

European Container Trade, 2020

Examination of container trade in 2020 (half year)



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Background

This article examines the pattern of containerised trade in the first six months of 2020, using EU (COMEXT) trade data in conjunction with methodologies to estimate the quantity of tonnes moved by container. See [4]. The database covers all EU trade with non-EU countries, and this article focuses on Central Europe, i.e. trade to and from eight Member States:

- Belgium
- Netherlands,
- Luxembourg,
- France
- Germany
- Italy
- Austria, and
- Czech Republic

(Switzerland is not covered by EU trade data.)

At the time of writing, August 2020, data for the first six months of 2020 has just been released by Eurostat, making it possible to examine in some detail the initial impacts of the Corona Crisis on the sector. Most economic analyses which have been circulated so far focus on trade impacts in terms of value (Euros), so here the aim is to look at the impacts in terms of tonnages, by comparing monthly data for 2020 against the equivalent periods in previous years, and with data obtained from the main containing ports serving the region.

Method

Eurostat trade data records whether trade tonnages are containerised or not, but as set out in previous articles, there are inconsistencies in terms of coverage per Member State, so a detailed set of containerisation factors were calculated to solve this data gap. This method has been used throughout this article. See [3] and [4]. Note that the quantities are measured in containerised tonnes.

Results

Monthly data covering the period January 2018 to June 2020 is shown below, by direction. In each case the flows cover trade between the eight central European countries and non-EU trade partners.

Containerised Tonnes

Table 1: Central Europe: Containerised *Export* Tonnes (000s)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2018	9,855	9,700	10,378	9,627	9,975	10,141	10,179	9,597	9,661	11,147	9,848	9,031	119,137
2019	9,788	9,687	10,431	10,290	10,408	9,195	10,569	9,602	10,269	11,212	9,929	9,369	120,749
2020	9,890	10,221	10,149	9,516	8,493	9,504							57,773

Table 2: Central Europe: Containerised *Import* Tonnes (000s)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2018	9,670	8,948	9,157	8,965	9,818	9,325	9,593	9,086	8,099	9,837	8,781	7,740	109,020
2019	10,129	9,236	9,002	10,374	10,169	8,847	10,064	8,797	8,677	9,082	8,574	7,924	110,876
2020	10,113	8,523	8,750	9,439	8,387	8,614							53,826

Table 3: Central Europe: Containerised *TOTAL* Tonnes (000s)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2018	19,525	18,648	19,536	18,592	19,792	19,466	19,771	18,684	17,760	20,984	18,629	16,771	228,157
2019	19,918	18,923	19,433	20,664	20,577	18,042	20,633	18,399	18,946	20,294	18,503	17,293	231,625
2020	20,003	18,744	18,899	18,954	16,881	18,118							111,599

Within this geographical segment, the trade volumes are consistently in the region of 9-10 million containerised tonnes per month per direction, and 19-20 million containerised tonnes per month for both directions together.

In 2020, the year appears to have started positively in January. However in February the first signs of the COVID crisis start to become visible in the import direction. Volumes remained fairly stable, and below trend until April 2020, and then there was a substantial drop in both imports and exports in May 2020. In June 2020, the first signs of recovery can be seen.

The same results are shown as index values for the first six months of 2020 and the year to date. See Figure 1. The 2020 monthly values are compared to the average of the same month in the previous two years and given an index value. An index value of 100 would show that the 2020 value is the same as the average for the previous two years. Since there was an upward trend before 2020, it would have been expected at the start of the year that the volumes for 2020 would exceed the average for the two previous years.

Figure 1: Monthly Container Trade Indices, 2020

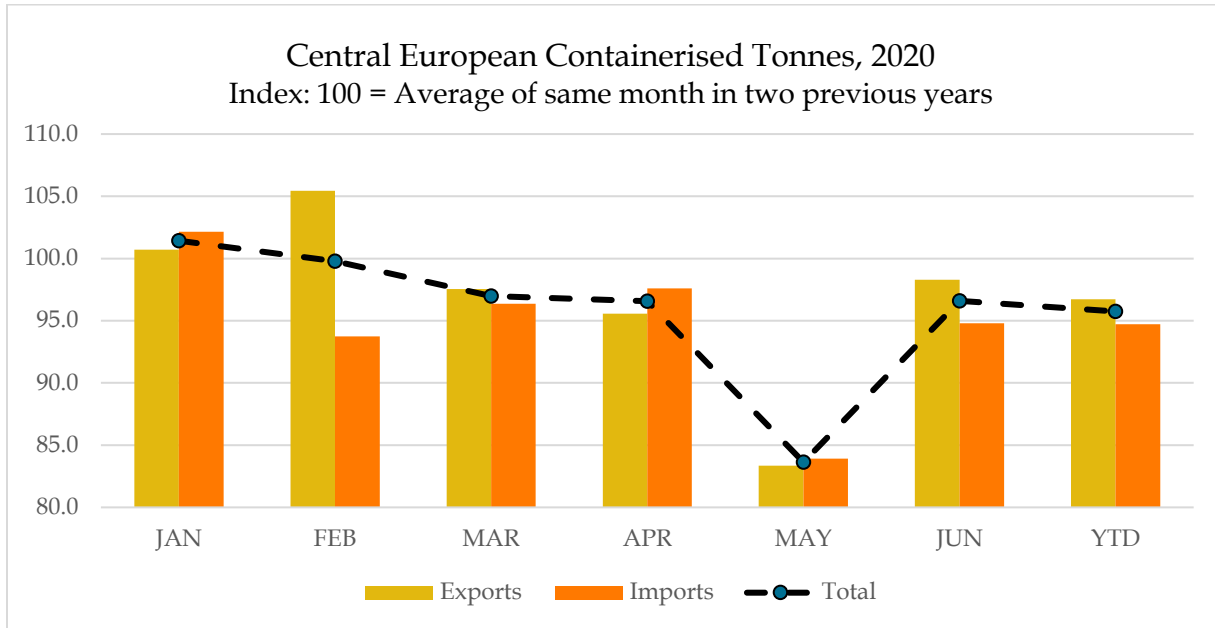


Figure 1 shows both the import and export directions (from the perspective of the eight Central European countries reporting the data), and the index for total trade is shown as a dotted line. The cumulative change for the first six months year-to-date (YTD) is also shown.

Starting from January 2020, volumes were close to their trend levels (=100), but then in February there was a noticeable drop in European imports. As the COVID crisis intensified in Europe in March and April 2020 there was a corresponding drop in exports, resulting in a 5% decrease overall. By May 2020, with the economic crisis spreading further, the largest fall occurred. According to the trade statistics for this segment, trade volumes in tonnes fell by over 15% compared to the expected value for May, and the effect was seen for both imports and exports. By June, however, volumes had returned to the “new normal”, approximately 3.5% lower than the expected average

Containerised tonnes per product group

Using the trade statistics, the same traffics can be broken down into product groups. For this analysis, the six main NST/R product groups for imports and exports have been used. As before, the index values show the relative volume of traffic in 2020 compared to the average for the same month across the previous two years (2018 and 2019). A figure below 100 indicates that traffic volumes were lower than would have been expected under normal economic conditions. Results can be seen across the different commodity groups in Table 4 and Table 5. The commodities are in descending order of volume, and the half year containerised tonnes are shown in the right hand

column. As before the market segment under examination covers containerised cargo traded between Central Europe and non-EU countries.

Index values lower than 85 (-15%) are highlighted in grey.

Table 4: Central European Containerised **Imports**, 2020 Index Values vs 2018/19

NST/R	JAN	FEB	MAR	APR	MAY	JUN	TONNES (000s) 2020 YTD
Manufactures	111	100	98	103	88	104	23,501
Chemicals	93	104	97	96	80	96	9,780
Foodstuffs	94	99	106	97	94	99	6,817
Agri Products	96	92	101	92	84	105	5,197
Building Materials	92	72	88	94	74	79	3,208
Metal Products	92	83	81	74	51	78	2,334
OTHERS	110	64	78	106	86	42	2,990

Table 5: Central European Containerised **Exports**, 2020 Index Values vs. 2018/19

NST/R	JAN	FEB	MAR	APR	MAY	JUN	TONNES (000s) 2020 YTD
Manufactures	92	100	97	79	75	88	13,262
Chemicals	98	93	92	102	79	91	12,615
Foodstuffs	99	100	97	106	90	97	12,038
Agri Products	135	154	112	126	126	142	10,080
Building Materials	89	92	92	59	52	77	2,787
Fertilizers	77	87	88	120	83	89	2,643
OTHERS	107	116	100	75	67	108	4,347

Imports of **manufactured goods** constitute the largest individual trade flow, and so far, volumes have remained close to their benchmark (100) level for five of the six months, the main exception being in May 2020, when volumes were 12% down. It therefore appears that the relative strength of this sector has played a large role in limiting the negative effect of the crisis. Exports of manufactured goods have seen a greater negative impact than imports, with the index falling to 75 (-25%) in May 2020, although the volumes are substantially lower than in the import direction. Trade in **chemicals** was more affected (relatively) than manufactured goods, but the overall trend is similar with the low point occurring in May.

Imports and exports of **food products** and **agricultural goods** have been relatively strong in both directions, with food products staying close to their benchmark level, and agricultural products actually registering gains in 2020 in the export direction. Within the category of agricultural products, much of the export cargoes are forest products, pulp and paper. Exported foodstuffs include animal feed, meat and dairy products, and beer.

Moving into the industrial (rather than consumer) oriented sectors such as trade in building materials (and other crude minerals), and metal products, the negative impacts of the crisis are more visible. Imports and exports of **building materials** were more than 15% lower than the benchmark for three of the six months and at certain points coming close to 50% of their normal value. Imports of **metal products** were also severely affected with volumes at least 15% lower for five of the six months, no doubt reflecting disruption in both European and overseas industrial production.

Containerised tonnes per region

The same dataset was analysed to look at the pattern of containerised trade with various world regions. Table 6 and Table 7 show the index values for 2020 compared to the average of the previous two years. Index values lower than 85 (-15%) are highlighted in grey.

Table 6: Central European Containerised **Imports**, 2020 Index Values vs 2018/19

	JAN	FEB	MAR	APR	MAY	JUN	TONNES (000s) 2020 YTD
North Africa	126	121	120	100	79	98	1,419
Other Africa	106	110	121	64	119	101	5,121
Middle East	73	74	100	113	68	138	2,628
Central Asia	69	90	124	106	63	75	551
East Asia	105	95	89	92	82	97	26,532
N America	127	97	108	142	83	67	8,998
C&S America	81	91	90	93	78	99	6,611
Oceania	87	33	87	62	84	105	668
Other	80	84	88	96	79	93	1,299

Table 7: Central European Containerised **Exports**, 2020 Index Values vs 2018/19

	JAN	FEB	MAR	APR	MAY	JUN	TONNES (000s) 2020 YTD
North Africa	99	104	96	81	77	87	3,120
Other Africa	101	110	94	92	75	119	5,204
Middle East	94	108	92	97	91	96	5,633
Central Asia	86	70	83	46	58	104	756
East Asia	109	103	92	104	96	106	23,607
N America	96	110	109	96	73	85	12,505
C&S America	89	112	100	84	65	94	4,645
Oceania	108	103	123	92	85	82	1,861
Other	70	71	77	61	75	63	442

Considering initially European imports from East Asia, as this is the largest single item, it can be seen that the year began with an increase of 5% in January, but then with the start of the pandemic affecting Chinese exports (and therefore European imports) there was a sequence of three months up to April 2020 with 5 to 10% decrease in trade volume. As the impact spread the largest impact was then recorded in May 2020 with an 18% decrease in volume, recovering somewhat in June.

On the export side, volumes have remained stronger relative to 2019. January, February, April and June 2020 were all higher than the same months of 2019, and the decrease have been somewhat limited.

European trade with North America had been strong in the first four months of the year for both imports and exports, but as the virus started to escalate in the USA between April and June so did the recorded impact on trade, reaching a low point in May 2020 for European exports and June 2020 for European imports.

In other world regions such as Africa and Latin America, there have been strong performances in the early part of the year followed by sudden downturns in April and May.

2020 First Half Port Traffics

From the above data it suggests that within this geographical region of eight Central European countries that although the year started on a positive note in terms of trade in containerised goods, it began recording negative changes in February 2020, building up to a significant drop in May 2020, followed by a slight recovery in June.

Overall, applying this methodology for identifying containerised trade flows, we measure a 5% decrease in containerised tonnes cumulatively for the first half of the year with most of the impact happening in the second quarter. The reason that the recorded decrease (compared to the same period 2019) is apparently less severe than might have been expected in the (extreme) circumstances is that key sectors i.e. manufactured goods traded with East Asia have remained quite close to their normal levels for most of the year, compensating for larger impacts in other geographical and product sectors.

Currently it is not possible to use the trade data to analyse flows through specific ports, but the total volumes can be compared with recorded results from a number of the larger ports serving this central hinterland region. **Table 8** shows the 2019 container volumes for the largest ports serving the hinterland regions covered by the eight selected Central European countries. Traffic volumes are total TEU: loaded and empty, import, export and transshipment as recorded by Eurostat in 2019.

Table 8: Container traffic through main container ports (NL, BE, DE, IT,FR)

Port		Total TEU 2019
Rotterdam	NL	13,492,837
Antwerp	BE	11,676,076
Hamburg	DE	9,281,987
Bremerhaven	DE	4,849,676
Gioia Tauro	IT	4,154,239
Le Havre	FR	2,762,743
Genoa	IT	2,326,173
La Spezia	IT	1,478,883
Marseille	FR	1,454,530
TOTAL 9 Ports		51,477,144

Source: Eurostat.

According to the latest reports from these ports, the following outcomes have been recorded:

Rotterdam(NL): 2020 half year container throughput (in tonnes) was down 3.3% compared to the same period in 2019, and 7% down in TEU.

Antwerp(BE): 2020 half year container throughput (in tonnes) was down 0.3% compared to the same period in 2019, and up 0.4% in TEU.

Hamburg(DE): 2020 half year container throughput (in TEU) was 12.4 percent down at 4.1 million TEU.

Bremen/Bremerhaven(DE): 2020 half year container throughput (in tonnes) was down 1.7% compared to the same period in 2019, and down 4.8% in TEU.

Gioia Tauro(IT): 2020 half year container traffic was up 17% in TEU (comparing the Assoport figure for the first half 2020 with half of the annual figure for 2019. The Assoport figure for 2019 is 2.5 M TEU, whereas Eurostat recorded 4.1 M TEU over the same period).

Le Havre(FR): 2020 half year container traffic was down 27%, to 1.1 M TEU (10 million tonnes).

Genoa(IT): 2020 half year container traffic was down 8.3% in tonnes, and 10.5% down in TEU.

La Spezia(IT): 2020 half year container traffic was down by 22% in TEU (comparing the Assoport figure for first half 2020 with half of the annual figure for 2019).

Marseille(FR): 2020 half year container traffic decreased by 14% in tonnage and by 17% in TEU, to 617,105 TEU.

Applying these 2020 impacts to the throughputs for the nine ports, implies that in total the decrease in TEU volume is close to (-)1.3 million TEU or 5.4% decrease overall for the half year.

Measured changes in containerised trade for the first six months of 2020 (See Table 3) and in port handling can then be compared. See below.

Table 9: Comparison of trade data and port data, first half 2020

Item	Quantity	Comment
Trade Data		
2019 Half Year	117.6 million tonnes	(Estimated from COMEXT)
2020 Half year	111.6 million tonnes	
2020/2019 Change	-5.9 million tonnes	
2020/2019 % Change	-5.1%	
Port Data		
2019 Half Year	24.9 million TEU	(Eurostat Basis)
2020 Half Year	23.6 million TEU	
2020/2019 Change	-1.3 million TEU	
2020/2019 % Change	-5.4%	

Both of the available data sources suggest that the net impact on container trade for Central Europe over the first six months of 2020 is between -5% and -5.5%. Both sources are approximately in agreement.

Conclusions

The aim of this article has been to investigate the impact of Corona Crisis on container traffic within Central Europe (eight countries: Belgium, Netherlands, Luxembourg, France, Germany, Italy, Austria, and Czech Republic).

Using a combination of data from port authorities and from trade statistics, and applying our model of containerisation rates, we conclude that the net impact on container volume is in the region of -5% to -5.5%. The largest impact was in May 2020, and so far it appears that volumes did recover somewhat in June.

One of the main reasons that the impact was limited to single-digit levels was that trade in (higher value) manufactured goods with East Asia remained close to 2019 levels. Trade in food products for all world regions also was relatively unaffected by the

negative effects of the crisis. However, the overall picture was quite mixed with larger impacts on lower value commodities, and different timings for the peak impact for different world regions.

The performance of the largest ports serving the region was also quite mixed, reflecting the findings from the trade data, that there was not “an impact” but rather a succession (or domino effect) of impacts which coalesced and reached peak magnitude in Q2. In some cases the impact was exaggerated by local issues such as strikes in France at the beginning of the year, when volumes were still high. Conversely these local shifts may have helped ports such as Antwerp to maintain 2019 throughput levels.

Looking ahead, it seems that the sector is cautiously optimistic, and the analysis carried out here supports that view, but it is still quite probable that full year 2020 volumes will be lower than 2019. Based on half-year results we are anticipating reductions of about 10 million tonnes of containerised trade and 2.5 million TEU in terms of port handling. We will continue to monitor trade and report our findings.

References

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