IAPH-WPSP Port Economic Impact Barometer

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### Survey set-up

The IAPH-WPSP survey on the impact of COVID-19 is conducted on a weekly basis 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, with the contribution of 67 ports from all over the globe. This week’s results deal with the situation in week 18. A total of 76 valid answers were received with Europe continuing to be the leading region with 38% of the total. No less than 20 ports from Central and South America completed the survey (26% of all respondents), which shows a strong upward trend compared to 17% last week, 14% in week 16 and only 9% in week 15. North America is also better represented in the sample, partly due to an increased participation from Canadian ports. Africa and the Asian regions remain somewhat underrepresented.

### WPSP-IAPH COVID-19 Dashboard

<table>
<thead>
<tr>
<th>Participating ports per region</th>
<th>Week 15</th>
<th>Week 16</th>
<th>Week 17</th>
<th>Week 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>5%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>South East Asia / Australasia (including New Zealand and Pacific Islands)</td>
<td>7%</td>
<td>5%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>North Asia (including China, Korea and Japan)</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>North America (U.S. and Canada)</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Middle East / Central Asia (including Arabian Gulf and Indian Subcontinent)</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Europe</td>
<td>26%</td>
<td>34%</td>
<td>33%</td>
<td>34%</td>
</tr>
<tr>
<td>Central and South America</td>
<td>38%</td>
<td>34%</td>
<td>33%</td>
<td>34%</td>
</tr>
</tbody>
</table>

#### Results based on surveys of ports worldwide, four weeks to April 27, 2020

This dashboard provides a visual summary of the results gathered from the IAPH-WPSP Port Economic Impact Barometer survey.

The survey consists of six identical questions, sent to port authorities and port operators with responses sent anonymously on a weekly basis.

The percentages indicated in the blue bars of the Dashboard highlight the level of impact of COVID19 contagion on ports based on the responses to the main six questions of the survey, subdivided into relevant categories (vessel, modal, cargo and port worker).

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

The situation for container vessel calls shows a mixed picture compared to the situation in the previous weeks. On the one hand, more than half of the respondents now report a rather stable situation (vs. 41% last week), a figure similar to the situation in weeks 15 and 16. On the other hand, the share of ports facing significant decreases (in excess of a 25% drop) climbs to 11%, compared to less than 10% last week and only 2-3% in the first two survey weeks. The situation for the other cargo vessels is slightly improving with more ports now even reporting increases in vessel calls. The number of ports reporting reductions of more than 25% remained fairly stable compared to last week.

The cruise/passenger market remains the most affected by the COVID-19 contagion. A few changes are observed for this vessel category. About 5% of the ports report an increase of cruise ship activity, although this figure remains below the 10% in week 16 and 6% in week 15. As with the past few weeks, about two thirds of the respondents indicate that passenger vessel calls are down more than 50%, in some cases even down more than 90%. These figures show the combined effect of partial or full lockdown measures in a lot of countries around the world with an almost complete cessation of cruise activities.

The situation in cargo ports has remained stable. Blanked sailings for container ships were confirmed but have not augmented in numbers. To some the few blank sailings of past week are expected to only be a temporary situation. Similarly stable remained the situation in passenger ports. Cruise calls have been canceled since March and in several ports these cancellations are combined with the absence of international ferries, leading up to 95% less passengers than the same week of 2019. Cruise vessels berthing for lay-up continues to happen in several ports, with some port authorities having to guarantee 24/7 surveillance of the pier and collaborate with cruise lines and other authorities in limiting access to the vessels.

How would you best describe the number of vessel calls in your port in the past week, compared to what would be expected in the same week under normal conditions for this period?

<table>
<thead>
<tr>
<th></th>
<th>Container vessels</th>
<th>Other cargo vessels</th>
<th>Passenger vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>W15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- More than 50% increase
- 25 to 50% increase
- 5 to 25% increase
- Rather stable situation
- 5 to 25% decrease
- 25 to 50% decrease
- More than 50% decrease

By: Theo Notteboom - Thanos Pallis
There have been no extra restrictions applied the last week. In the case of vessels for example, the same restrictions applied over the last 5 weeks, with coordination on health declaration and related clearance needed in most cases. The extra restrictions noted are the ones connected with the restriction of the vessel crew leaving the vessel, i.e. obligatory temperature control for all crew prior to the disembarkment, or the presence of doctors at port terminals who decided whether further tests should be mandatory. In several ports, solid waste removal from ships is subjected to the permission of the sanitary service. Notably, in many cases, ports receive cruise ships, or at least those flagging the national flag, via dedicated anti COVID 19 safe corridors in ports in order to let them reach their own destinations.

2. Extra restrictions on vessels
The COVID-19 outbreak can lead to extra restrictions on vessels. The results for this week differ somewhat from the previous week with a moderate decrease overall in the share of ports imposing restrictions on container and other cargo vessels. Close to 8 out of 10 ports did not impose any restrictions on container vessels with the same applying for 3 out of 4 ports for other cargo vessels. The picture for passenger vessels is gradually improving: 66% of the responding ports have not imposed additional restrictions (compared to 44% three weeks ago). However, an elevated 22% of the ports report extra measures on all incoming passenger vessels, a figure that is down from the first two weeks, but sharply up compared to the 9% of last week.

Were there any extra restrictions on vessels introduced in the past week, for either cargoes or ship crews?

<table>
<thead>
<tr>
<th></th>
<th>Container vessels</th>
<th>Other cargo vessels</th>
<th>Passenger vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>W15 (n=51)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>51%</td>
<td>53%</td>
<td>44%</td>
</tr>
<tr>
<td>Less</td>
<td>29%</td>
<td>30%</td>
<td>4%</td>
</tr>
<tr>
<td>Few</td>
<td>7%</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Many</td>
<td>4%</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>All incoming</td>
<td>16%</td>
<td>14%</td>
<td>35%</td>
</tr>
</tbody>
</table>

By: Theo Notteboom - Thanos Pallis
3. Extra delays due changes in port call procedures

Inland barge operations are seeing more disruptions compared to last week: 72% of ports (81% last week) indicate that there were no extra delays during the past week due to changes in call procedures (e.g. hygiene inspections, distancing of workforce, disruption of port or related services). The figures show that less ports report only minor delays (<6 hours) while the categories of ‘delays’ and ‘discontinued operations’ now account for 10% of the total. For container vessels and other cargo vessels, an increasing number of ports report delays or major disruptions, while the share of respondents facing minor delays has decreased. The passenger segment remains the most affected vessel category: one third of the port operations of this type have discontinued (stable compared to last week), while just half of the ports report no additional delays.

Overall, there are no major changes compared to last week, with expectations for the same conditions to prevail for the next weeks. Notably, in some cases nautical services (pilotage, mooring, tug service) are reduced for the time being and their offering is limited to a smaller number of ships to be operated simultaneously. This results into minor disruptions of service but keeps port operational 24/7. Besides, precisely because of the crisis, several industries and sectors have temporarily ceased operations and there is a decrease in the amount of cargo transported to/from the ports.

Were there any extra delays during the past week due to changes in port call procedures? (hygiene inspections, distancing of workforce, disruption of port or related services etc.)

By: Theo Notteboom - Thanos Pallis
4. Impact of crisis on hinterland transport

Border checks, a lower availability of truck drivers and disruptions in terminal operations can negatively affect trucking operations in/out of the port area and to the hinterland. About 18% of the ports report delays (6-24 hours) or heavy delays (> 24 hours) in cross-border road transportation with 2% of the ports indicating that cross-border trucking has been discontinued. Thus, the trend of the past week has reversed with figures somewhat returning back to the situation of three weeks ago. On a positive note, about two thirds of the ports witness normal operations in cross-border transport by truck. For trucks arriving or leaving the port, we see several trends: a stabilization of ports reporting normal activity and less ports reporting minor delays. Rail services see less disruptions compared to last week. Some 8 out of 10 ports report no changes in rail operations. The situation for barge services shows a dramatic shift to minor delays from major disruptions or even discontinued operations. The share of ports reporting normal barge activity show a moderate declining trend from 77% in week 16 to 72% in week 18.

At national borders, trade flows and the overall situation is getting somehow better, though there is a significant number of road hauliers refusing to transport freight involving cross-border operations. This situation might further reduce the pressures on borders but complicates transnational supply chains. A number of truckers have limited night time operations to save costs, pushing demand into the day shift and leading to a shortage of available bookings for pick-ups and deliveries. Trucks companies are the most affected by the crisis, i.e. in some countries it was reported that more than 50% are actually closed; due to the present drop of the demand for services however, this does not affect services at ports. Rail services are getting close to running stable and normal. Still rail operations within ports remain more complex, but also delayed, due to mandatory rules limiting the proximity of workers.

<table>
<thead>
<tr>
<th></th>
<th>Trucks (cross border)</th>
<th>Trucks (in/out port area)</th>
<th>Rail services</th>
<th>Barge services</th>
</tr>
</thead>
<tbody>
<tr>
<td>W15 (n=37)</td>
<td>57%</td>
<td>61%</td>
<td>69%</td>
<td>59%</td>
</tr>
<tr>
<td>W16 (n=49)</td>
<td>59%</td>
<td>67%</td>
<td>79%</td>
<td>77%</td>
</tr>
<tr>
<td>W17 (n=40)</td>
<td>65%</td>
<td>65%</td>
<td>68%</td>
<td>60%</td>
</tr>
<tr>
<td>W18 (n=40)</td>
<td>63%</td>
<td>61%</td>
<td>78%</td>
<td>72%</td>
</tr>
</tbody>
</table>

By: Theo Notteboom - Thanos Pallis
5. Impact on capacity utilization including warehousing and distribution activities

Warehousing and distribution activities in ports may see changes due to the fall in demand for consumer products in countries with partial or full lockdown measures. Hoarding behavior can disrupt the foodstuff supply chains. Tank storage parks for liquid bulk, and oil products in particular, might see changes in their utilization degree caused by the sharp decline in the oil price and in the use of kerosene, diesel and gasoline.

The survey results show the COVID19 crisis has resulted in 1 out of 4 ports reporting an increase in utilization of warehousing and distribution facilities for foodstuffs and medical supplies, with no ports reporting capacity shortages. These figures are an improvement compared to last week. Also, the situation for consumer goods has improved. In the dry and liquid bulk markets, almost two thirds of the respondents see no changes in utilization levels: for dry bulk the moderate upward trend of the past weeks has reversed, while for liquid bulk the situation remained quite stable. While in the past weeks, the remaining ports were fairly evenly distributed between under-utilization and increased utilization of storage facilities, we now see that overall there are more ports reporting under-utilization than increased utilization in liquid and dry bulk storage facilities. Moreover, we observe a further drop in ports with capacity shortages.

Storage utilization is slightly down following an increase, which nevertheless might have been caused by Easter. Food products and medicines are the products that continue to be on the rise. In some cases, dwell times are reported to be slightly up, and higher than normal, but not to a level that would cause concern or major issues to be addressed.

<table>
<thead>
<tr>
<th></th>
<th>W15 (n=51)</th>
<th>W16 (n=64)</th>
<th>W17 (n=56)</th>
<th>W18 (n=59)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foodstuffs and essential medical supplies</td>
<td>5%</td>
<td>61%</td>
<td>62%</td>
<td>63%</td>
</tr>
<tr>
<td>Consumer goods</td>
<td>10%</td>
<td>14%</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>Liquid bulk</td>
<td>10%</td>
<td>12%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>Dry bulk</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>

What is this week’s situation in terms of capacity utilization, including warehousing and distribution activities in the port?

- **Capacity shortages**
- **Major increase in utilization**
- **Increase in utilization**
- **Minor increase in utilization**
- **Rather stable**
- **Minor under-utilization**
- **Under-utilization**
- **Severe under-utilization**
- **Operations discontinued**

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

The measures to fight the COVID-19 outbreak up until now have not had a huge impact on the availability of port-related workers. However, the situation seems to have deteriorated in week 18: 22% of the ports mention that they face shortages of dock workers (compared to 15 to 16% in the past three weeks), 12% of the sample is confronted with shortages for the delivery of technical-nautical services (the highest figure since the start of the weekly survey), while 10% of ports are short of personnel for harbor master services (vs. 7% last week). About one quarter of the port authorities report a moderate to more serious decline in staff availability (22% in weeks 16 and 17 and 28% in week 15). The availability of truck drivers shows a positive trend: only 16% of the ports face truck driver shortage compared to 21% last week.

Port Authorities staff, or most of it, continues to mostly work from home, in compliance with the measures applied to all public offices. Working in shifts is also present in some other ports. As regards port workers, reporting ports face no shortages, as they are available in the required quantity. That said, in addition to the cruise/passenger terminals, the past week cargo port terminals and stevedoring companies have requested social wages schemes adoption for their dockworkers. Yet, there are no permanent layoffs so far. Finally, as in quite a few countries several industries head back to work on May 4, it remains to be seen what the adjustments will be, and what will be the effect of this partial ‘reopening’ of the respective economies.

### What was the availability of port workers last week?

Here is a summary of the availability of port workers in recent weeks:

- **Dock workers**
  - **W15 (n=57)**
    - Return of all to work: 7%
    - Normal presence: 9%
    - Moderate return to work: 6%
    - Severe shortages: 4%
  - **W16 (n=77)**
    - Return of all to work: 6%
    - Normal presence: 9%
    - Moderate return to work: 3%
    - Severe shortages: 4%
  - **W17 (n=68)**
    - Return of all to work: 6%
    - Normal presence: 3%
    - Moderate return to work: 4%
    - Severe shortages: 4%
  - **W18 (n=73)**
    - Return of all to work: 7%
    - Normal presence: 3%
    - Moderate return to work: 6%
    - Severe shortages: 4%

- **Technical-nautical services (pilots, tugboat and mooring crews)**
  - **W15 (n=57)**
    - Return of all to work: 84%
    - Normal presence: 4%
    - Moderate return to work: 5%
    - Severe shortages: 1%
  - **W16 (n=77)**
    - Return of all to work: 86%
    - Normal presence: 4%
    - Moderate return to work: 1%
    - Severe shortages: 1%
  - **W17 (n=68)**
    - Return of all to work: 91%
    - Normal presence: 3%
    - Moderate return to work: 1%
    - Severe shortages: 1%
  - **W18 (n=73)**
    - Return of all to work: 90%
    - Normal presence: 3%
    - Moderate return to work: 1%
    - Severe shortages: 1%

- **Harbor master services (including VTS operators)**
  - **W15 (n=57)**
    - Return of all to work: 84%
    - Normal presence: 9%
    - Moderate return to work: 1%
    - Severe shortages: 3%
  - **W16 (n=77)**
    - Return of all to work: 86%
    - Normal presence: 9%
    - Moderate return to work: 1%
    - Severe shortages: 3%
  - **W17 (n=68)**
    - Return of all to work: 90%
    - Normal presence: 1%
    - Moderate return to work: 1%
    - Severe shortages: 1%
  - **W18 (n=73)**
    - Return of all to work: 90%
    - Normal presence: 1%
    - Moderate return to work: 1%
    - Severe shortages: 1%

- **Port Authority**
  - **W15 (n=57)**
    - Return of all to work: 65%
    - Normal presence: 25%
    - Moderate return to work: 6%
    - Severe shortages: 4%
  - **W16 (n=77)**
    - Return of all to work: 60%
    - Normal presence: 25%
    - Moderate return to work: 16%
    - Severe shortages: 1%
  - **W17 (n=68)**
    - Return of all to work: 71%
    - Normal presence: 16%
    - Moderate return to work: 16%
    - Severe shortages: 1%
  - **W18 (n=73)**
    - Return of all to work: 63%
    - Normal presence: 16%
    - Moderate return to work: 16%
    - Severe shortages: 1%

- **Truck Drivers**
  - **W15 (n=57)**
    - Return of all to work: 79%
    - Normal presence: 3%
    - Moderate return to work: 5%
    - Severe shortages: 1%
  - **W16 (n=77)**
    - Return of all to work: 86%
    - Normal presence: 4%
    - Moderate return to work: 1%
    - Severe shortages: 1%
  - **W17 (n=68)**
    - Return of all to work: 76%
    - Normal presence: 3%
    - Moderate return to work: 1%
    - Severe shortages: 1%
  - **W18 (n=73)**
    - Return of all to work: 74%
    - Normal presence: 3%
    - Moderate return to work: 1%
    - Severe shortages: 1%

By: Theo Notteboom - Thanos Pallis
7. Call for ports to participate in this survey

This weekly report will be published every Friday on the WorldPorts COVID19 INFORMATION PORTAL under the FAQ section “WHAT IS THE ECONOMIC IMPACT ON THE GLOBAL PORT SECTOR?”

All ports are welcome to participate in this survey by contacting us on the following email: covid19@sustainableworldports.org