

COVID-19: Cargo movement update

Date: 21 August 2020

About this update

This update — *the fifth of its kind* — contains a combined overview of the flow of air, sea and road freight to and from South Africa over the course of the last week. The report provides a consolidated view of the different modalities published earlier by the Business for South Africa supply chain team.

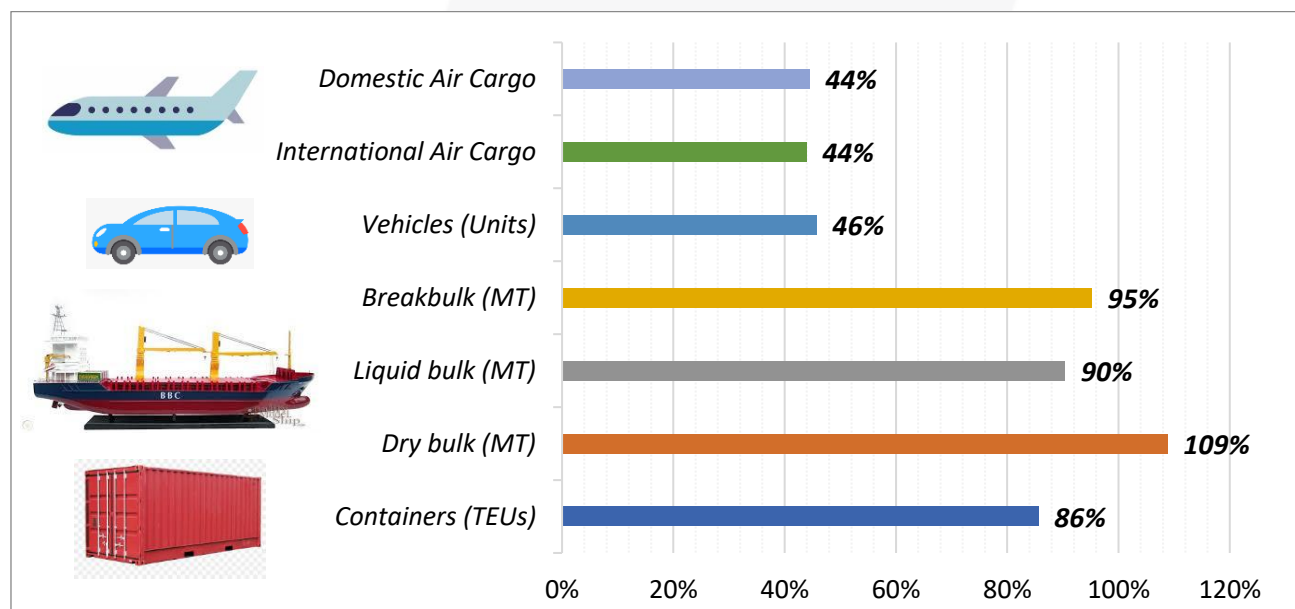
Weekly snapshot

Table 1 - Port volumes and air cargo flows compared to last week

Flows	Current ¹			Previous ²			Growth
	Import	Export	Total	Import	Export	Total	
Port Volumes (TEUs)	28 681	41 202	69 883	31 424	36 582	68 006	↑3%
Air Cargo (tons)	1 952	1 147	3 100	1 951	1 097	3 048	↑2%

Monthly snapshot

Figure 1 - Monthly³ cargo flows compared to the same period in 2019



¹ 'Current' means the last 7 days' (a week's) worth of available data.

² 'Previous' means the preceding 8-14 days' (a week's) worth of available data.

³ 'Monthly' means the last full month's worth of available data compared to the same month in 2019 (in this case July 2020 versus July 2019)

Key Notes

- An average of **~9 983 TEUs** were handled per day over the course of the last week, **↑268** from last week
- Air cargo volumes have generally remained constant with international air cargo⁴ flows at approximately **59%** compared to pre-lockdown levels
- Globally, average freight rates have once again increased, this time to **\$2,1760.90** per **40'**, which is a 4.2% increase on last week

Ports Update

This section provides an overview of the flow of containerised cargo to South Africa's commercial ports.

Container flow overview

The following two tables indicate the container flows for the last 7 days, as well as the projected container flows for the next 7 days.

Table 2 - Container Ports - 7-day flow forecasted for 14 August to 20 August⁵

7-day flow forecast (14.08.2020 – 20.08.2020)		
TERMINAL	NO. OF CONTAINERS TO DISCHARGE (IMPORT)	NO. OF CONTAINERS TO LOAD (EXPORT)
DURBAN CONTAINER TERMINAL PIER 1:	5 645	4 380
DURBAN CONTAINER TERMINAL PIER 2:	15 571	16 207
CAPE TOWN CONTAINER TERMINAL:	4 473	5 996
NGQURA CONTAINER TERMINAL:	5 292	7 949
PORT ELIZABETH CONTAINER TERMINAL:	443	2 050
TOTAL:	31 424	36 582

Source: [Transnet](#), 2020. Updated 21/08/2020

Table 3 - Container Ports - 7-day flow forecast for 21 August to 27 August⁶

7-day flow forecast (21.08.2020 – 27.08.2020)		
TERMINAL	NO. OF CONTAINERS TO DISCHARGE (IMPORT)	NO. OF CONTAINERS TO LOAD (EXPORT)
DURBAN CONTAINER TERMINAL PIER 1:	4 106	4 150
DURBAN CONTAINER TERMINAL PIER 2:	14 279	20 034
CAPE TOWN CONTAINER TERMINAL:	3 934	6 792
NGQURA CONTAINER TERMINAL:	4 937	7 663
PORT ELIZABETH CONTAINER TERMINAL:	1 425	2 563
TOTAL:	28 681	41 202

Source: [Transnet](#), 2020. Updated 21/08/2020

Export container volumes have continued to outstrip import container volumes, being approximately 5,000 TEUs more this week (*Table 2*) and more than 12,000 TEUs next week (*Table 3*). The Port of Durban has seen significant volume increases over the course of the last three weeks, with volumes at the Port of Cape Town still down. Nonetheless, the outlook for Cape Town has once again continued to improve, with the handling



⁴ There is no further update on domestic air cargo flows for this week, however, an update will return for the following iteration of this report

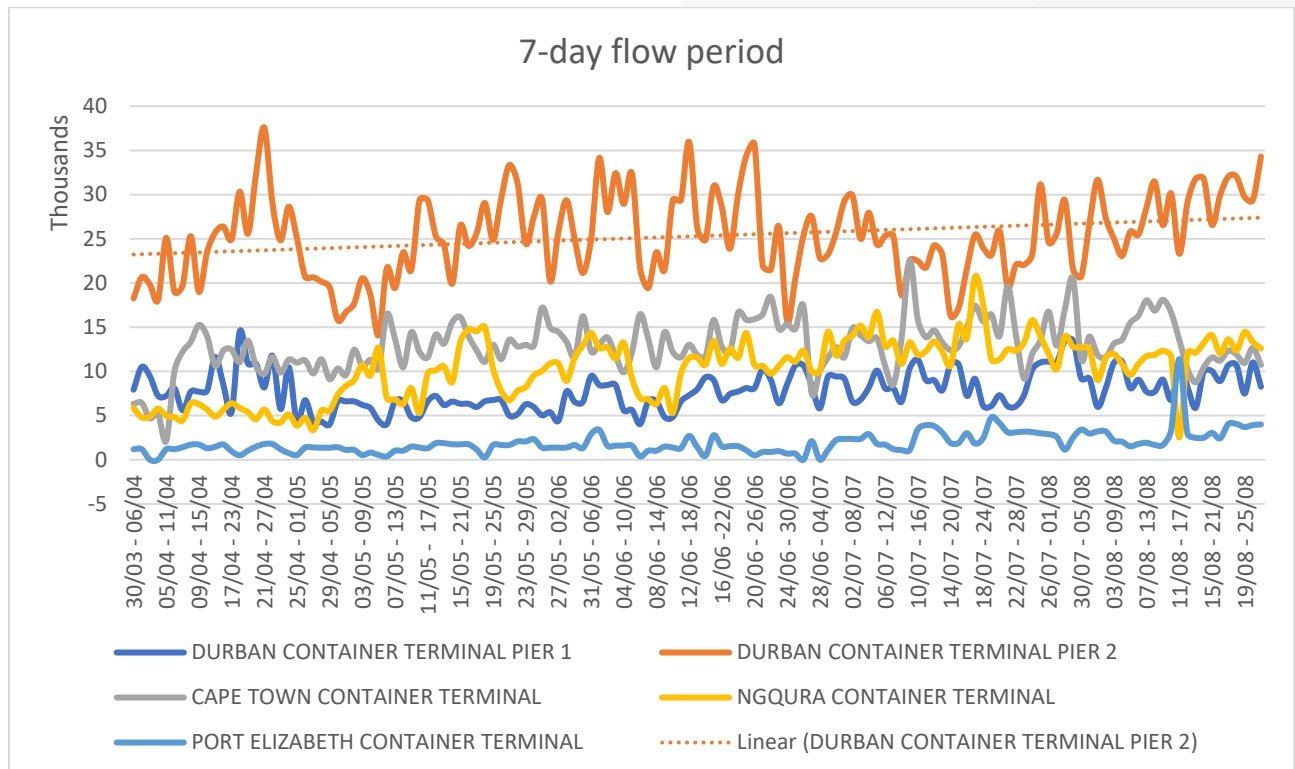
⁵ It remains important to note that a fair percentage (approximately 28%) of containers are neither to be imported nor exported, but rather consist of empties and transshipments. Due to container imbalances, this proportion is fluctuating more than usual.

⁶ As noted in *footnote 1*.

of nearly 12,000 containers the past week, as port operations have continued with six gangs (note the discussion in the [summary](#) section).

Current stack occupancy across the board is approximately 70% and 40% in Durban and Cape Town respectively. The following figure provides a more comprehensive flow of container cargo to and from our commercial ports, indicating the 7-day rolling forecast for container flows from the onset of the lockdown period at the end of March.

Figure 2 - 7-day flow forecast for total cargo movement (TEUs: 30 March to 21 August; week-on-week)

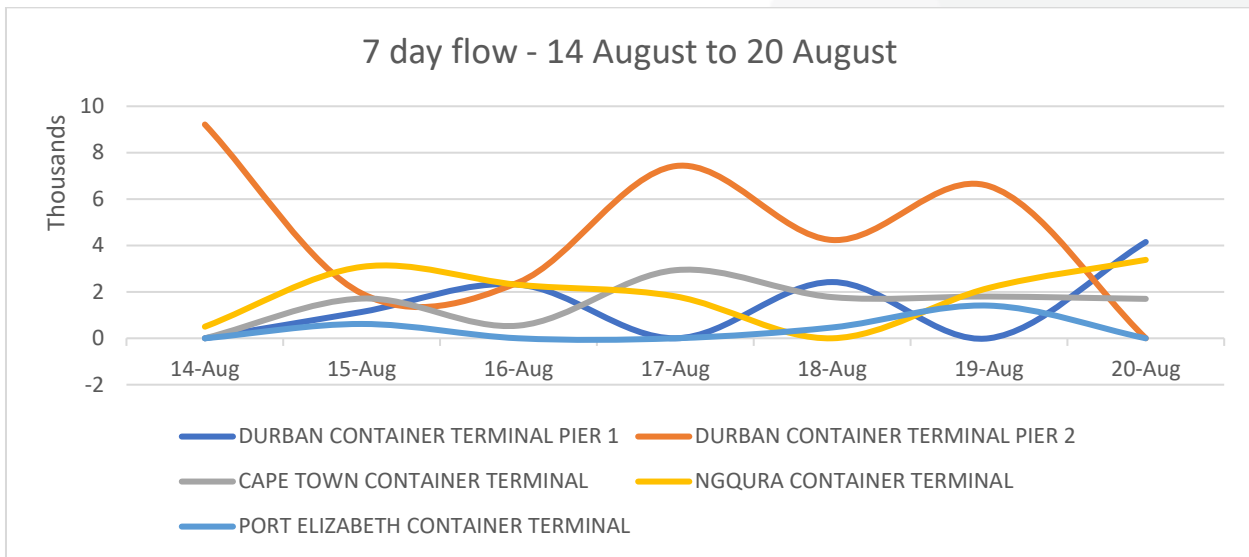


Source: Calculated using data from the [Transnet Port Terminal](#) updates. Updated 21/08/2020

Due to the delayed effects of the pandemic and standard lead times in ocean-going freight, overall container volumes are still only around **~86%** compared to the same time last year. However, a noticeable improvement has been experienced in recent weeks, especially in terms of exports.

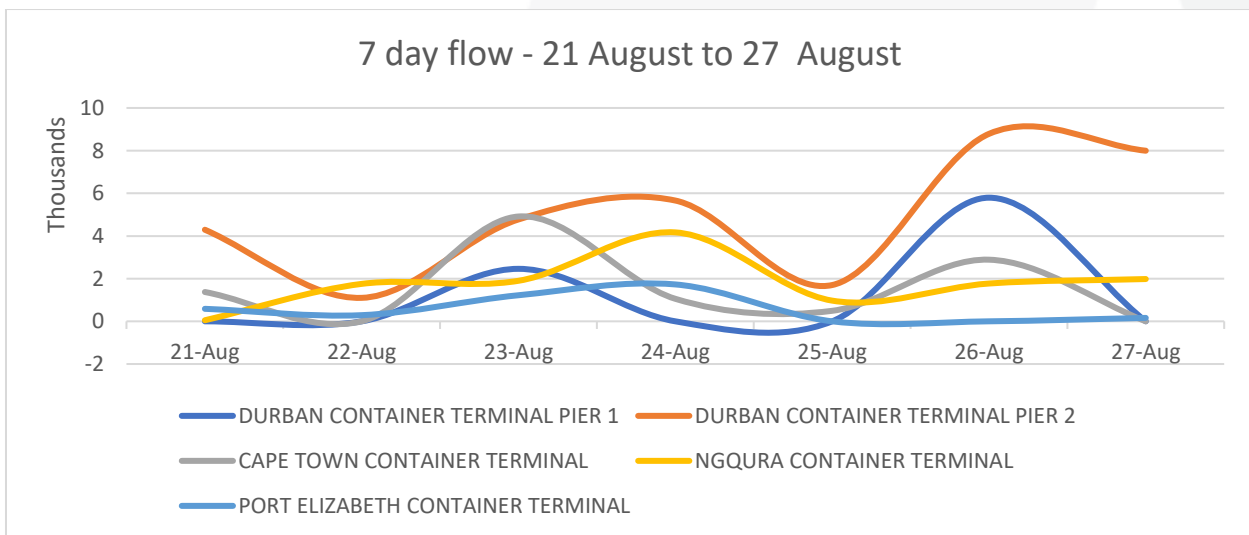
The figures below show the weekly container flows for the last 7 days, as well as projections for the next 7 days.

Figure 3 - 7-day flow forecast for total cargo movement (14 August to 20 August; day-on-day)



Source: Calculated using data from [Transnet Port Terminal](#), updated 21/08/2020.

Figure 4 - 7-day flow forecast for total cargo movement (21 August to 27 August; day-on-day)



Source: Calculated using data from [Transnet Port Terminal](#), updated 21/08/2020.

Summary of port statistics

An average of **~9 715 TEUs** were handled per day over the course of the last week (14 - 20 Aug - Table 2), with an increased average of around **~9 983 TEUs** expected to be handled over the course of the next week (21 - 27 Aug - Table 3). These figures can be compared to an average of **~9 705 TEUs** handled per day in the previous report (14 August), which is a positive sign for the industry and translates into a small, but sustained increase compared to last week. Overall, containerised cargo volumes are **~86%** compared to the same time the previous year, but up by **6%** when comparing month on month.

In terms of operations at the Port of Cape Town, efficiency once again continues to improve. The port is operating exceptional well at the moment with berthing on arrival happening at CTCT and MPT. However, due to some delays being experienced at the Port of Durban, the news serves as a false positive since Cape Town volumes have decreased. Furthermore, some major lines have not resumed Cape Town calls yet, which has reduced the number vessels into Cape Town. Nonetheless, the Port of Cape Town can confirm that Marine and TNPA handling vessels are currently on time with no delays reported on docking and sailings, and the CTOC programme has been reintroduced.

A further boost for the port has been the dry-docking of De Beers vessel MV GARIEP, which will create about 600 jobs while the vessel undergoes a major refit, providing some much-needed relief for the ship repair industry.

Air Update

i. International air cargo

The following table depicts the inbound and outbound air cargo flows to and from ORTIA in the last week. For comparative purposes, the average air freight cargo (inbound and outbound) handled at ORTIA in the two months *before* the lockdown period (January and February) was approximately **743 879 kg per day**⁷. The volumes depicted in the table are also in kilograms.

Table 4 - International inbound and outbound cargo from OR Tambo

Flows	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug	18-Aug	19-Aug
Volume inbound	346 333	232 656	241 117	407 770	294 974	142 233	287 263
Volume outbound	213 410	113 169	159 274	235 322	107 431	134 220	184 544
Total handled per day	559 743	345 825	400 391	643 092	402 405	276 452	471 807

Updated: 21/08/2020

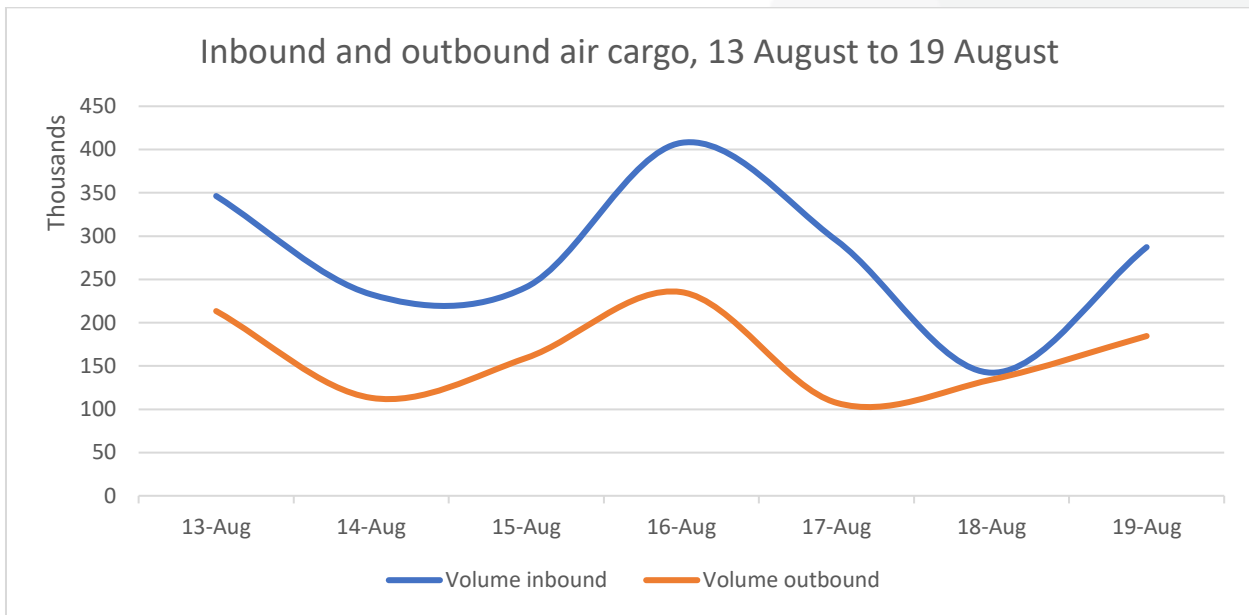
The average volume of air cargo handled at ORTIA over the seven days starting 13 August amounted to **278 907 kg** inbound and **163 910 kg** outbound, resulting in an average of **442 816 kg** per day, which is approximately **59%** compared to the two months before the lockdown period. These figures are - on average - slightly lower than those reported in the previous edition of this report (*14 August*), but fortunately not significantly so.

The following figure is a visual representation derived from *Table 4*, illustrating how the volumes of air cargo have fluctuated over the course of the last seven days.



⁷ Note, when including statistics from South Africa's other two international airports, Cape Town International and King Shaka (Durban) International airports, the total figure rises to **916 175 kg** per day.

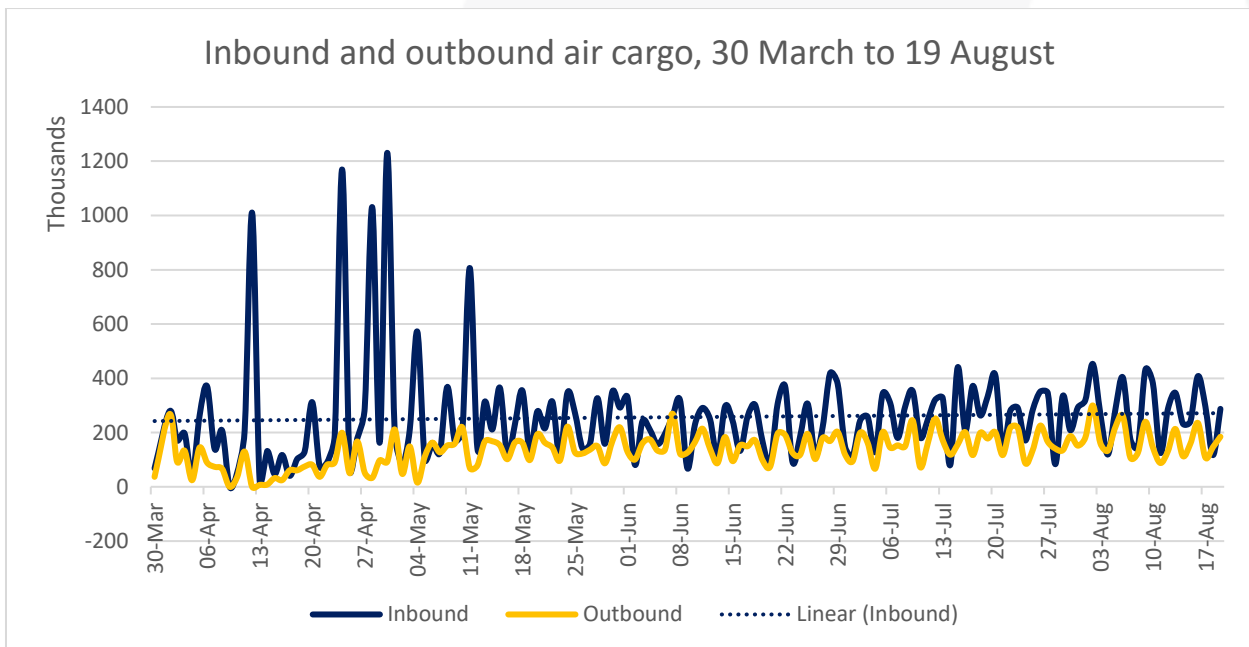
Figure 5 - 7-day cargo flow for OR Tambo



Updated: 21/08/2020

The following figure shows the long-term average of international air cargo flows to and from ORTIA since 30 March. After the initial spike in volumes in late April and early May, mainly caused by bulk imports of PPE, weekly flows, although fluctuating from day to day, have settled into a reasonably consistent average.

Figure 6 - Daily cargo flow for OR Tambo



Updated: 21/08/2020

The following table depicts the origin and destination of air cargo moved to and from ORTIA. Note that the origin shown is the source of the flight, not necessarily the source of the load. The cargo originates around the world and then moves here via the hubs of the major airlines, i.e. Doha (Qatar), Dubai (Emirates), Istanbul (Turkish), and London (British), etc. Indications are that the bulk of the arriving cargo originates in the Far East, since there are virtually no passenger flights, and only chartered flights and scheduled cargo flights are arriving. Consistently high volumes between ORTIA and Nairobi are noteworthy and can be explained by the opportunities arising out of the fresh flower export trade from Kenya to Europe.

Table 5 - Total international cargo movement to and from OR Tambo

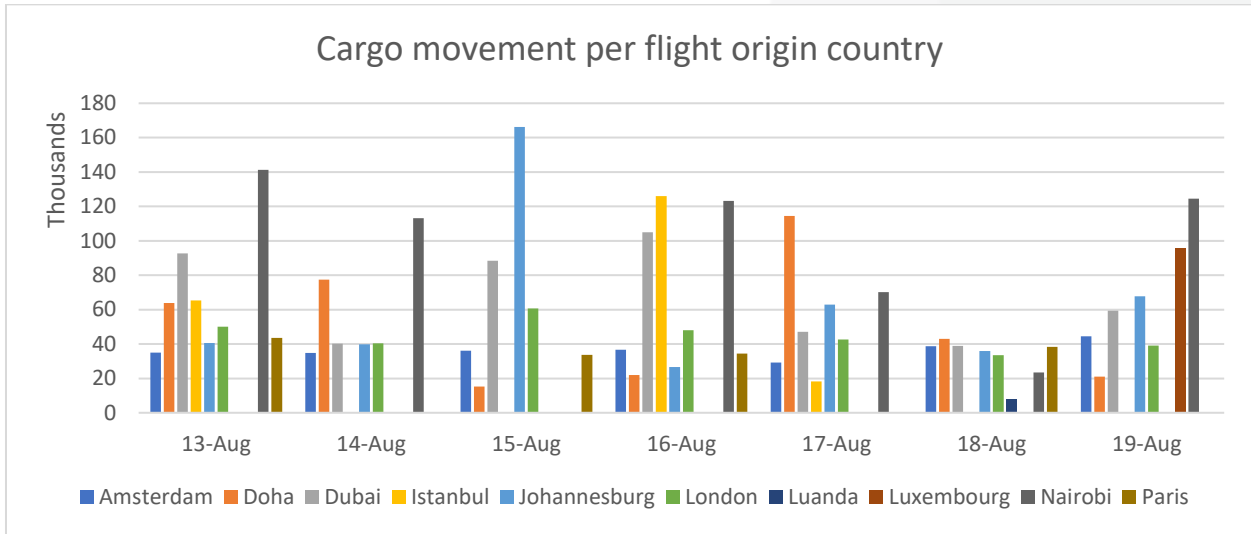
Partner	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug	18-Aug	19-Aug
Amsterdam	35 037	34 742	36 165	36 613	29 183	38 718	44 461
Doha	63 913	77 500	15 248	21 978	114 386	42 948	21 087
Dubai	92 641	40 151	88 334	104 972	47 052	38 915	59 290
Istanbul	65 299	-	-	126 044	18 182	-	-
Johannesburg	40 492	39 757	166 198	26 545	62 913	35 910	67 774
London	50 080	40 429	60 724	47 995	42 556	33 407	39 086
Luanda	-	-	-	-	-	7 681	-
Luxembourg	-	-	-	-	-	-	95 906
Nairobi	141 201	113 246		123 312	70 232	23 474	124 531
Paris	43 569	-	33 722	34 401	-	38 351	-
Singapore	27 511	-	-	121 232	17 901	17 048	19 672
Total handled:	559 743	345 825	400 391	643 092	402 405	276 452	471 807

Updated: 21/08/2020

When comparing the origin and destination of air cargo moved to and from ORTIA over the course of the last couple of months, it is evident that our trading partners have mainly remained the same. The significant omission is Addis Ababa and Ethiopian Airways, which accounted for a large portion of the air cargo during the early days of lockdown when bulk imports of PPE from China were in full swing, and even passenger aircraft were being used on a charter basis.

The following figure, a graphic representation of *Table 8*, shows the diversity of South Africa's trading partners in terms of cargo handled per country of origin. Overall, international freight has increased by ~2% compared to last week.

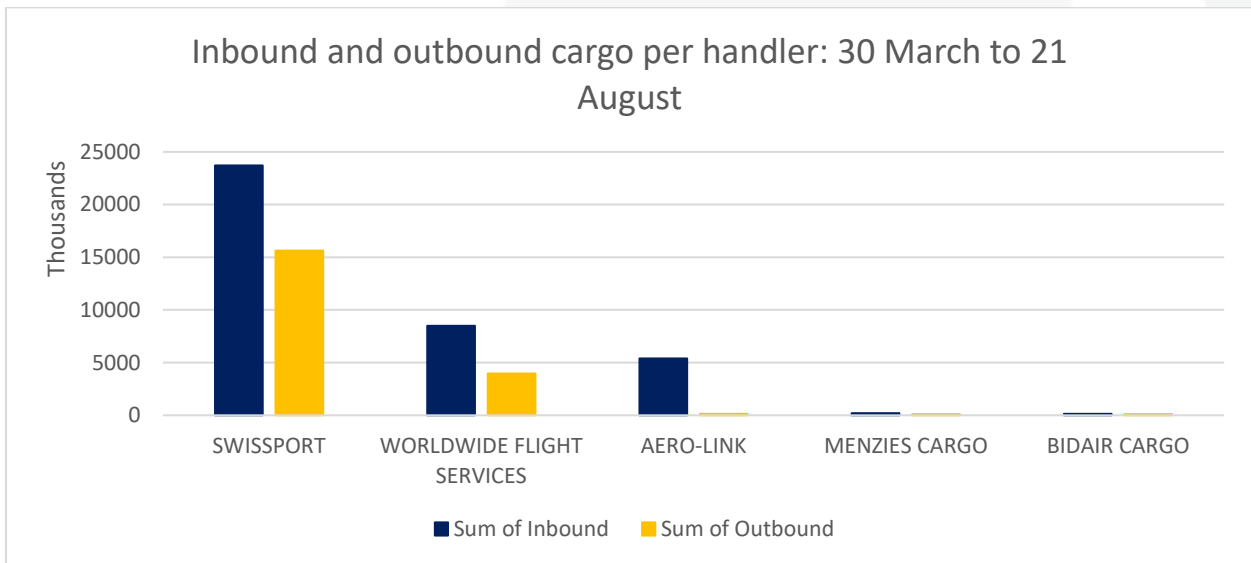
Figure 7 - Total cargo movement between OR Tambo and trading partners



Updated: 21/08/2020

The next figure illustrates the cargo moved per ground handling agent since the start of the lockdown period, with Swissport handling the bulk of the international freight to and from ORTIA.

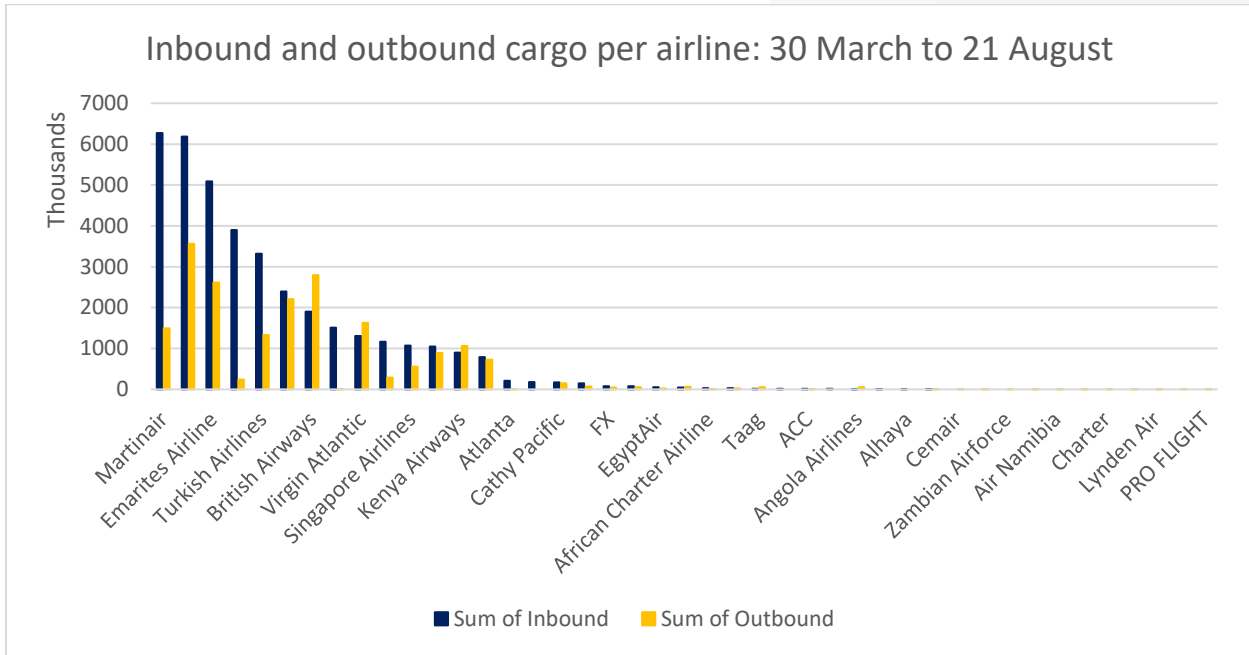
Figure 8 - Cargo movement during the lockdown, per handler



Updated: 21/08/2020

The following figure illustrates the cargo moved per airline since the start of the lockdown period, with Qatar, Martinair, Emirates, and Ethiopian accounting for the vast majority of the international freight to and from ORTIA.

Figure 9 - Cargo movement during the lockdown, per airline

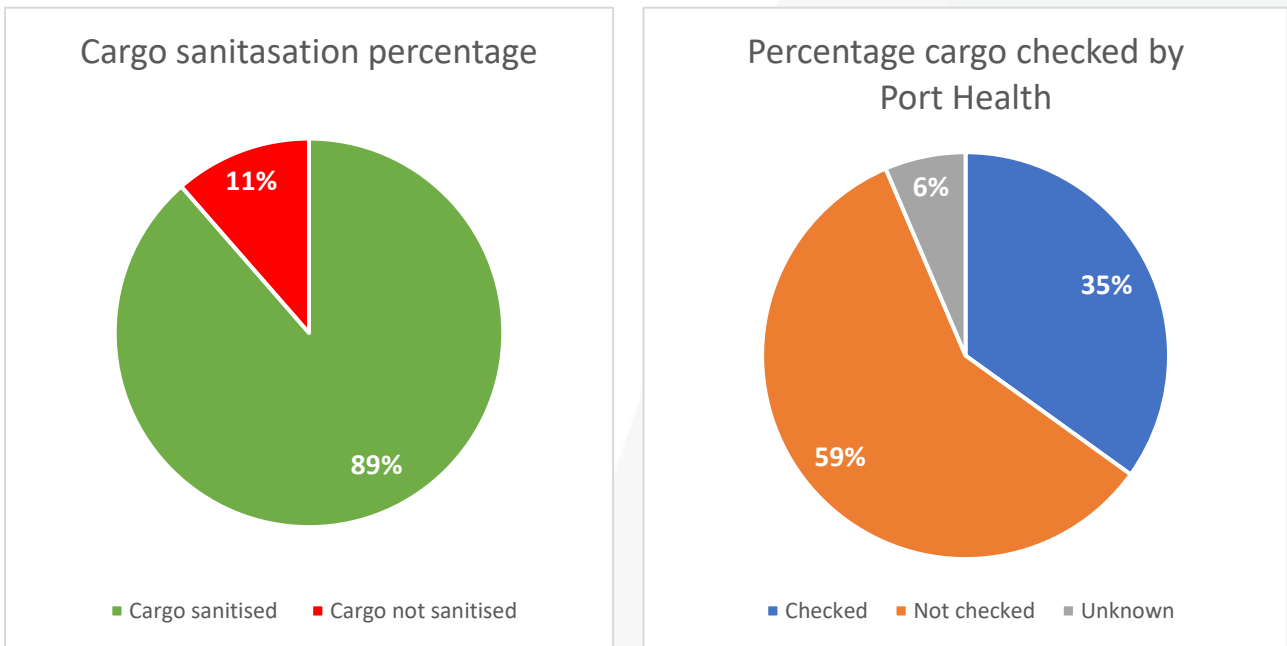


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We are underlining the fact that most international air cargo has been channelled to ORTIA during the lockdown period, with very little cargo consigned to or from Durban and Cape Town. The onward movement of cargo from ORTIA to the coastal cities (primarily by road) adds to both cost and transit time, as well as creating a need for in-bond clearances with Customs which has also presented some obstacles.

The figure below illustrates the percentage of cargo sanitised, as well as the portion of cargo checked by Port Health.

Figure 10 - Air cargo sanitation process



Updated: 21/08/2020

Global air cargo traffic

The following air traffic image displays the current pattern of air traffic globally, providing a snapshot around mid-afternoon of 21 August.

Figure 11 - Global air traffic: 21 August 2020



Source: [FlightRadar24](https://www.flightradar24.com), 21/08/2020, 16:30

The image continues to highlight the lack of activity in African airspace, although this traffic has increased dramatically compared to the early days of lockdown. The numbers of aircraft currently moving across African airspace has increased. Still, as can be seen in the statistics provided in the previous section, the amounts are not yet up to normal ranges, as the following image will show.

South African air traffic

The next image displays the current pattern of air traffic in Southern Africa, providing a snapshot around mid-afternoon on 21 August.

Figure 12 - Southern African air traffic: 21 August 2020



Source: [FlightRadar24](https://www.flightradar24.com), 21/08/2020, 16:30

1. International update

The following section provides context as to the health of the global economy and the impact of COVID-19.

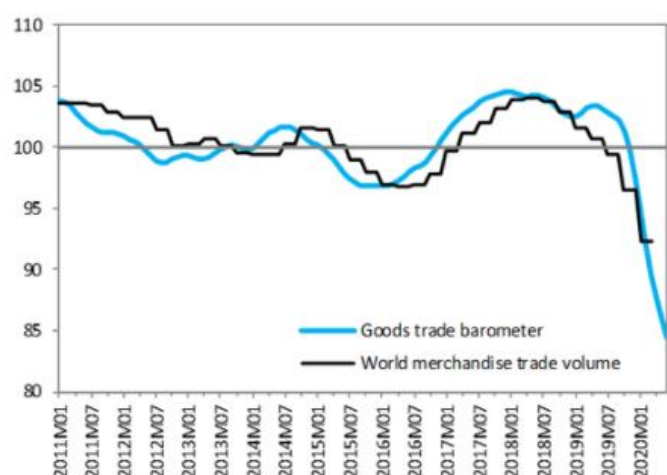
- **WTO**

On 19 August, the World Trade Organisation released its "*Goods barometer*"⁸, confirming the steep drop in global trade. Fortunately, the analysis does show signs of a nascent recovery in the not too distant future. The current barometer reading looks as follows:



⁸ WTO. 19 August. https://www.wto.org/english/news_e/news20_e/wtoi_19aug20_e.htm

Figure 13 - WTO Goods trade barometer for June 2020 (index history, trend = 100)



Source: [WTO](#)

The following points are critical to the WTO's analyses:

- The current barometer reading of 84.5 is 15.5 points below the baseline value of 100.
- Even worse, the index is 18.6 points down from the same period last year and lowest on record (with data going back to 2007).
- The effects of COVID-19 on world trade is approximately similar to the 2008-09 financial crisis.
- The barometer reading is broadly consistent with WTO statistics issued in June, which estimated an 18.5% decline in merchandise trade in Q2 of 2020 as compared to the same period last year.
- All of the barometer's component indices remain well below trend, with many registering historic lows, although some have begun to stabilise. Indices for automotive products (71.8) and air freight (76.5) are by far the worst on record since 2007
- Container shipping (86.9) also remains deeply depressed
- Export orders (88.4) show signs of recovery as this index has turned upward. Meanwhile, indices for electronic components (92.8) and agricultural raw materials (92.5) have held up relatively well, showing only modest declines.
- The WTO's June statistics implied a 14% drop in global merchandise trade volume between the first and second quarters of this year.

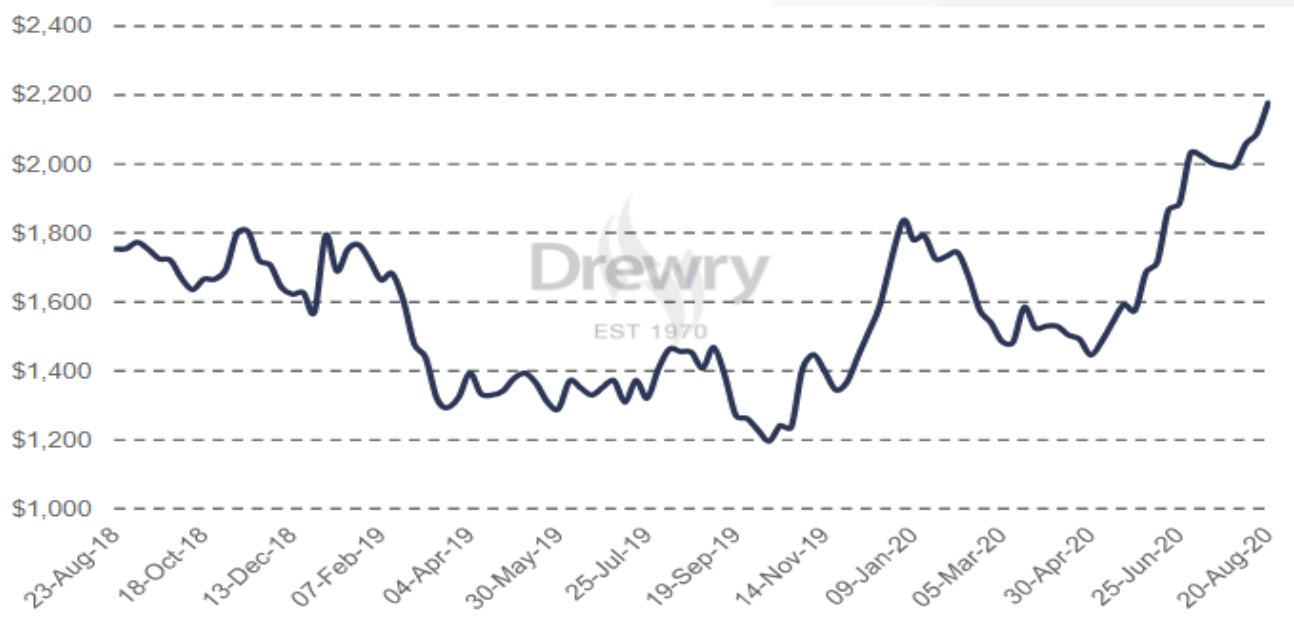
All of the barometer's component indices remain well below trend, with many registering historic lows, although some have begun to stabilise. However, it must be said that the WTO points out that the exact extent of the fall in trade will only be confirmed later this year when official trade volume data for the period from April to June becomes available.

- **Container industry at a glance**

International freight rates have once again increased over the course of the last week, according to the "World Container Index" (WCI) as published by Drewry, the UK-based Maritime research and consulting firm. The current global average freight rate currently stands at **\$2,1760.90** per 40ft container. The WCI has therefore increased by 4.2% since the previous week (13 August 2020).

The following figure showcases the current increase.

Figure 14 - World container index - Assessed by Drewry (\$ per 40' container)



Source: [Drewry Supply Chain Advisors](#)

Drewry provides the following reasons for this continued upward trend in rates:

- The average composite index of the WCI, assessed by Drewry for year-to-date, is \$1,726 per 40ft container, which is a staggering \$313 higher than the five-year average of \$1,414 per 40ft container.
- Spot rates from Shanghai to New York surged 11% or \$389 and stood at \$3,910 per feu.
- Similarly, spot rates from Rotterdam to New York soared 11% or \$247 to touch \$2,449 per 40ft box.
- Freight rates on the route between Shanghai and Los Angeles gained \$182 to \$3,390 for a 40ft box.

The following table consolidates the monthly and annual changes for the eight major East-West trades.

Table 6 - World container index per route - Assessed by Drewry (\$ per 40' container)

Route	06-Aug-20	13-Aug-20	20-Aug-20	Weekly change (%)	Annual change (%)
Composite Index	\$2,059	\$2,089	\$2,177	4% ▲	50% ▲
Shanghai - Rotterdam	\$1,856	\$1,805	\$1,870	4% ▲	14% ▲
Rotterdam - Shanghai	\$1,296	\$1,297	\$1,222	-6% ▼	109% ▲
Shanghai - Genoa	\$1,982	\$1,982	\$1,941	-2% ▼	-8% ▼
Shanghai - Los Angeles	\$3,024	\$3,208	\$3,390	6% ▲	143% ▲
Los Angeles - Shanghai	\$518	\$518	\$518	0%	28% ▲
Shanghai - New York	\$3,510	\$3,521	\$3,910	11% ▲	55% ▲
New York - Rotterdam	\$561	\$561	\$552	-2% ▼	4% ▲
Rotterdam - New York	\$2,264	\$2,202	\$2,449	11% ▲	4% ▲

Source: [Drewry Ports and Terminal insights](#)

The consistent increase in average freight rates does not bode well for global trade and especially for South Africa. As with all basic economic principles, once supply decreases and demand remains unchanged, the result is a higher equilibrium price and lower quantity. This phenomenon is what is occurring within the realms of the global container industry, with fewer sailings due to lower levels of container throughput, which ultimately leads to higher equilibrium prices as seen above. Luckily, in recent weeks, some major sailing schedules have returned to South African shores. The collective ocean freight industry (with the possible exception of the ocean carriers themselves) hopes that this will continue.

In other internationally related maritime news, the world's largest container shipping company — Maersk — announced operating profits of \$1.7 billion in Q2 of 2020. This figure represents a 25% increase compared to Q2 of 2019⁹. Similarly, improved other major carriers have reported profitability

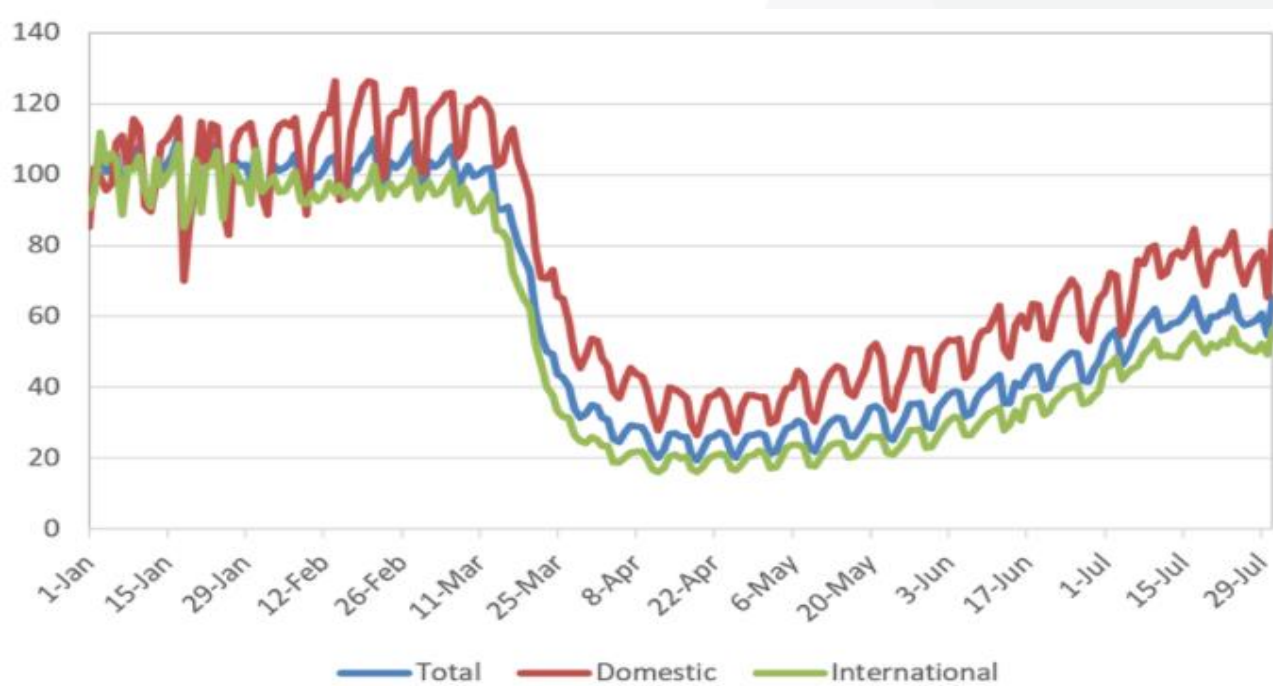
Air cargo Industry

Amid the spread of the COVID-19 pandemic, the number of commercial flights available to carry cargo experienced a sharp decline. The following figure shows the 6-month index of all domestic and international flights, according to OpenSky network and the WTO.



⁹ <https://www.businessinsider.co.za/maersk-q2-results-biggest-shipping-firm-profits-rise-25-percent-2020-8>

Figure 15 - Demand and yield expectations



Source: [OpenSky Network and WTO Secretariat calculations](#)

From the figure, we can infer the following vital points:

- Flights worldwide fell nearly 80% between late February and mid-April
- The overall decline in international flights was worse compared to domestic flights
- Flight totals have gradually recovered through the end of July
- Nonetheless, current levels remain approximately 40% below their level at the start of the year.

Ultimately, the numbers of commercial passenger flights are a reliable barometer of the state of the global economy since they are closely related to trade in both goods and services. As is the case throughout, and especially in Africa, many countries still have very restrictive border policies in place which is exaggerating the constraints on air travel (cargo and passengers). Despite concerted efforts over the last 20 years, no progress is forthcoming in terms of an African "open skies" environment, and this intensifies the impact of the crisis.

Conclusion

This update — *the fifth of its kind* — contains a consolidated overview of the South African supply chain, as well as the current state of trade internationally. In terms of COVID-19 infections, South Africa remains in 5th position globally (although Peru and Mexico are fast catching up) with almost 610,000 total cases¹⁰ recorded at the time of writing.

Fortunately, the infection rate has decreased significantly over the course of the last three weeks, with the curve starting to bottom out. Despite this, complacency is to be avoided. The impact of the recent lifting of the alcohol ban, with a widespread return of patrons to restaurants, bars and clubs over the weekend remains to be quantified. The country must, therefore, remain vigilant and not relax its efforts in fighting this pandemic.

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¹⁰ John Hopkins, Coronavirus Resource Centre. <https://coronavirus.jhu.edu/map.html>

For the ocean modality, container volumes have marginally increased compared to those recorded last week, with an average of **~9 715 TEUs** handled daily over the course of the previous seven days, with an increased average of around **~9 983 TEUs** expected over the course of the next week. As has been the case lately, export cargo has continued to outstrip import cargo, which is a positive sign for our local industry and adds to the recent positive trade balance. Overall containerised cargo volumes are **~86%** compared to the same time last year, but up by **6%** when comparing month by month.

Concerning international air cargo flowing to South Africa, the average daily volume of air cargo handled at ORTIA over the seven days increased by **3%**. The period beginning 13 August saw daily volumes of **278 907 kg** inbound and **163 910 kg** outbound, resulting in an average of **442 816 kg**, which is approximately **59%** compared to the two months before the lockdown period. These air cargo figures once again highlight the sustained negative impact of the pandemic on the global air cargo industry, which was aptly illustrated by *Figure 15* above. In summary, worldwide flights fell by nearly **80%** between late February and mid-April, which was incidentally, also South Africa's worst period for the air cargo industry. Recovery proceeds slowly with current levels holding at approximately **40%** less than those experienced at the start of the year.

Internationally, world merchandise trade has declined by **18.5%** for Q2, with the automotive and air freight industries hit the hardest, followed by container shipping. Average freight rates also continue to surge (currently at a record-high of **\$2,176.90** per 40'). At the same time, container throughput has also experienced a slight revival, which has been primarily driven by the return to 'near-normal' volumes in China. In South Africa, port operational efficiency has luckily increased over the course of the last week or so, most notably at the Port of Cape Town, which will hopefully coincide with increases in container volume in the coming weeks. Further positive news includes the creation of approximately 600 jobs for the refit of De Beers vessel MV GARIEP.

In overall terms, the South African supply chain and its related industries have experienced a slight recovery since the start of *Risk-Adjusted Strategy* Level 2. However, relative to levels this time a year ago remains alarmingly low. And this is coming off of a small base. We have become very dependent on the continued upward trends in the world economy. However, South Africa's trading community needs first to return to full operational levels successfully. Although some regions of the South African supply chain have made some positive progress over the course of the last couple of weeks, the industry remains poised at a critical crossroads. Successfully navigating this crossroads will require concerted and coordinated efforts of both government and the private sector to ameliorate some of the lasting constraints imposed by the COVID-19 pandemic.