AIR FREIGHT STATE OF THE INDUSTRY
AUGUST 2023

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## Summary

### Demand
- **Volumes continued to remain low; flat growth MoM**
- Conservative increase in volumes expected towards peak season
- **Fluctuating PMI Index** across globe; higher export orders from emerging markets
- High inflation continues to affect the world economy and trade
- High inventories and lower purchase power contributing to comparatively low demand

### Capacity
- **Sufficient capacity for current volume levels**: belly capacity continued to improve as passenger travel demand remains high
- Global capacity +12% higher than last year; no significant backlogs

### Carriers
- Higher flight frequencies in general for increased PAX demand
- Most airlines have available capacity at hand, absorbing low yields amidst lean volumes

### Jet Fuel
- Prices remain higher than normal, > $100/Bbl again
- Expected cut in inventories over late ’23
- EIA increased crude oil forecast at $86/b in Q4 ‘23

### Rates
- Market still remains competitive: slight increase on specific tradelanes
- Expect stability on long term rates towards Q4 2023

### Regulation/News
- Russia, Ukraine crisis continues; sanctions likely to be in effect

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Source: IATA, Seabury, WorldACD Market Data, DGF Desk Research
Market Developments

**Economic Outlook**

**GDP Growth by Region**

<table>
<thead>
<tr>
<th>Region</th>
<th>2023F</th>
<th>2024F</th>
<th>2025F</th>
<th>2026F</th>
<th>2027F</th>
<th>CAGR (2023-2027)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURO</td>
<td>0.59%</td>
<td>1.35%</td>
<td>1.64%</td>
<td>1.74%</td>
<td>1.66%</td>
<td>1.64%</td>
</tr>
<tr>
<td>MLA</td>
<td>2.79%</td>
<td>3.28%</td>
<td>3.60%</td>
<td>5.12%</td>
<td>5.20%</td>
<td>3.50%</td>
</tr>
<tr>
<td>AMNO</td>
<td>1.20%</td>
<td>0.98%</td>
<td>1.62%</td>
<td>1.96%</td>
<td>1.82%</td>
<td>1.59%</td>
</tr>
<tr>
<td>AMLA</td>
<td>1.93%</td>
<td>2.41%</td>
<td>2.80%</td>
<td>2.94%</td>
<td>2.98%</td>
<td>2.78%</td>
</tr>
<tr>
<td>ASPA</td>
<td>4.30%</td>
<td>4.52%</td>
<td>4.35%</td>
<td>4.26%</td>
<td>4.16%</td>
<td>4.32%</td>
</tr>
<tr>
<td>World</td>
<td>2.29%</td>
<td>2.57%</td>
<td>2.87%</td>
<td>2.90%</td>
<td>2.83%</td>
<td>2.79%</td>
</tr>
</tbody>
</table>

**Demand**

**Demand Development in Tons (% change YoY)**

- Jan 22: -10%
- Feb 22: -11%
- Mar 22: -8%
- Apr 22: -6%
- May 22: -5%
- Jun 22: -3%
- Jul 22: -4%
- Aug 22: -17%
- Sep 22: -15%
- Oct 22: -13%
- Nov 22: -15%
- Dec 22: -10%

**Jet Fuel**

**Crude Oil vs. Jet Fuel Price (USD per bbl)**

- Global Jet Fuel Price $/ bbl
- Global Crude Oil Price $/ bbl

**Supply**

**Supply Development (000 Tons)**

- Passenger: 9,555
- Freighter: 31%

Source: IHS Markit Group, IATA, Seabury, WorldACD Market Data, Economic Data Factbook, IMF

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- **High inflation** continued to affect majority of the global economies
- Some of the major economies are expected to recover towards Q4 '23 which is likely to increase the purchase power and improve the volumes
- **Flat growth** continued for global volumes; MoM volume growth remained flat
- **Capacity** remained sufficient as the overall global volumes remained low
- EIA increased Brent crude oil spot price forecast average
**Demand**

### Global Volume Development

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<thead>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume (%)</td>
<td>-10</td>
<td>-10</td>
<td>-13</td>
<td>-15</td>
<td>-17</td>
<td>-11</td>
<td>-6</td>
<td>-5</td>
<td>-3</td>
<td>-4</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- Conservative increase in demand expected as of mid Oct (after golden week); estimated to be at +3% increase vs LY
- MoM volume growth remained flat
- Manufacturing output kept fluctuating in August which reflects the flat demand growth
- E-commerce volumes on the contrary continued to pick-up compared to previous months
- Higher demand also on sectors like Automobile, Tech and Life Healthcare
- High inflation and reduced purchase power continued to contribute to overall lower volumes
- Market is still expected to improve in Q4 ’23 compared to same period ’22

### Regional Volume Development

<table>
<thead>
<tr>
<th>Region</th>
<th>Apr 23</th>
<th>May 23</th>
<th>Jun 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURO</td>
<td>-10</td>
<td>-10</td>
<td>-14</td>
</tr>
<tr>
<td>MIDEAST</td>
<td>-7</td>
<td>-6</td>
<td>-14</td>
</tr>
<tr>
<td>AFRICA</td>
<td>0</td>
<td>-1</td>
<td>-18</td>
</tr>
<tr>
<td>ASPA</td>
<td>-2</td>
<td>-2</td>
<td>-17</td>
</tr>
<tr>
<td>AMNO</td>
<td>5</td>
<td>2</td>
<td>-5</td>
</tr>
<tr>
<td>AMLA</td>
<td>-5</td>
<td>-5</td>
<td>-5</td>
</tr>
<tr>
<td>GLOBAL</td>
<td>-10</td>
<td>-10</td>
<td>-15</td>
</tr>
</tbody>
</table>

Source: WorldACD Market Data & desk research; *I/S* - Inventory to Sales ratio; demand data available till Aug ’23 only on global level
Global scheduled capacity now at **+12% vs Aug '22**

- **Belly capacity also continues to grow** - YoY ~19% growth as passenger travel demand remains significant

- Scheduled capacity in **Q3** likely to be **+9% vs Q2** and **+18% vs Q1 '23**

- Capacity remains sufficient on majority of tradelanes with no significant backlogs apart from some countries outbound ASPA, EURO

- High e-commerce and Tech demand likely to tighten up spaces outbound ASPA

- Transpacific freighter retirements one step closer towards right-sizing capacity

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**Global Capacity Development**

- **Global scheduled capacity** now at +12% vs Aug '22
- **Belly capacity** also continues to grow - YoY ~19% growth as passenger travel demand remains significant
- Scheduled capacity in Q3 likely to be +9% vs Q2 and +18% vs Q1 '23
- Capacity remains sufficient on majority of tradelanes with no significant backlogs apart from some countries outbound ASPA, EURO
- High e-commerce and Tech demand likely to tighten up spaces outbound ASPA
- Transpacific freighter retirements one step closer towards right-sizing capacity
Utilization

Global Cargo Load Factor Development

% Change CTK and ACTK

- Sufficient capacity in market; cargo volumes remain low
- Flat volume growth against improved capacity has led to reduced load factors in all regions
- Cargo Load Factor (CLF) is an indicator of how tight is the demand-supply balance
- Utilization is likely to remain balanced under current demand vs capacity situation

Regional Cargo Load Factor Development

CLF in % (CLF = CTK/ACTK)

Source: IATA; 2023 onwards data is compared against last year

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Markets remained competitive, with a slight MoM increase in rates on specific tradelanes, as demand remained low and capacity sufficient. Rates are expected to increase across all regions, particularly the outbound ASPA market, with carriers anticipating an upturn in Q4 demand. Winter schedule changes are likely to affect the rates. Rates are expected to remain stable in Q4 '23, with rates having bottomed out for long term validity and subject to seasonal fluctuations or peak season increase. Jet fuel prices remain comparatively higher than normal, likely to affect rates as prices fluctuate amidst current market dynamics.

**Rates - Global Carrier Rate Development**

**Carrier Rate**

<table>
<thead>
<tr>
<th>Month</th>
<th>2022 %</th>
<th>2023 %</th>
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<tbody>
<tr>
<td>Jan</td>
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<td>Feb</td>
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<td>Dec</td>
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</tbody>
</table>

Source: WorldACD Market Data; average freight rate including other charges.
## Regional Market Development

### Market development on key regional tradelanes

<table>
<thead>
<tr>
<th>Source: DGF Desk Research; most regions have stable capacity but some tradelanes still have tight capacity with likely rate increment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASPA</strong></td>
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<td><strong>EURO</strong></td>
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<td><strong>MEA</strong></td>
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<td><strong>LATAM</strong></td>
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</tbody>
</table>

- **Demand > Capacity; Rates(++)**
- **Demand, Capacity balanced; Aggressive spot market**
- **Demand, Capacity imbalance; Backlog- Rates fluctuating(+)**

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Jet Fuel

Jet Fuel Price Development

Crude Oil vs. Jet Fuel Price Development

- EIA changed Brent crude oil spot price forecast to average $85/Bbl in August '23
- Extended voluntary cuts to Saudi Arabia’s crude oil production increased since Jun ’23 affecting jet fuel prices
- EIA increased their average forecast to at $86/Bbl for Q4 ’23
- Global oil inventories will be low compared to rising demand for rest of this year; jet fuel prices expected to remain comparatively higher
- Demand, production for crude only expected to be balanced towards 2024 beginning; will likely have downward pressure on crude oil prices as well as jet fuel

Source: DGF Desk Research; updated till August 2023 available date
2023 Q4 – Market Expectations

**SERVICE DISRUPTIONS**
- Unforeseen circumstances can affect further
- Russia Ukraine situation– any development on the same is critical to the sanctions and global trade that impacts the capacity and rates
- No crystal ball to predict similar scenarios

**CONSERVATIVE DEMAND INCREASE**
- Q3 expected to remain similar as current market condition; flat growth
- PMI improved mostly for emerging markets; volume increase expected in Q4 outbound the same market
- Major volume movements due to e-commerce
- Volumes expected higher than last year till CN golden week

**CRUDE OIL AND JET FUEL**
- Demand for crude oil remains stable despite high inflations
- As a result, EIA increased their average forecast for rest of 2023 and beginning 2024
- Jet fuel prices likely to remain around ~$100?Bbl with recently announced OPEC+ production cuts in late 2023

**SUFFICIENT CAPACITY**
- Capacity expected to remain sufficient
- Travel demand increase expected to remain till year end– belly capacity also sufficient
- No major backlogs expected till end 2023
- Planned freighter removals or C-checks in Q3, Q4 will balance currently high capacity against low demand

**RATES REMAIN ELEVATED**
- Competitive market to continue in Q3 with increases mostly outbound emerging markets
- Q4 likely to see higher rates compared to Q3 as demand is likely to increase
- Long term rates will be stable as market has mostly likely bottomed out
BACKUP
Global Capacity Development

Capacity Development by Aircraft Configuration January 2019 – August 2023

In tons

Source: Seabury (Total Capacity includes marginal Combi aircraft contribution); data is updated for same month of release

WHO declared a global pandemic

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Abbreviations

Explanation of Abbreviations

ACTK - Available Cargo Ton Kilometers
AMLA - Latin America
AMNO - North America
ASPA - Asia Pacific
CTK - Cargo Ton Kilometers
Bbl - Barrel
bn - Billions
CAGR - Compound Annual Growth Rate
CLF - Cargo Load Factor
FRT - Freighters (in the airline industry)
FSC - Fuel surcharge
IATA - International Air Transport Association
ICAO - International Civil Aviation Organization
LY - Last Year
mn - Millions
MoM - Month-on-month
PAX - Passengers (in the airline industry)
PPE - Personal Protective Equipment
Pts - Percentage points
RPK - Revenue-Passenger-Kilometers
SSC - Security surcharge
T - Thousands
YoY - Year-on-Year
YTD - Year-to-Date
THANK YOU