers, Central and South America is the second most represented region in the results. The share of North American ports has dropped from 15% in October and November to around 9% in December. Twelve ports from North Asia, South East Asia and Australasia are included in this week’s results, which is the same number as in November and the highest number since the start of the survey. African ports are better represented than in past surveys with now reaching 6 responding ports, while one answer was received from ports of the Middle East-Central Asia.
This dashboard provides a visual summary of the results gathered from the IAPH-WP-SP COVID-19 Port Economic Impact Barometer survey. The survey initially consisted of six identical questions, sent to port authorities and port operators with responses sent anonymously on a weekly basis. From week 23 until week 29, the survey has been sent out on a bi-weekly basis and the number of questions has been reduced to four. Since then the report has been compiled on a monthly basis. The most recent surveys contained new questions, such as a question dealing with the status on crew changes in the ports (weeks 27 and 29), a question on port infrastructure investments (week 36), a question on investments in environmental sustainability (week 41) and a question on the ports’ cargo throughput compared to the same period last year (week 45). This month the additional question deals with the share of empty containers in total container throughput, given the current equipment availability crisis on some major trade lanes.

The percentages indicated in the blue bars of the Dashboard highlight the level of impact of COVID19 contagion on world ports based on the responses to the main four questions of the survey, subdivided into relevant categories (vessel, transport mode, cargo and port worker). The results on the questions dealing with empty containers will be discussed using a separate graph.

You can find comprehensive data and more detailed explanations of responses to the five questions in this report.
1. Impact of crisis on vessel calls

About 34% of the ports are reporting that the number of container vessel calls fell by more than 5% compared to a normal situation. This figure is much lower than the peak of 53% in week 21, and also below the 40-41% in the first weeks of the survey in early April. The share of ports facing a significant drop (in excess of 25%) in container vessels calls remained stable at 4%, a figure that is about 8 percentage points below the results of weeks 17, 18 and 20, and similar to what we could observe in weeks 15 and 16. Some two thirds of ports are reporting that vessel calls are similar or even higher compared to the same period the year before. The evolution is going in a positive direction given the current surge of container volumes on some trade routes (e.g. trans-pacific) combined with a sharp decrease in idle container vessel capacity since July/August.

The share of ports reporting reductions in other cargo vessel calls of more than 25% gradually decreased from 16% in week 21 to 4% in week 25, which is also far below the 12 to 15% observed throughout weeks 16 to 20. However, in weeks 27 and 29 the figure was up again to reach 9%. Since September the figure has been consistently below 5%. Globally, some 53% of the ports are now reporting that the number of calls by other cargo vessels is rather stable compared to a normal situation. As regards the other cargo markets, bulk remains very low, while ro/ro vessels calls are overall doing quite well and are close to normality.

The cruise/passenger market remains the most affected by the COVID-19 contagion. In week 50, 52% of respondents indicate that passenger vessel calls are down by more than 50%, in many cases even down by more than 90%. This is a sharp drop compared to the 69% in November. In the period from week 20 to week 25 this figure was 61-62% while in weeks 15 to 18 this figure amounted to two thirds of respondents with a peak of 76% in week 19. Since late August, only a few cruise operators have resumed some cruise activity, albeit on a very small scale compared to normal activity levels. For some ports, this implies that cruise ship calls will no longer remain at almost zero levels.

While ports started reporting that they are now completely back to normal, some of them stand at better numbers than this time last year. As many ports are moving more cargo every month, they also need to face the challenges as a consequence of container vessels being delayed more frequently than before. Although not directly linked to the conditions generated by the pandemic, the imbalances observed are very much related to the shock that the pandemic has produced to the global economy. Congestion due to the surge in container volumes has eased slightly on the landside (see next section), but ports are still experiencing berthing delays for some ships. Berth congestion has even led to a few cases where carriers skipped specific port calls.

Another key indicator points towards ports that are presently not impacted by COVID-19 except for the case of cruise vessels that still are not calling. The problem during this period of the year is felt more in the South, as, for example, Latin America at this time of the year in 2019 was already hosting passenger ships offering cruises. In other parts of the world, like Europe, this would be the period of the year with low numbers of calls anyway, however cruise vessels are berthing for lay-up. The lack of cruise vessels due to the pandemic also affects specific ports revenues and not unimportantly minimizes the hiring of additional labour that would in normal conditions needed to be engaged in cruise operations.

Passenger vessels continue to be fewer than normal, with no change the last weeks though. On the contrary, some lines have already halved the calls until certain days in 2021, with passenger vessels reported to be sailing mainly with cargo instead of passengers.
How would you describe the number of vessel calls in your port in the past week, compared to activity during normal conditions?

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<th>Other Cargo vessels</th>
<th>Passenger vessels</th>
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2. Impact of crisis on hinterland transport

The situation in hinterland transport significantly improved in September and October. However, November seemed to present a turning point. While in October none of the ports were reporting delays (6-24 hours) or heavy delays (> 24 hours) in cross-border road transportation, this figure bounced up to 16.3% in November (week 45). While this percentage is far below the figures of more than 40% in weeks 15 and 16, it shows that fewer ports are experiencing normal cross-border trucking operations. For December, we observe a small improvement in cross-border trucking with 14.6% of ports reporting delays.

The situation for trucks arriving or leaving the port did not change much: the share of ports reporting normal activity went from 86% in November to 87% in December. In October 94% of ports reported normal activity versus some 88% in weeks 29 and 36, 78% in week 21 and only 63% in week 15.

Some 11.1% of ports face disruptions in rail services, up from the record low figure of 4.9% in October (week 41), but below the figure of 14.6% in November. The situation for barge services has significantly improved: the share of ports reporting delays went sharply up from 3.7% in October to 17.1% in November, followed by a drop to 3.4% in week 50 (the lowest figure since the start of the survey).

In summary, the vast majority of ports have not experienced any disruptions in recent weeks and are operating normally. In the cases that delays in hinterland transportation are reported these delays are an indirect result of COVID19, as it is related to surging cargo volumes. Expressed in percentages, the number of ports experiencing delays in cross-border trucking services, rail services, and barges has decreased after the strong surge in November, although barge and rail saw a stronger improvement than trucking. The reopening of markets and a wave of restocking/stockpiling resulted in a surge of containerised flows in recent months, with numerous ports in Europe and North America reporting record traffic volumes on the import side, while many key Asian ports are also seeing strong recovery of the volumes compared to the first half of the year. This sudden surge in volumes on several of the big trade routes is testing the capacity limits of ports/terminals and the inland transport systems, leading to disruptions in hinterland transport connectivity in some ports.
3. Impact on capacity utilization including warehousing and distribution activities

Warehousing and distribution activities in ports have in some cases seen changes due to the fall in demand for consumer products or the closure of factories in countries with partial or full lockdown measures still in place. Utilization levels such as tank storage parks for liquid bulk, and oil products in particular, have to some degree been impacted by the sharp decline in the oil price at the start of the COVID-19 crisis.

The survey results for week 50 show two main developments. First of all, more ports are reporting an increase in utilization of warehousing and distribution facilities for foodstuffs and medical supplies and consumer goods. This figure went up from 17% in week 41 to 21% in week 50 for foodstuffs and medical supplies, and from 17% to nearly 23% for consumer goods. At the other side of the spectrum, we see a gradual decrease in the share of ports facing an underutilization of storage capacity for foodstuffs and medical supplies: from 10.6% in week 36 to 3.8% in week 50. This figure remains far below the peak share of 18% in week 27. Only 2% of ports are now reporting an underutilization of storage capacity for consumer goods (the lowest share to date) confirming the pressure of surge in import cargoes on distribution facilities.

Secondly, the utilization degree in the liquid bulk and dry bulk markets is higher than last month. In the liquid bulk market, 67% of the respondents have seen no changes in utilization levels. However, more than 16% of ports are reporting underutilization of liquid bulk storage facilities in December 2020, 6 percentage points above the figure of week 29, which was the lowest figure since the start of the surveys. Fuel consumption and storage is down due to lower demand.

In the dry bulk sector, 11% of the ports reported an underutilization of facilities in November, which far below the 18% of October and November. However, the share of ports with increased utilization levels in dry bulk storage increased from 11% last month to 18% in week 50. Overall, this indicator has been going up and down in a narrow band of 10 to 20% since the start of the survey with no clear observable trend.

In summary, the ‘new’ problem for many ports as regards capacity utilisation is the overutilization of the available capacity, due to the increase of the volumes transported.
What is this week's situation in terms of capacity utilization, including warehousing and distribution activities in your port?

By: Theo Notteboom - Thanos Pallis
4. Impact on availability of port-related workers

In the past few months, the COVID-19 crisis is having a very limited impact on the availability of port-related workers. Only 7.8% of the ports mention that they face shortages of dockworkers, a figure that is a bit above the record low of 5.4% in week 29 and far below the 12-13% range in weeks 23 to 27. In week 18, 22% of ports still faced dock worker availability issues. Compared to last month, December brought a small decrease in the ports reporting shortages.

Only 1.6% of the sample face shortages for the delivery of technical-nautical services, the lowest figure up until now. No ports are short of personnel in the harbor master division.

Only 4.7% of the port authorities report a moderate to more serious decline in staff availability, far below the figures of the first weeks of the barometer (i.e. 26% in week 18, 22% in weeks 16 and 17 and 28% in week 15). In several countries, port authority staff remains partly at home-office stage working online. This is not caused by the illness or isolation but due to the formula of organisation endorsed during the pandemic situation (e.g. one person per office room). As a result, more online meetings/webinars instead of physical contacts continue to take place.

The availability of truck drivers sees the most significant changes in the past months. While the availability remains good overall, the share of ports facing truck driver shortages gradually went up from 7.3% in October to 10.9% in December (compared to 21% in week 17). We believe this is partly explained by the surge of volumes in quite a few ports which requires more drivers for inland transport.

Overall, port communities are reported to working together to secure continuity in operations, so with health protocols implemented, a normal presence of workers concludes all port services and activities. Except for some major gateway ports, cargo peaks at terminals generally remain lower and this has led to a reduction in daily working shifts for stevedores and eased adaptations. The situation is reported to be under control due to the availability of “speed tests”.

Port authority administration working from home-offices continues. Many of the personnel that had returned to physical presence at the office began working from home again. This reverse of the situation is present in Europe since early November and in North America since later within the month. In some cases, it remains widespread, as administrative staffs are still telecommuting, with few exceptions and only essential operational staff is working as normal. In other ports, working from home happens at an even more intense scale, another regional variation noted in this issue of the Barometer. In Europe in particular, the practice started to expand again in those countries where the numbers of infected people (at the port or beyond) are increasing. On the contrary, those parts of the world that do not experience another wave of COVID-19 cases, there has been no significant impact on the port since the last survey. While there is no direct disruption of port operations, for all ports, reducing of direct personal contacts, social distance and necessity of stay at home-office continue to make the development of IT skills and digitalisation necessary processes.
What was the availability of port workers last week?

By: Theo Notteboom - Thanos Pallis

Dock workers
- Technical-nautical services (pilots, tugboat and mooring crews)
- Harbor master services (including VTS operators)
- Port Authority
- Truck Drivers

Return of all to work  Major return to work  Moderate return to work  Normal presence  Moderate shortages  Shortages  Severe shortages

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5. Share of empty containers in total container throughput

This month the Barometer includes an additional question, asking ports to indicate how the share of empty containers in total container throughput evolved in the past three months compared to the same period in 2019.

One out of four reporting ports deals with a higher than normal number of empty containers. Another 15% reports that the share of empty containers in total container throughput stands at a lower or much lower percentage.

The number of ports that reported a significant imbalance compared to last year stands at just 8%. In particular, 6% of ports reported the presence of much lower numbers of empties. Around 60% of ports reported a rather stable share of loaded and empties.

The findings of the barometer show that the COVID-19 related shocks in maritime trade produced a rather wide imbalance of minor scale, which in aggregate creates conditions that affect shippers – and freights - in several regional markets around the globe. Since early 2020, a large volatility in demand caused by COVID-19 combined with more rigorous capacity management by carriers has contributed to high freight rates, recent equipment availability issues and high costs to reposition empty containers. Despite the observed volatility, the ratio full/empty containers served by ports has remained fairly the same.

6. Further information

This report will now be published on the World Ports COVID19 INFORMATION PORTAL under the FAQ section “WHAT IS THE ECONOMIC IMPACT ON THE GLOBAL PORT SECTOR?”

For a detailed analysis of the survey results obtained in week 15 to week 36, we refer to the IAPH-WPSP Port Economic Impact Barometer Half Year Report which is also available on the World Ports COVID19 INFORMATION PORTAL. 

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