

# Air Cargo Challenges in Project Cargo

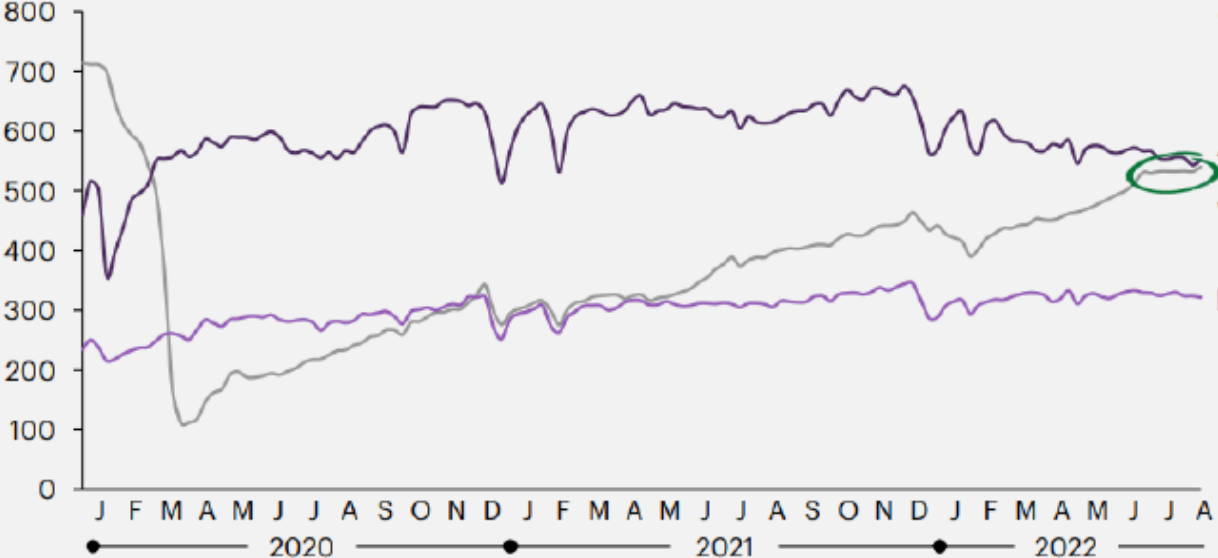


# Topics of discussion

- 1. Current Market Conditions**
- 2. Availability of Aircraft**
- 3. Current Challenges**
- 4. Forward Future**

**Global international air cargo capacity declined slightly in the last two weeks, with belly growth temporarily stagnating**

**International air cargo capacity, Jan 2020 – Aug 2022**  
 Thousand tonnes per week



Seabury Data

**International airline freighter air cargo capacity continues its slow decline**

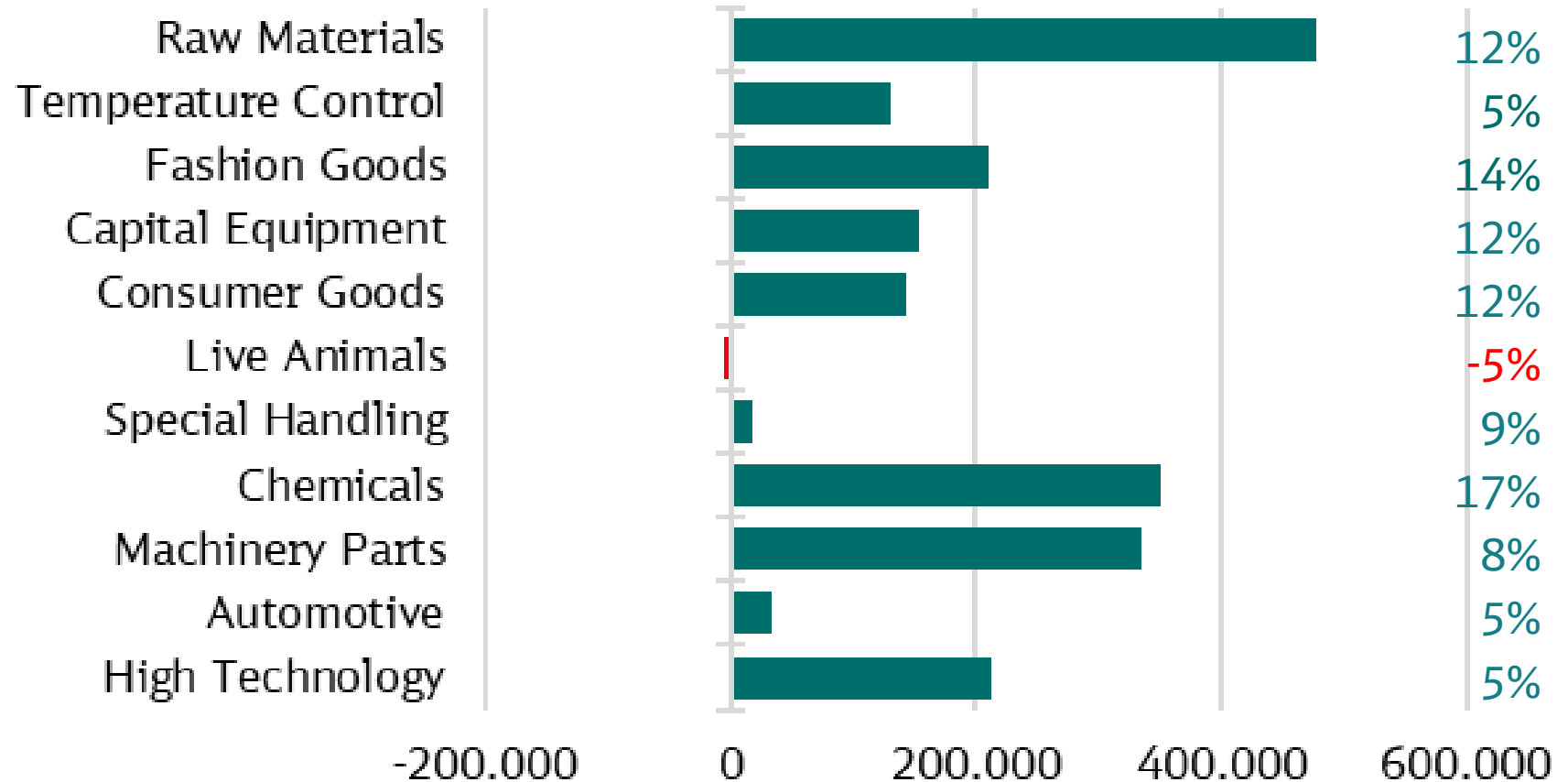
## Current Market Overview

### Industry Development last 12 Months

Absolute & percentage growth YOY last 12 months (incl. June 2022)

**Most sectors** are showing year-on-year growth over the last 12 months, only Live Animals are showing a negative growth

**Most sectors** are currently slowing or negative over April - June due to global economics



Source: Seabury Data

# Global air trade - 5 Years Forecast

## Demand continues, but down from earlier forecasts...

### Global market trends

YoY % growth for corresponding timespan

CAGR 2021 - 2026F



# Aircraft Availability on the Market.



# Aircraft Availability Landscape

## Pre – 2020

- Airbus A380
- Boeing B-747 F
- Boeing B-777 F
- Airbus A-330 F
- Airbus A300 F
- Boeing B767 F
  
- Antonov AN225
- Antonov AN124
- Ilyshin IL-76 ( Stage II / Stage IV)
- Lockheed L-100 /C-130
  
- Boeing B737 F ( Freighter / Combi)

## Current

- Airbus A380
- Boeing B-747 F  
(Final Delivery 2022)
- Boeing B-777 F
- Airbus A-330 F
- Airbus A300 F
- Boeing B767 F
  
- ~~Antonov AN225~~
- Antonov AN124 ( Decreased)
- Ilyshin IL-76 ( Stage II / Stage IV)  
(Limited Operations)
- Lockheed L-100 /C-130
  
- Boeing B737 F / P2F
- Airbus A320 P2F

## Future ?

- Airbus A380 F ?
- Boeing B-747 F
- Boeing B-777 F
- Airbus A-330 F / P2F
- Airbus A300 F
- Boeing B767 F / P2F
  
- ~~Antonov AN225~~
- Antonov AN124 ( Decreased)
- Ilyshin IL-76 ( Stage II / Stage IV)  
(Limited Operations)
- Lockheed L-100 /C-130
- Airbus A300/A330 (Beluga / XL) ?
  
- Boeing B737 F / P2F
- Airbus A320 P2F
  
- Former Military aircraft?

## Palletized Cargo Equipment

- **Boeing B747 F**
  - Limited availability due to high General Cargo demand.
  - High cost of charter operations off schedule.
  - Older generation aircraft and variants currently in operation.
  - Limited future operations due to fuel efficiency and maintenance.
  - Crew availabilities.
- **Boeing B777 F**
  - No Nose Load capabilities / Side door only.
  - Number in operation dedicated to scheduled operations.
  - Crew Availabilities.
- **Airbus A330 /A300**
  - Limited operational availabilities

## Ramp Cargo Equipment

- **Antonov An124**
  - Single operator with global authorization
  - Limited availability due to governmental obligations
  - Geographical / Operational limitations
  - High Cost
- **Ilyushin IL-76 Stage II/ Stage IV**
  - Geographical Limitations ( Regulatory/Sanctions)
  - Number of aircraft available
  - Necessary equipment positioning / Costs
- **Lockheed L100-C130**
  - Areas of Operations
  - Numbers of aircraft
  - High cost



## Aircraft Development Planning

- Boeing and Airbus are focusing on passenger industry recovery and manufacturing.
- Current focus is on Passenger to Freighter conversion of available aircraft to meet the Ecommerce demand. B777, B767, A330, A300, B737, A320.
- When Passenger demand returns on a global market, more freighter capacity will be available.
- Will there be an Airbus A380 Freighter?
- Will the Boeing continue the B747F Production?
- Will there be aircraft coming from the military?

## What Does it all mean??

- Industry has previously designed solutions based on the air products available.
- Engineering and projects with longer lead times were depending on aircraft to meet delivery requirements.
- Longer term forecasting did not take the current state of the air cargo market into account.
- Diversion to Ocean will lead to additional time, reprogramming of transportation planning and financial implications.
- Future planning will need dedicated discussions with more risk mitigation requirements.
- Capacity and demand will remain tight for the next 24-36 months.



# The future for Project Cargo?

- New entry of Airbus Beluga / XL.
- Continuation of AN124 operations. Multiple carriers as options.
- Boeing B747 Freighters with existing aircraft.
- More engineering for smaller compact modular designs for B747 aircraft.
- Additional discussions with the aviation operations and manufacturing pushing the necessity and design of project friendly aircraft.
- Integrated partnerships with stakeholders for end to end solution design and execution.



**Thank you!**

# Thank you