

## Airfreight - Global

# Air Cargo Watch #15: Strong demand trends continue into Jan-Feb 2024

Industry Overview

## Monthly Air Cargo Watch to track the airfreight industry

Our monthly Air Cargo Watch includes high frequency airfreight data to track trends in the industry. Air cargo demand has started 2024 strong with Jan-Feb data trending 10-15% YoY higher although Red Sea boosts remain somewhat elusive. 1Q24 QTD average cargo freight rates are down -13% QoQ on tough seasonal comps but holding at 14% above 2019. Cargo capacity is slightly above 2019 levels – watch more belly ramp this year and new freighters offset by retirements and lower flying hours.

## Demand: Recovery continues into Jan-Feb 2024

Air cargo's volume recovery has continued into 2024 with high frequency data showing January-February volumes tracking 10-15% YoY higher following +10.8% YoY demand growth in December 2023. Traffic growth was led by Asia with strong capital equipment and consumer goods exports particularly into Europe, as well as strong eCommerce demand where our checks suggest represents up to 20-30% of Asian exports. 2023 global air cargo demand recovered to 97% of 2019 levels, with US/Asia/Europe back to 108%/93%/88% of pre-COVID levels. Typical demand seasonality was seen in the Chinese New Year period while the boost from Red Sea disruptions appears limited for now.

## Supply: Belly at 2019 levels testing freighter disciplines

Air cargo capacity grew by 13.6% YoY in December 2023 with similar YoY capacity growth trends expected in January-February 2024. Global air cargo supply in 2023 recovered to 102% of 2019 levels driven primarily by belly capacity as airlines ramped passenger flights, which grew by 32% YoY in 4Q23. Dedicated freighter capacity was flat YoY in 4Q23 – and look for some older freighter retirements and lower flying hours to help absorb new deliveries and conversions coming in 2024.

## Rates: 1Q24 rates down QoQ but still 14% above 2019

Average 1Q24 air cargo freight rates dipped -13% QoQ QTD on tough peak season comps but remain ~14% above 2019 levels with rates for HK/Singapore/Shanghai still 93%/52%/28% above 2019 levels. Drewry Shanghai-LA rates have normalized to pre-COVID levels on ramping freighter capacity in response to eCommerce demand with belly a low proportion of the capacity mix on transpacific.

## Taiwan: Yields normalizing in January 2024

Cargo yields for the Taiwanese airlines were down by -20% MoM in January 2024. Relative to 2019, Taiwan air cargo yields are back to 20% above 2019 levels in January 2024. Cargo loads fell by 2ppts MoM or 1ppts YoY with EVA operating at 50% above 2019 cargo capacity in January 2024.

23 February 2024

Equity  
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CNY – Chinese New Year

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**Refer to important disclosures on page 15 to 17.**

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Timestamp: 22 February 2024 09:27PM EST

# Airfreight rates

## Exhibit 1: Weekly Global Baltic Airfreight Index

Baltic Airfreight index now at 1,895 down -27% YTD YoY

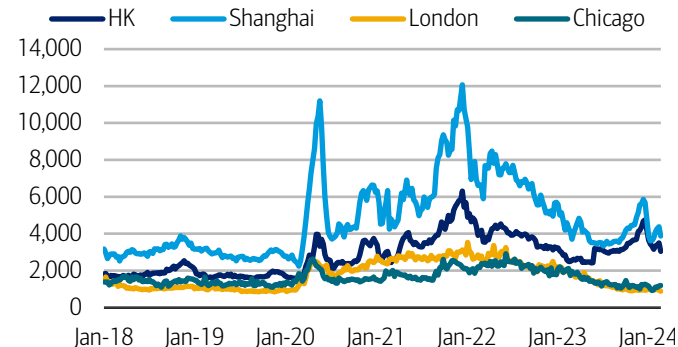


Source: TAC

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## Exhibit 2: Baltic Airfreight Index for key cities

HK/SH/London/Chicago saw rates move by +19%/-16%/-52%/-47% YTD YoY



Source: TAC

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## Exhibit 3: Key airfreight rates overview table, % change on 1Q24 data

Global rates are down -13% QoQ in 1Q24 so far

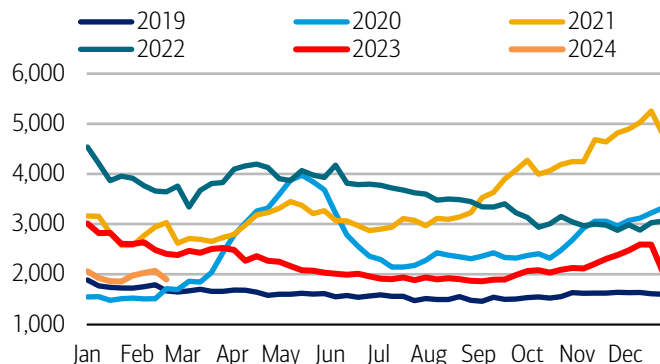
	Baltic Airfreight - Global	BAF-HK	BAF- Shanghai	BAF- Singapore	BAF-London	BAF- Chicago
1Q21	2,803	2,828	5,165	423	2,547	1,702
2Q21	3,136	3,545	5,867	425	2,755	1,672
3Q21	3,284	3,724	6,521	412	2,664	1,702
4Q21	4,562	5,230	9,898	417	2,928	2,322
1Q22	3,844	4,300	7,373	484	2,771	2,151
2Q22	3,995	4,226	7,717	564	2,890	2,424
3Q22	3,529	3,909	6,845	600	2,340	2,312
4Q22	3,002	3,288	5,477	528	2,210	1,973
1Q23	2,591	2,736	4,542	495	1,877	1,958
2Q23	2,148	2,742	3,777	425	1,512	1,436
3Q23	1,905	3,067	3,577	351	1,090	1,230
4Q23	2,239	3,886	4,831	313	957	1,186
<b>1Q24</b>	<b>1,956</b>	<b>3,356</b>	<b>3,942</b>	<b>340</b>	<b>956</b>	<b>1,076</b>
QoQ	-13%	-14%	-18%	9%	0%	-9%
YoY	-25%	23%	-13%	-31%	-49%	-45%
YTD YoY	-27%	19%	-16%	-32%	-52%	-47%
vs 2019	14%	93%	28%	52%	-8%	-20%

Source: TAC, BofA Global Research

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## Exhibit 4: Weekly Global Baltic Airfreight Index by year, 2019-24

Latest weekly rate index trending slightly downwards

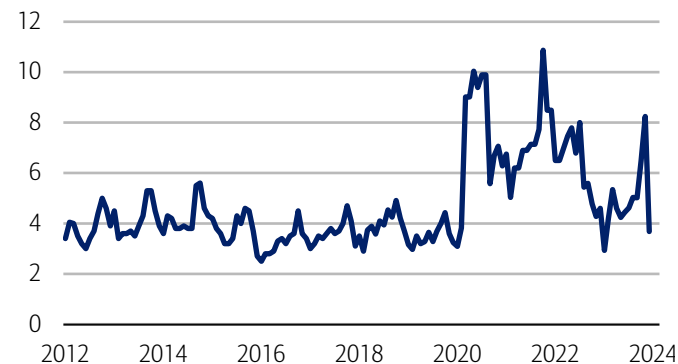


Source: TAC, BofA Global Research

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## Exhibit 5: Drewry Shanghai to LA rate/kg, 2012-2024

Shanghai-LA rates normalized in recent month



Source: Bloomberg, BofA Global Research

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# Airfreight demand

## Global cargo traffic

### Exhibit 6: Monthly global air cargo demand growth YoY%

Demand was up 10.8% YoY in December, 8.3% YoY in November

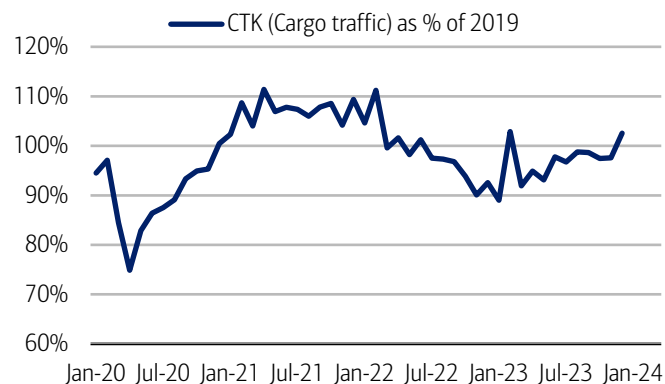


Source: BofA Global Research estimates, IATA

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### Exhibit 8: Air cargo demand (CTK) as % of 2019 levels

Demand at 102.6% of 2019 levels as of December 2023

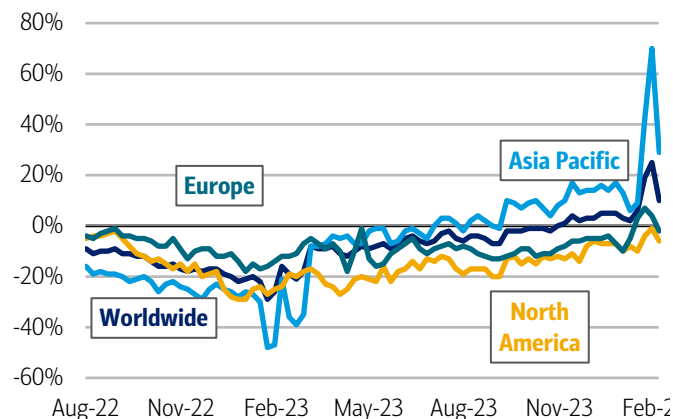


Source: BofA Global Research estimates

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### Exhibit 10: Weekly cargo chargeable weight, YoY % since Aug 2022

Global demand was up by 7-9% in January to early February

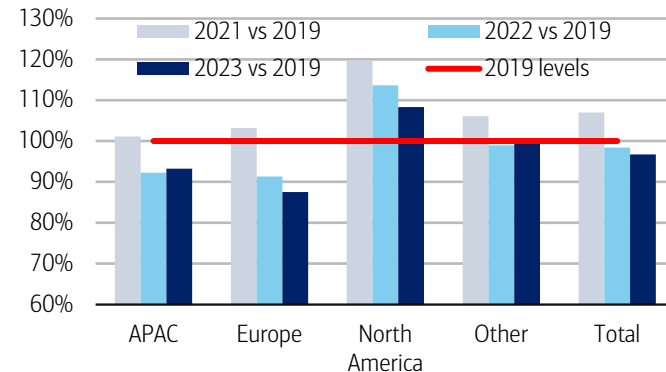


Source: WorldACD, BofA Global Research

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### Exhibit 7: Air cargo demand (CTK) vs 2019 levels by major regions

2023 demand was 3% below 2019 levels

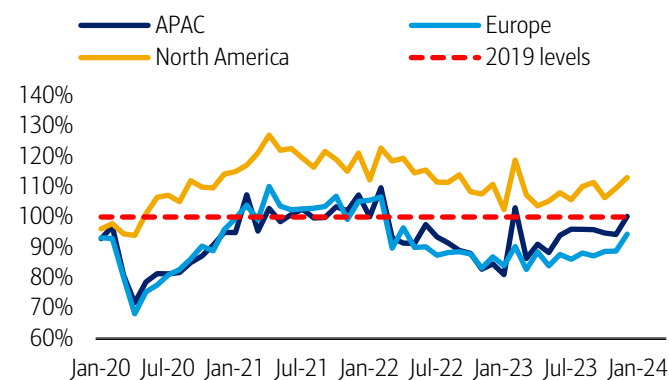


Source: IATA, BofA Global Research. YTD up to February 2023

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### Exhibit 9: Monthly air cargo demand by major regions vs 2019 levels

Demand from North America still the strongest at 113% of 2019 levels

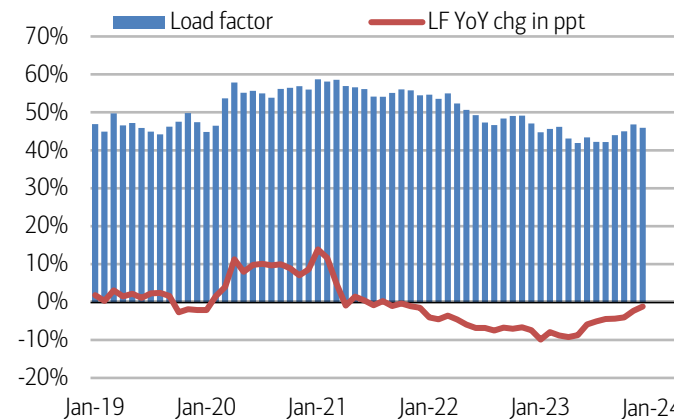


Source: BofA Global Research estimates

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### Exhibit 11: Global cargo load factor and YoY changes in ppts

Load factor fell back to 45.9% in December from 46.8% in November



Source: IATA, BofA Global Research estimates

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**Exhibit 12: China air cargo: export growth by industry v. 2019, 11M2023**

Capital equipment made positive contributions YTD2023

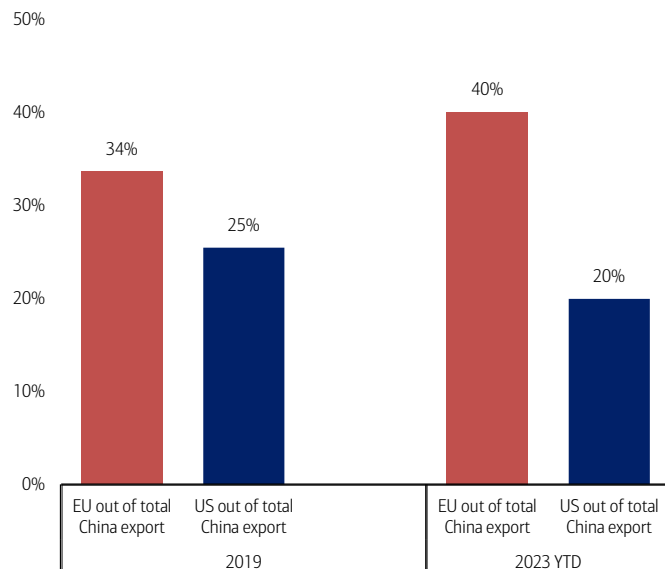
	Automotive	Capital Equipment	Chemicals	Consumer Goods	Fashion Goods	High Technology	Machinery Parts	Raw Materials	Total
China-US Export	-14%	-28%	-6%	16%	-43%	-33%	-9%	-17%	-21%
China-EU Export	15%	85%	17%	66%	-1%	-15%	32%	41%	21%
Total China export	19%	58%	26%	34%	-7%	-19%	8%	-3%	2%
Total China import	-18%	-30%	-9%	-39%	-48%	-29%	-23%	-18%	-18%

Source: Company report

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**Exhibit 13: EU and US contributions to total China air cargo export, YTD 2023 v. 2019**

China-EU export is 40% of total China air cargo export while US is 20% YTD

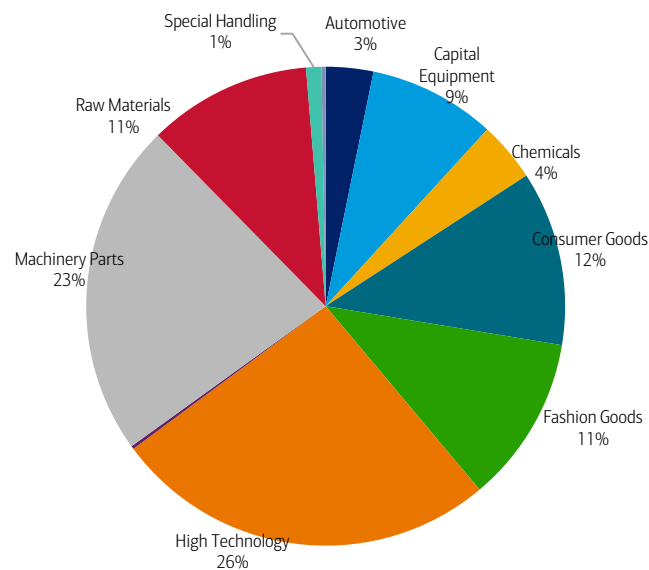


Source: Company report

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**Exhibit 14: China air cargo export by product categories, YTD 2023**

26% of YTD China air cargo export is high tech products



Source: Company report

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**Leading demand indicators****Exhibit 15: Global air cargo demand yoy growth v. ISM new orders**

ISM new orders lead air cargo demand by 3 months with 0.65 correlations

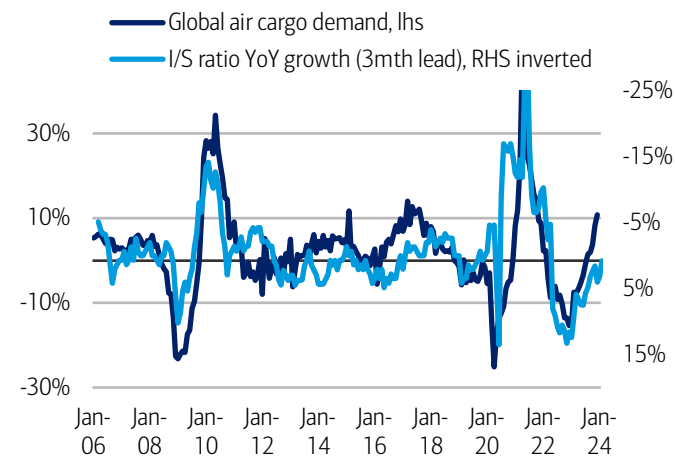


Source: BofA Global Research, Bloomberg

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**Exhibit 16: Air cargo demand v. US inventory-to-sales ratio (inverted)**

I/S ratios lead air cargo demand by 3 months with -0.56 correlations



Source: BofA Global Research, Bloomberg

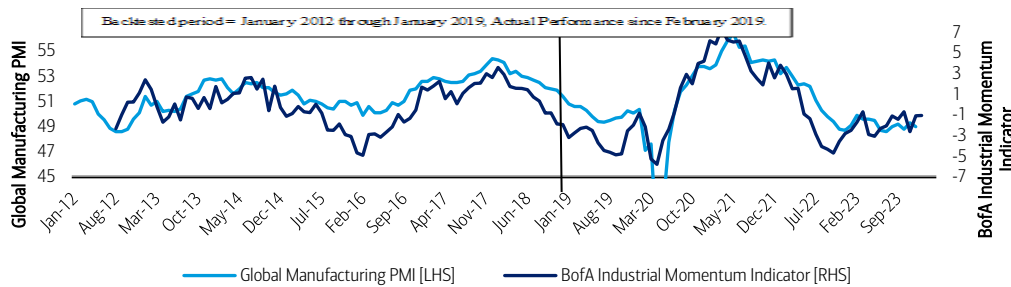
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## Industry demand data

See “BofA Industrial Momentum Indicator holds steady: ready to break-out through 2024?”

### Exhibit 17: BofA Industrial Momentum Indicator vs Global Manufacturing PMI

BofA Industrial Momentum Indicator typically leads Global Manufacturing PMI



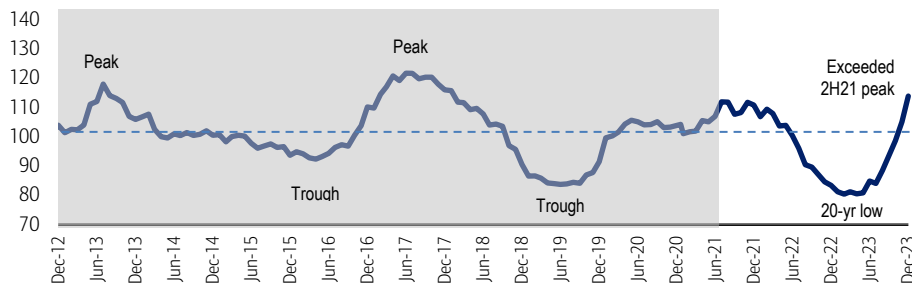
**Source:** BofA Global Research, Backtested period = January 2012 through January 2019, Actual Performance since February 2019. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. Disclaimer: The indicator identified as BofA Industrial Momentum Indicator above is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purposes, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark.

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### Global Memory Tech: BofA memory indicator exceeded 2H21 peak

#### Exhibit 18: BofA Memory Indicator – V-shaped recovery through 2023

Above mid-cycle through Nov-Dec vs 20-year low in 1H23



**Source:** DRAMeXchange, WSTS, MoTIE Korea, BofA Global Research

The shaded area represents backtested results from January 1991 to March 2021. The unshaded area represents actual performance since April 2021. This performance is backtested up to March-2021, and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

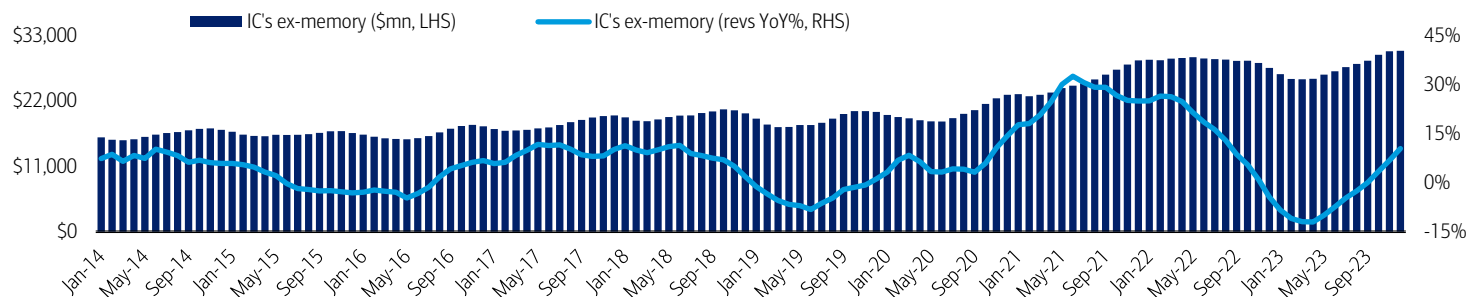
Disclaimer: The BofA Memory Indicator is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark.

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### Global Semiconductors: Dec'23 SIA: Strong semis growth rounds out a down year

#### Exhibit 19: IC ex-memory unit trends over the last 10 years (3mma)

IC ex-memory sales were up 10.5% YoY (3mma)



**Source:** SIA, BofA Global Research

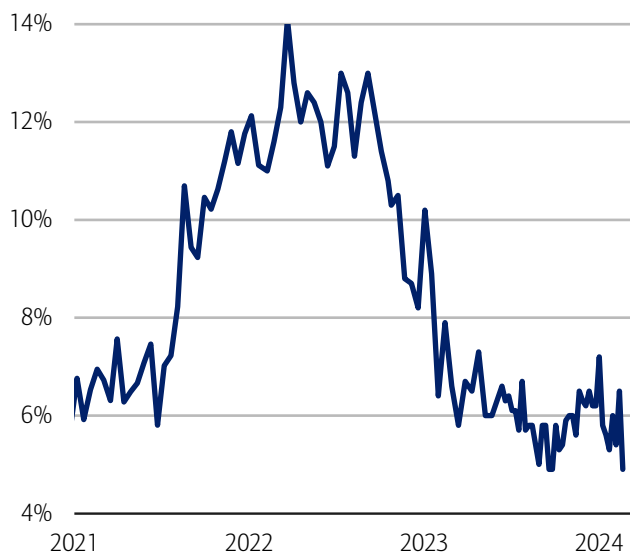
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## Ocean vs air shipping

### Exhibit 20: Vessel capacity stuck in congestion (% of fleet), 2020-23

World congestion eased to 4.9% of world supply now

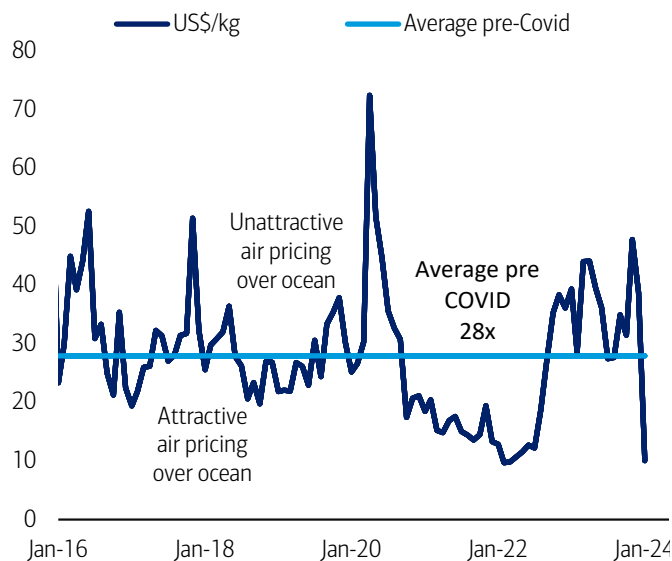


Source: Linerlytica

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### Exhibit 21: Airfreight relative pricings to ocean, Shanghai – Los Angeles

Airfreight relative pricing fell to 10x in January

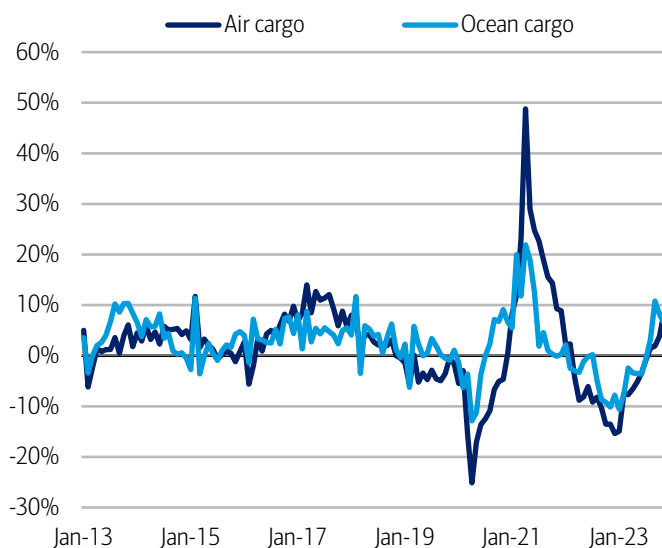


Source: BofA Global Research estimates, Bloomberg

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### Exhibit 22: Air and ocean cargo demand growth YoY %, 2013-23

Air cargo and ocean demand both grew yoy in December

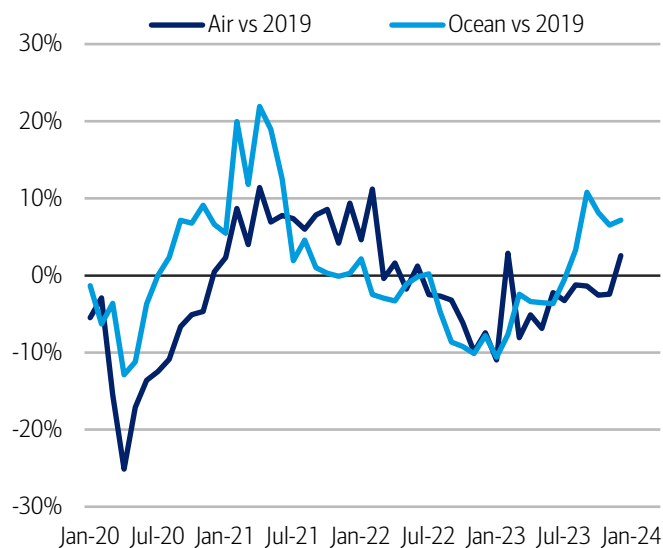


Source: Bloomberg, IATA, BofA Global Research estimates

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### Exhibit 23: Air and ocean demand compared to 2019 levels

Air cargo demand is +3% above 2019 vs ocean at +7% in December



Source: Bloomberg, IATA, BofA Global Research estimates

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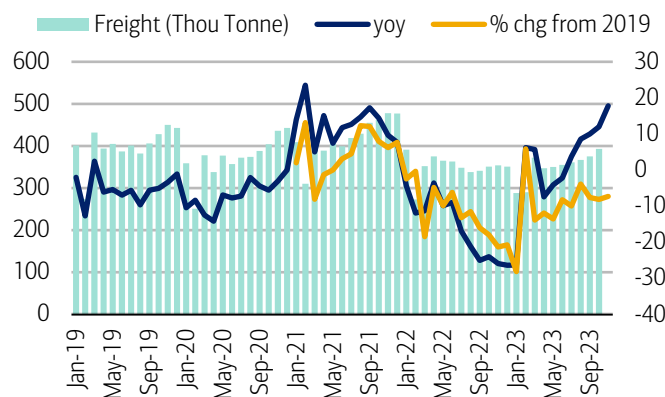
## Airport cargo traffic

### Asian airports

Key cargo hubs in the region (Hong Kong, Shanghai, Singapore, Beijing, Taipei, Seoul):

#### Exhibit 24: Hong Kong – airport cargo traffic ('000 tonne) and % chg

November cargo traffic was -7% down from 2019 levels, +18% YoY

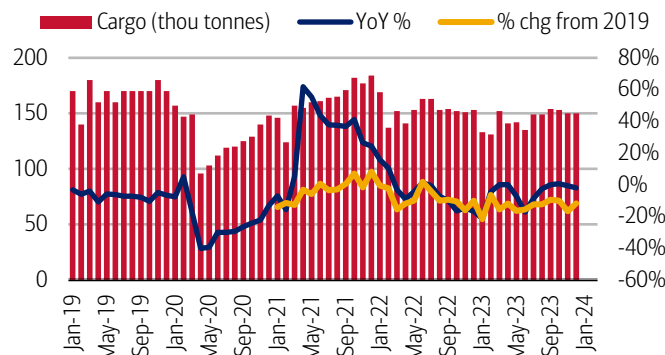


Source: BofA Global Research, company report

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#### Exhibit 26: Singapore – airport cargo traffic ('000 tonne) and % chg

December cargo traffic was -12% of 2019 levels, -2% YoY

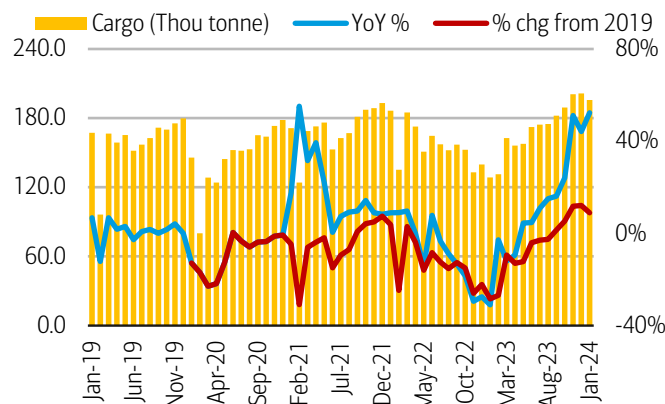


Source: BofA Global Research, company report

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#### Exhibit 28: Guangzhou – airport cargo traffic ('000 tonne) and % chg

January cargo traffic was +17% up from 2019 levels, +52% YoY

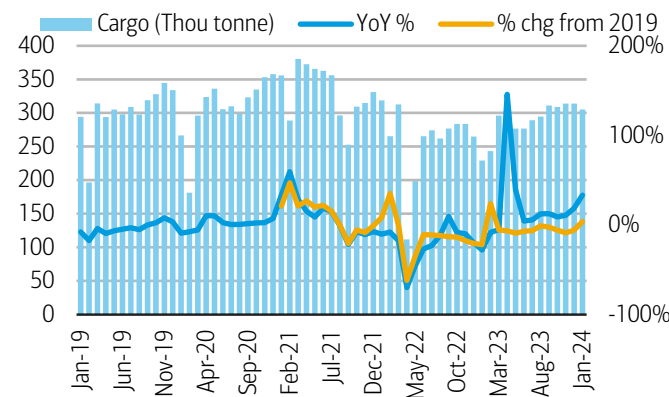


Source: BofA Global Research, company report

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#### Exhibit 25: Shanghai PVG – airport cargo traffic ('000 tonne) and % chg

January cargo traffic was +4% up from 2019 levels, +33% YoY

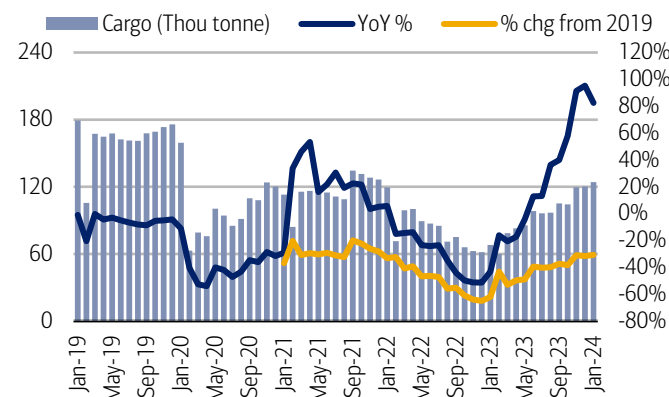


Source: BofA Global Research, company report

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#### Exhibit 27: Beijing PEK – airport cargo traffic ('000 tonne) and % chg

January cargo traffic was -31% down from 2019 levels, +82% YoY

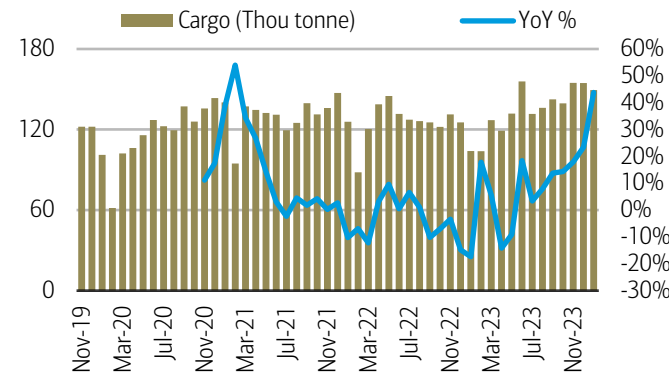


Source: BofA Global Research, company report

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#### Exhibit 29: Shenzhen – airport cargo traffic ('000 tonne) and % chg

January cargo traffic were +44% YoY

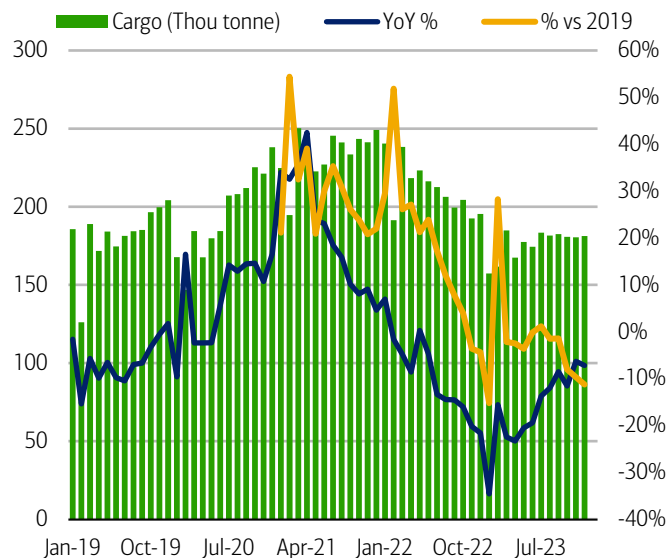


Source: BofA Global Research, company report

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**Exhibit 30: Taipei – airport cargo traffic ('000 tonne) and % chg**

December cargo traffic was -11% down from 2019 levels, -7% YoY

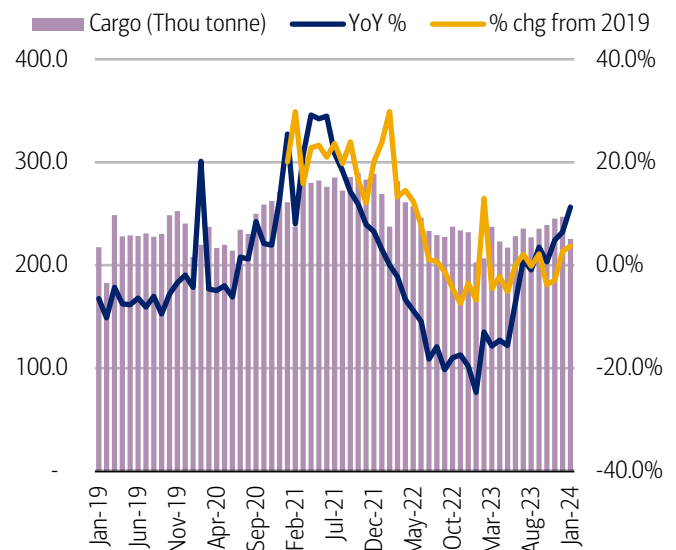


Source: BofA Global Research, company report

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**Exhibit 31: Seoul – airport cargo traffic ('000 tonne) and % chg**

January cargo traffic was +4% up from 2019 levels, +11% YoY



Source: BofA Global Research, company report

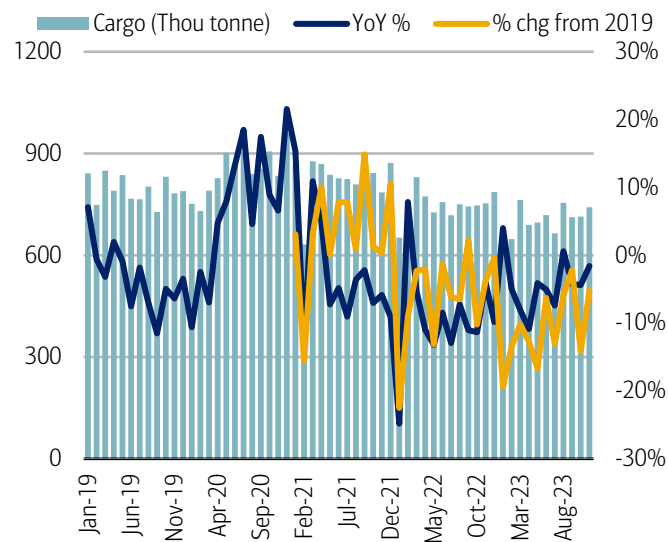
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**US airports**

Key cargo hubs for FedEx (Memphis) and UPS (Louisville):

**Exhibit 32: Memphis – airport cargo traffic ('000 tonne) and % chg**

November cargo traffic was -5% down from 2019 levels, -2% YoY

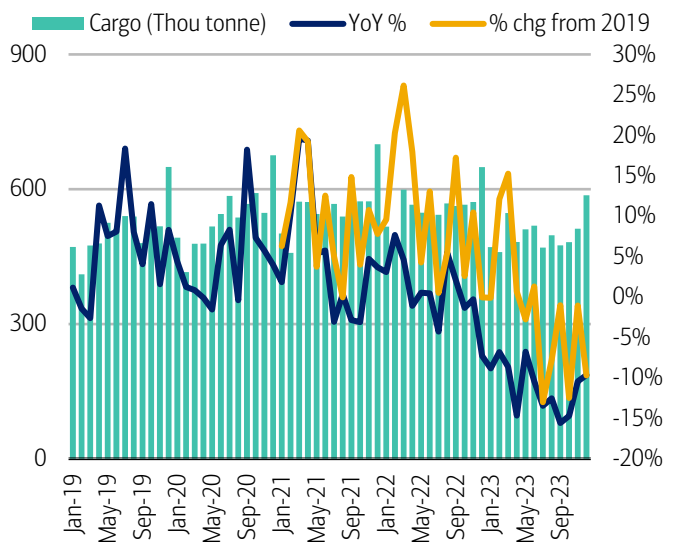


Source: BofA Global Research, company report

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**Exhibit 33: Louisville – airport cargo traffic ('000 tonne) and % chg**

December cargo traffic was -10% down from 2019 levels, -10% YoY



Source: BofA Global Research, company report

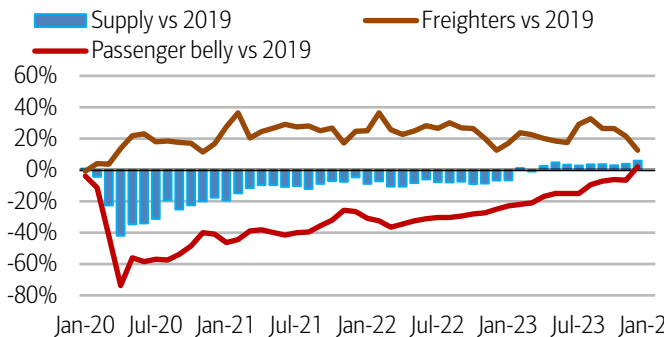
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# Airfreight supply

## Exhibit 34: Global airfreight capacity vs 2019, freighters & belly

Airfreight capacity stays above 2019 levels in 2023

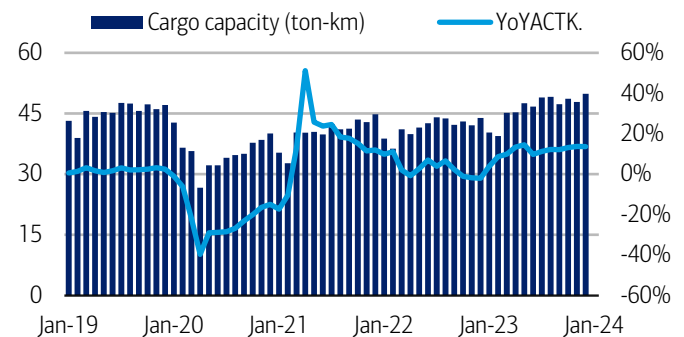


Source: BofA Global Research estimates, IATA

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## Exhibit 35: Global airfreight capacity (mn ton-km)

Global supply was up +13.7%/13.6% YoY in November/December 2023



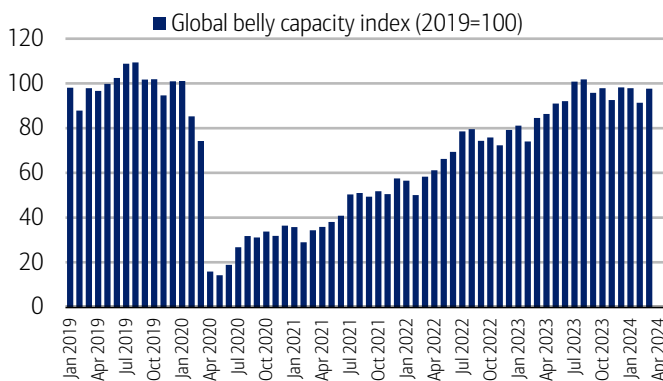
Source: IATA, BofA Global Research estimates

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## Belly capacity

### Exhibit 36: Payload adjusted global bellyhold capacity index, 2019=100

Belly cargo capacity rising to 98% of 2019 levels in 2024

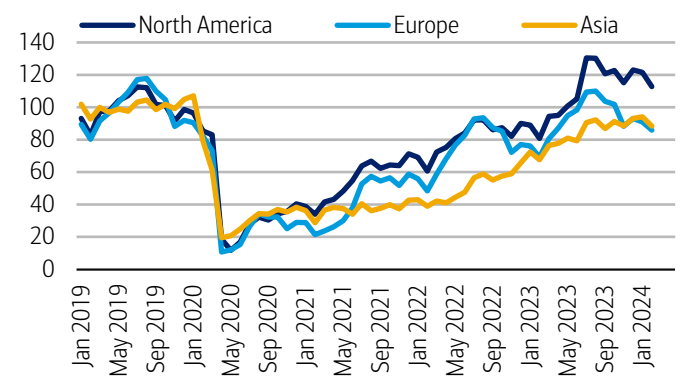


Source: BofA Global Research estimates, Diio, Boeing, Airbus

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### Exhibit 37: Payload adjusted belly capacity by region, 2019=100

Belly capacity return led by North America



Source: BofA Global Research estimates, Diio, Boeing, Airbus

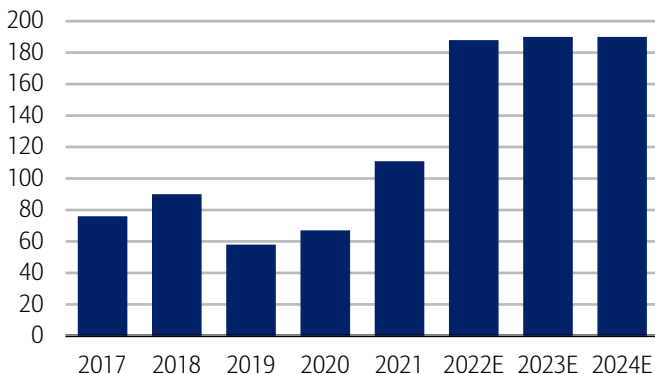
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## Freighter

[BofA Commercial Aerospace: Global dedicated Freighters strongly fell WoW](#)

### Exhibit 38: Number of freighter jet conversions from passenger

Annual conversions planned has doubled in 2022-24E vs pre-COVID

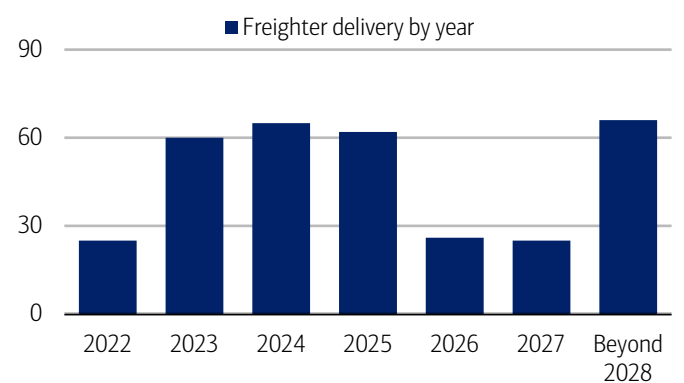


Source: Cirium, BofA Global Research estimates

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### Exhibit 39: Number of freighter deliveries by year

Deliveries will reach 60-65 freighters per year in 2023-25



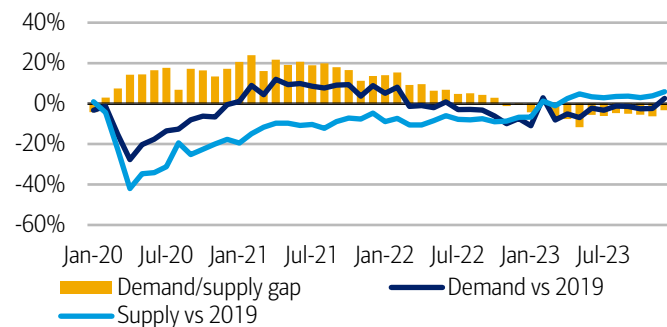
Source: Cirium, BofA Global Research estimates

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# Demand/supply balance

## Exhibit 40: Global airfreight demand and supply vs 2019 levels and demand-supply gap

Balance has flipped to negative since November 2022

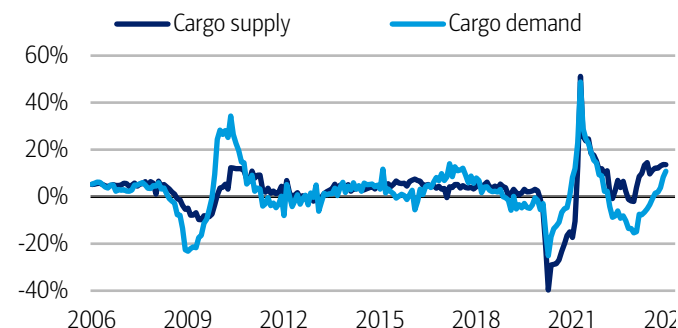


Source: IATA, BofA Global Research estimates

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## Exhibit 41: Global airfreight demand and supply growth YoY%

YoY cargo demand and supply imbalance improved slightly



Source: IATA, BofA Global Research estimates

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## BofA demand/supply model

We expect air cargo to remain in oversupply into 1H24 on YoY impacts of belly ramp through calendar 2023:

## Exhibit 42: Global air cargo annual supply & demand balance

Cargo reaching balance sometime in calendar 2024

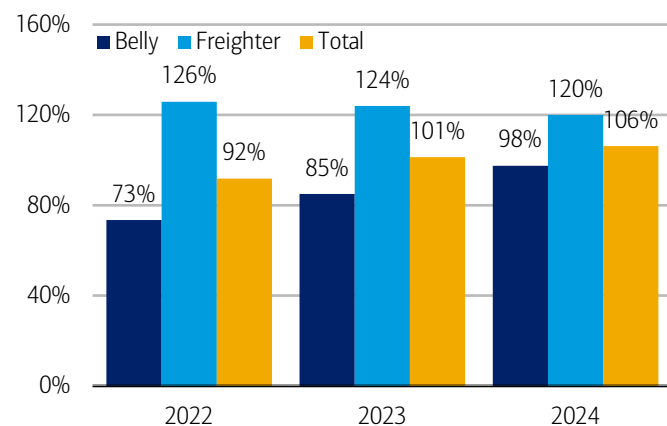
YoY %	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Demand (FTK)	20.8%	-0.7%	-1.0%	1.9%	4.5%	3.4%	3.8%	10.1%	3.7%	-3.3%	-8.9%	17.5%	-8.0%	-3.0%	3.2%	3.4%
Capacity (AFTK)	8.9%	4.1%	1.1%	3.1%	3.7%	6.1%	5.3%	3.8%	5.2%	2.1%	-20.9%	12.8%	2.9%	10.4%	4.8%	3.2%
<b>Demand/supply balance</b>	<b>11.9%</b>	<b>-4.8%</b>	<b>-2.0%</b>	<b>-1.2%</b>	<b>0.8%</b>	<b>-2.7%</b>	<b>-1.5%</b>	<b>6.3%</b>	<b>-1.5%</b>	<b>-5.4%</b>	<b>12.0%</b>	<b>4.7%</b>	<b>-10.9%</b>	<b>-13.4%</b>	<b>-1.6%</b>	<b>0.2%</b>

Source: BofA Global Research estimates, IATA

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## Exhibit 43: Air cargo capacity by segment, as % of 2019 levels

We see global capacity to reach 93%/99%/106% of 2019 levels in 2022/23/24

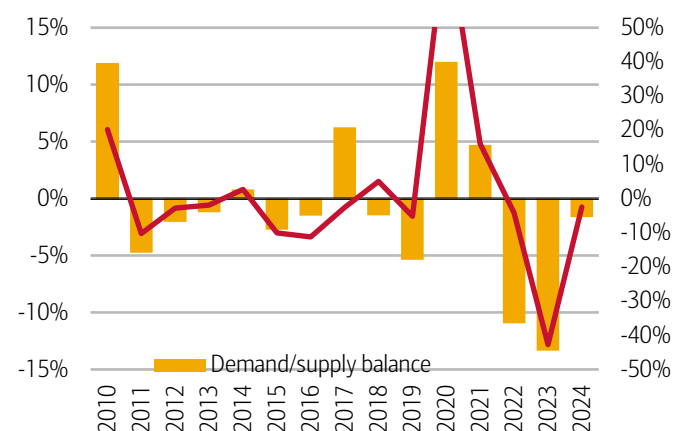


Source: BofA Global Research estimates

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## Exhibit 44: Global air cargo balance and cargo yield YoY %

Cargo balance drives cargo yield with high correlation at 0.77



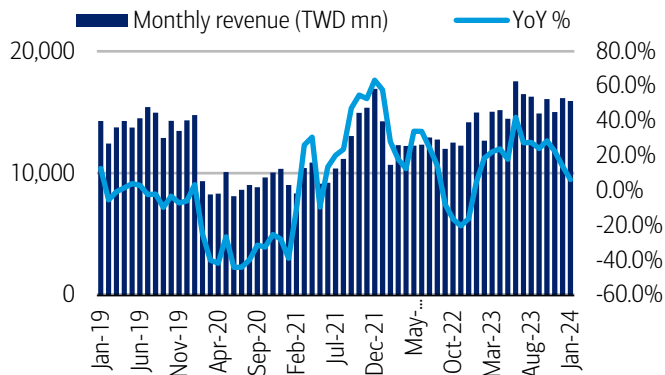
Source: IATA, BofA Global Research estimates

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# Airlines operating data

## Exhibit 45: China Airlines – monthly revenue (TWD mn) and YoY %

January revenue +6% YoY

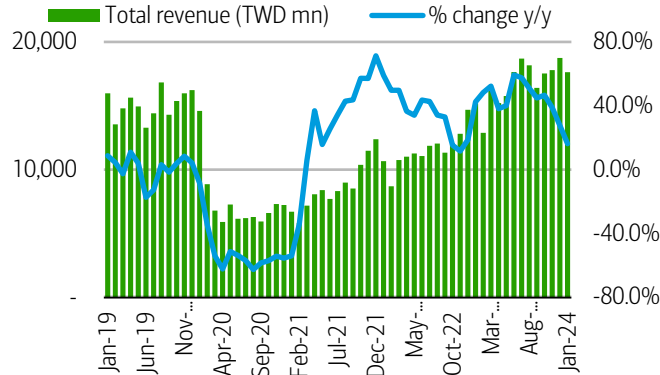


Source: BofA Global Research, company report

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## Exhibit 46: EVA Air – monthly revenue (TWD mn) and YoY %

January revenue +16% YoY

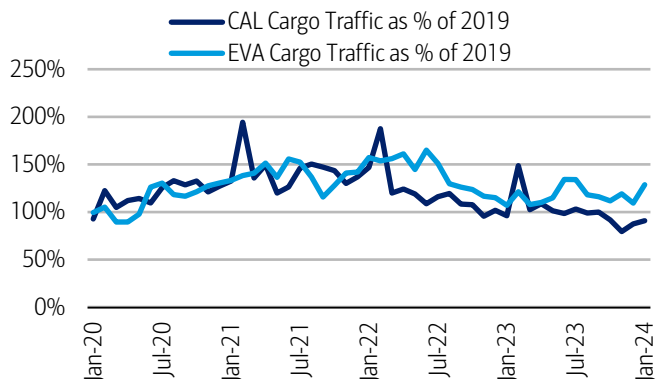


Source: BofA Global Research, company report

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## Exhibit 47: CAL and EVA cargo traffic (FTK) as % of 2019

CAL/EVA January cargo traffic at 91%/129% of 2019 levels

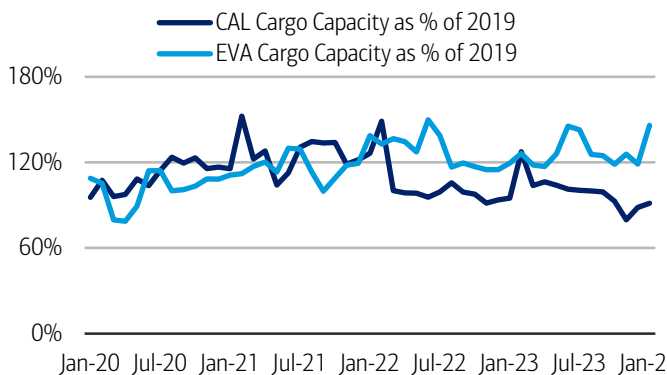


Source: BofA Global Research, company report

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## Exhibit 48: CAL and EVA cargo capacity (AFTK) as % of 2019

CAL/EVA January cargo capacity at 91%/146% of 2019 levels

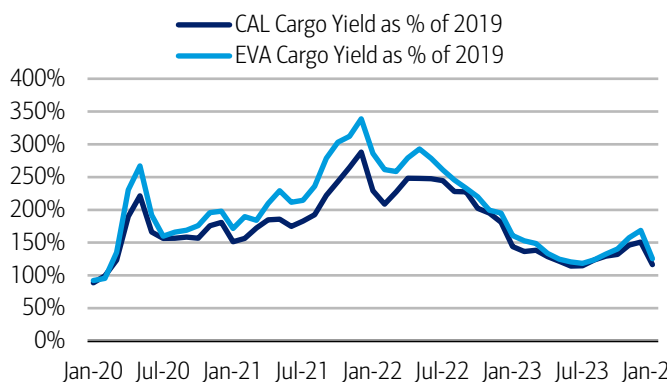


Source: BofA Global Research, company report

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## Exhibit 49: CAL and EVA cargo Yield as % of 2019

CAL/EVA January cargo yield at 117%/125% of 2019 levels

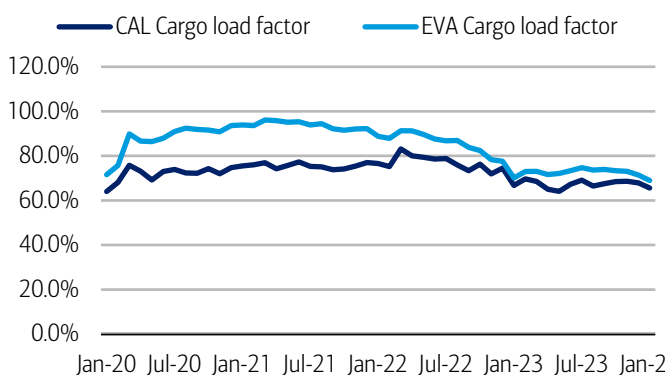


Source: BofA Global Research, company report

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## Exhibit 50: CAL and EVA cargo loads

CAL/EVA January cargo load factor at 66%/69%

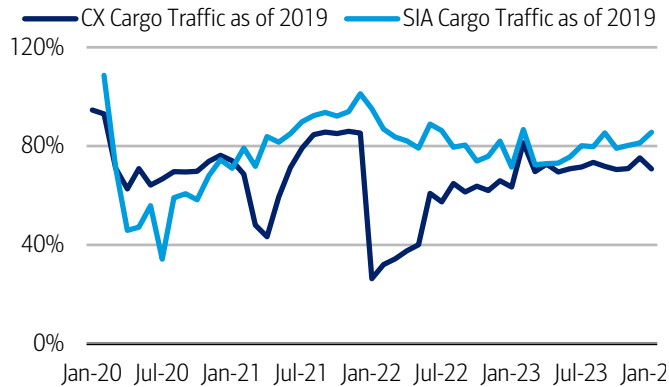


Source: BofA Global Research, company report

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**Exhibit 51: CX and SIA cargo traffic as % of 2019**

CX/SIA January cargo traffic at 71%/86% of 2019 levels

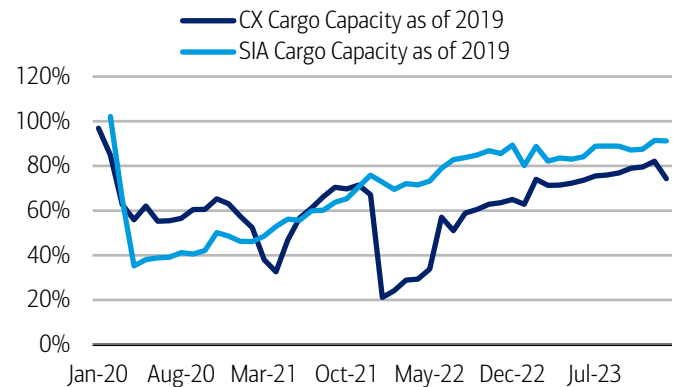


Source: BofA Global Research, company report

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**Exhibit 52: CX and SIA cargo capacity as % of 2019**

CX/SIA January cargo capacity at 74%/91% of 2019 levels

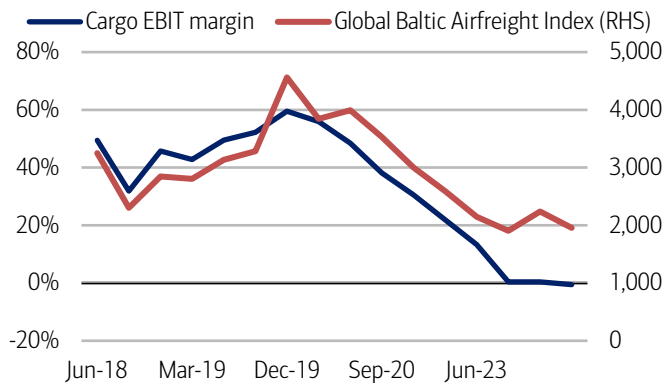


Source: BofA Global Research, company report

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**Exhibit 53: Singapore Airlines quarterly cargo EBIT margin and Baltic Airfreight Index (RHS)**

Dec-Q SIA cargo margin at 0%, down from 13% in Jun -Q

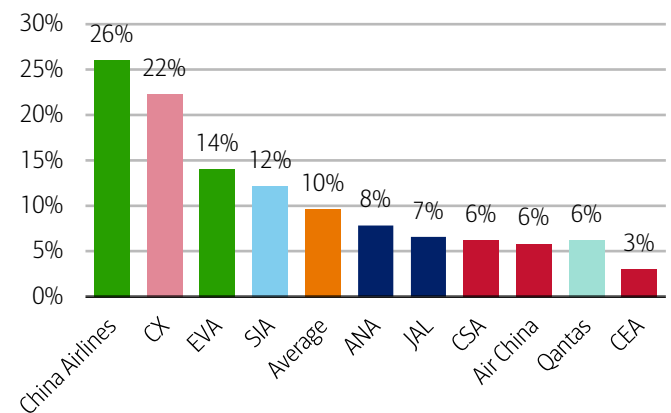


Source: BofA Global Research estimates, company report

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**Exhibit 54: Asian airlines: Cargo as % of revenue in FY2019**

China Airlines, Cathay Pacific and EVA are most exposed to cargo earnings

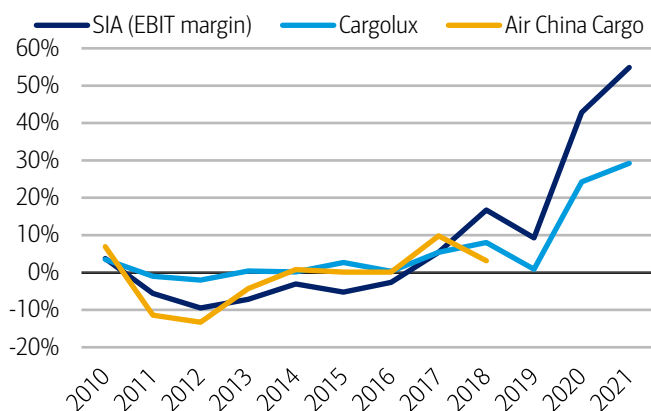


Source: BofA Global Research estimates, company report

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**Exhibit 55: Cargo margins for selected airlines with disclosures**

Cargo historically has been largely a breakeven business

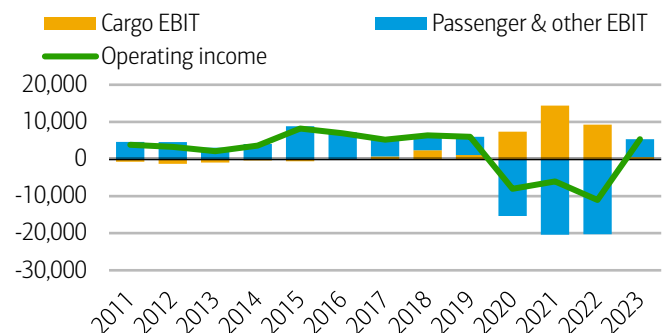


Source: BofA Global Research estimates, company report

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**Exhibit 56: Asian airlines estimated EBIT breakdown, USD mn**

We estimate cargo has contributed US\$14bn in operating profit in 2021, offsetting &gt;70% of the losses in passenger and other businesses



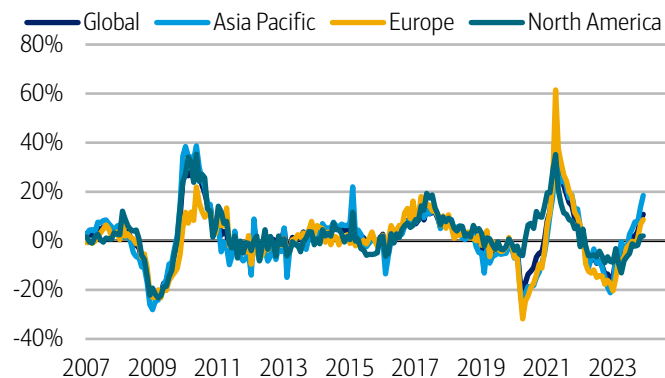
Source: BofA Global Research estimates, company report. Note airlines include Air China, CEA, CSA, JAL, ANA, EVA, China Airlines, CX and SIA

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# Global airfreight market overview

## Exhibit 57: Monthly air cargo demand growth YoY %

Cargo demand drives the cyclicality of the industry, CAGR at ~3% pre-COVID

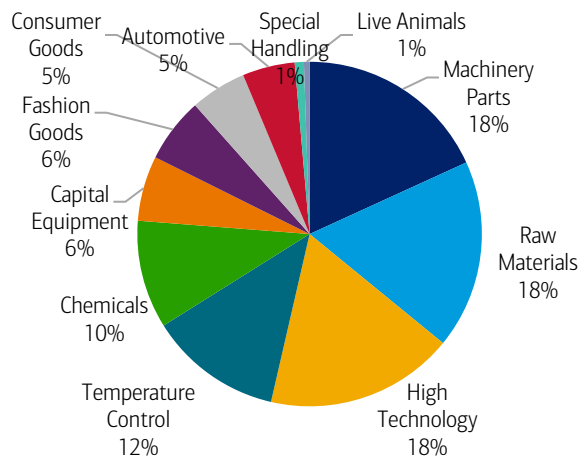


Source: IATA, BofA Global Research

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## Exhibit 59: Global air cargo demand (metric tonne) by industry, 2022

Major industries are machinery parts, raw materials and high tech

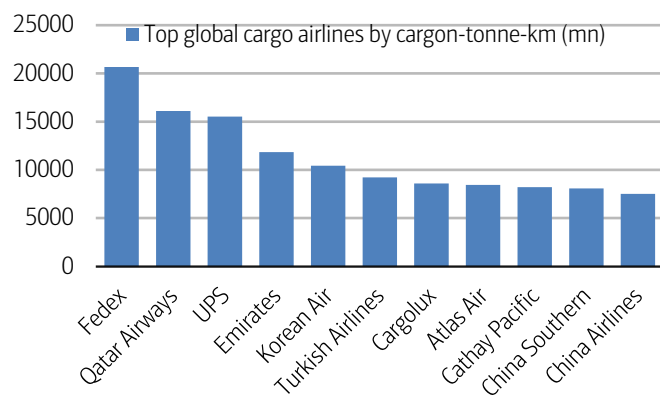


Source: BofA Global Research estimates

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## Exhibit 61: Top global cargo airlines by cargo-tonne-km (mn), 2021

Fedex, Qatar and UPS the global top 3

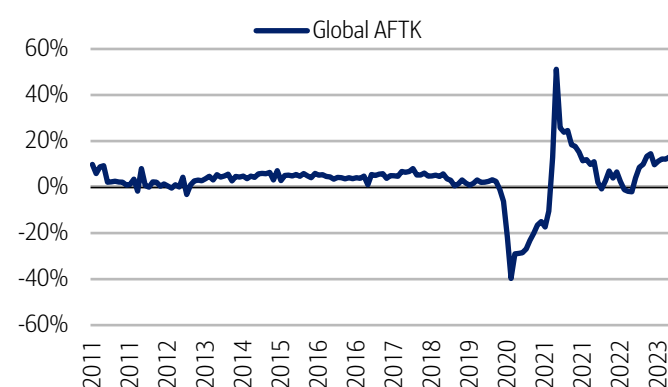


Source: IATA

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## Exhibit 58: Monthly air cargo supply (AFTK) growth YoY %

Cargo supply has been relatively steady at 3-4% p.a. pre-COVID

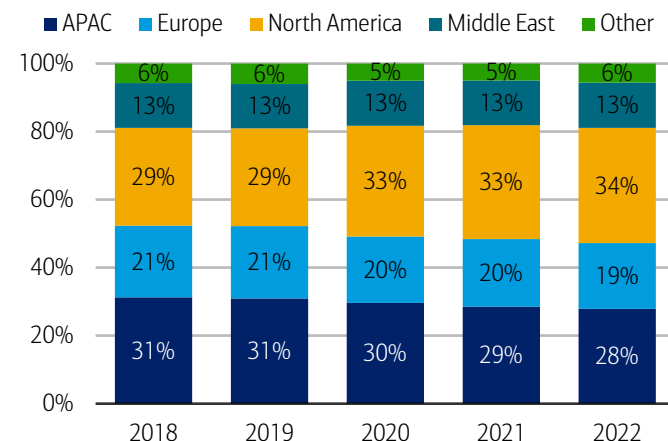


Source: IATA, BofA Global Research

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## Exhibit 60: Global air cargo demand by region

The share of North America has risen from 29% to 34% now

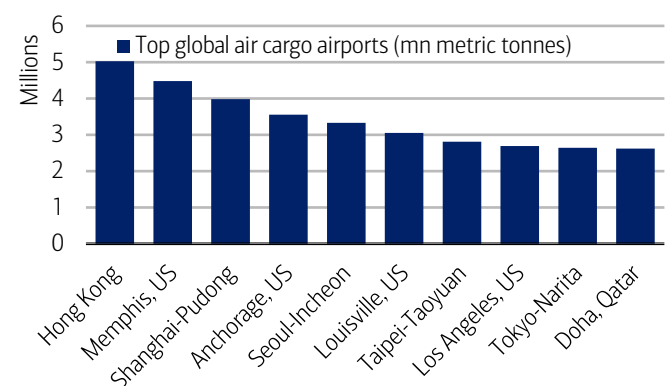


Source: IATA, BofA Global Research

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## Exhibit 62: Top global air cargo airports (mn metric tonnes), 2021

Hong Kong, Memphis and Shanghai-Pudong the global top 3



Source: ACI

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R1</sup>
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Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R1</sup> Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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