



### **BOC Aviation Investor Presentation**

**NOVEMBER 2022** 





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## **3Q 2022 and Recent Developments**



#### STRONG ASSET QUALITY

- 612 aircraft owned, managed and on order<sup>1</sup>
- 4.3 years<sup>2</sup> average fleet age; 8.2 years<sup>2</sup> average remaining lease term
- 96% aircraft utilization rate



- ROBUST LIQUIDITY
- US\$6 billion of available liquidity<sup>3</sup>
- More than covers 2H 2022 target capex and maturing liabilities
- Well positioned to support future investment
- Limited refinancing required



### PROACTIVE INVESTMENT **STRATEGY**

- 12 aircraft deliveries, including six used aircraft transitions
- 21 lease commitments signed
- · Committed to acquire nine new aircraft. including six Airbus A320NEO aircraft placed with **JetSMART**
- STRONG CREDIT

RATINGS

- A- by S&P Global Ratings
- A- by Fitch Ratings



**FUTURE** 

GROWTH

- Delivered seven new Boeing 787 aircraft from our orderbook to American Airlines since delivery of the 787 aircraft resumed in August 2022
- Expecting another 11 be to delivered to American Airlines through to end-2023



**EXPERIENCED** MANAGEMENT AND **OWNERSHIP** 

- Experienced management team successfully managed through multiple cycles
- Bank of China provides ongoing support

### Long-term sustainable growth



### **How We Invest**



Investing in aircraft through multiple cycles



All data as at the end of the relevant period

## **Popular and Fuel-Efficient Fleet**

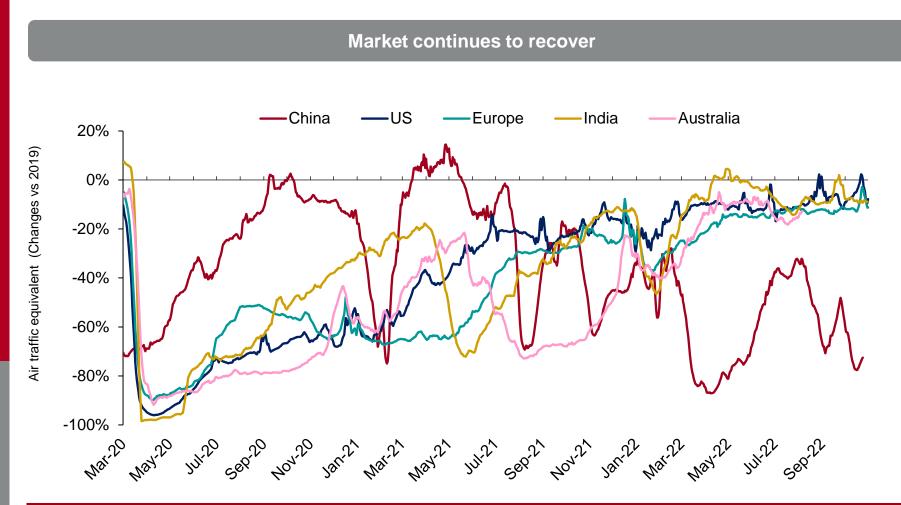
Our aircraft portfolio								
Aircraft type	Owned aircraft	Managed aircraft	Aircraft on order <sup>1</sup>	Total				
Airbus A320CEO family	100	15	0	115				
Airbus A320NEO family	93	0	117	210				
Airbus A330CEO family	8	1	0	9				
Airbus A330NEO family	6	0	0	6				
Airbus A350 family	9	0	0	9				
Boeing 737NG family	72	14	0	86				
Boeing 737 MAX family	52	0	50	102				
Boeing 777-300ER	27	4	0	31				
Boeing 787 family	23	1	14	38				
Freighters	5	1	0	6				
Total	395	36	181	612				

100% of orderbook comprises latest technology aircraft

All data as at 30 September 2022 See Appendices - Endnotes



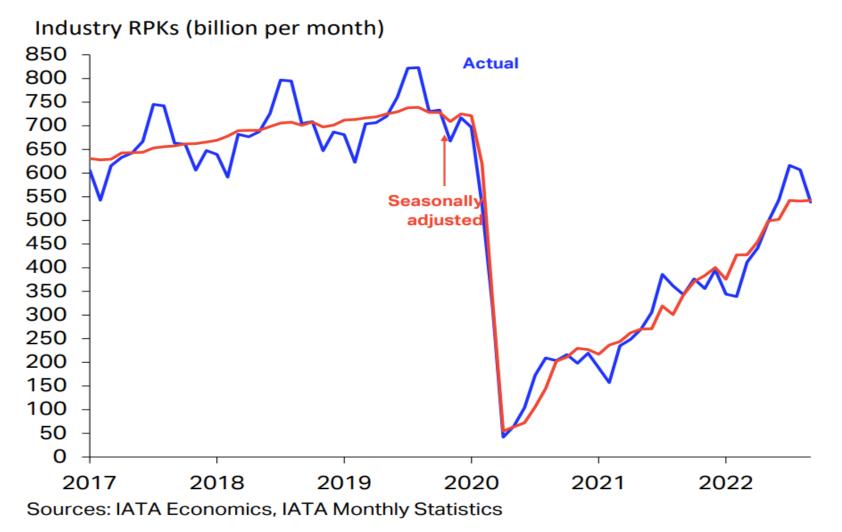
### Major Passenger Markets See Strong Rebound in Travel



Recovery in large domestic markets following a resurgent cargo market



### **Global Passenger Traffic Recovering Rapidly**

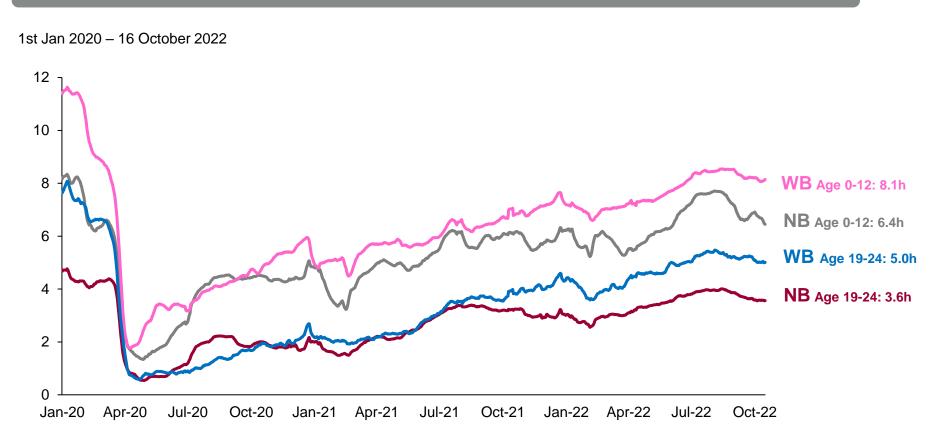


Passenger traffic now within 20% of pre-pandemic levels



### **Rising Aircraft Utilisation**

**Rising utilisation hours** 



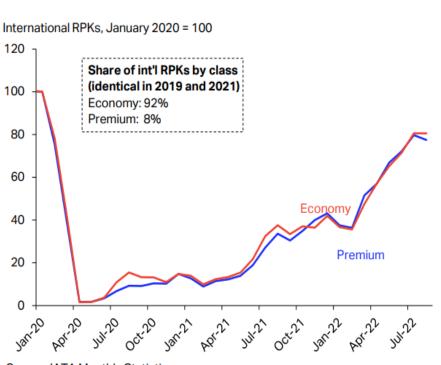
Shorthaul recovery drives demand for narrowbody aircraft; international demand picking up

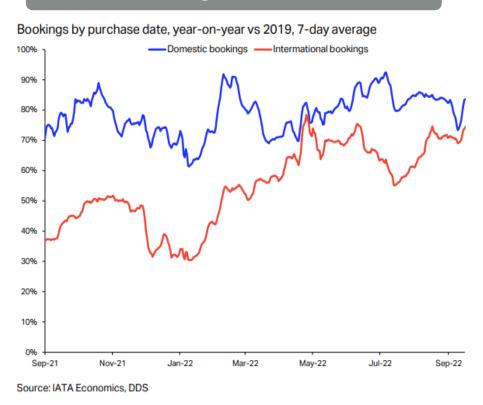


## **Improving Forward Bookings Drive Traffic Recovery**



**Passenger ticket sales** 





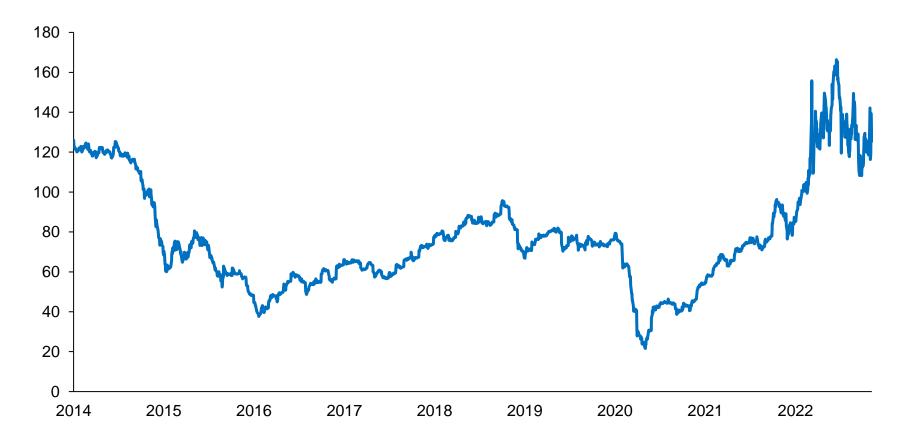
Source: IATA Monthly Statistics

Air traffic is expected to remain resilient as forward bookings move up



### **Jet Fuel Prices**

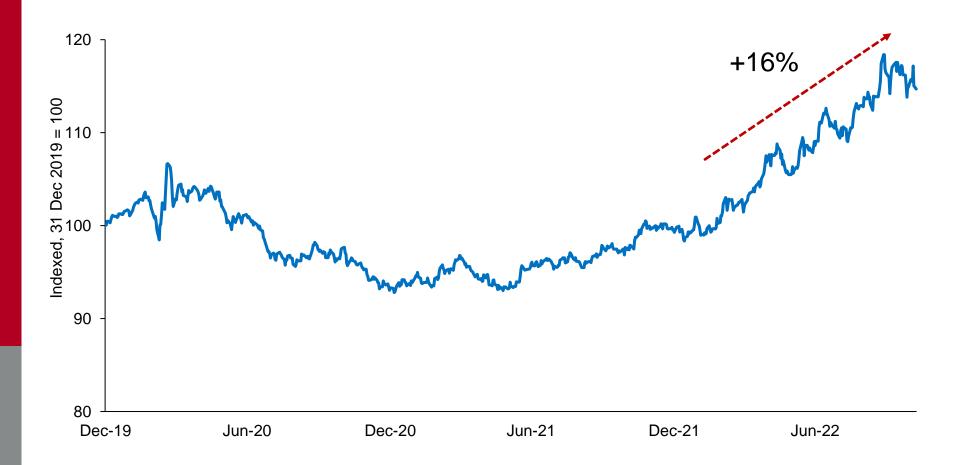
Jet fuel price, US\$



Fuel prices remain high and volatile



### **Strengthening USD**

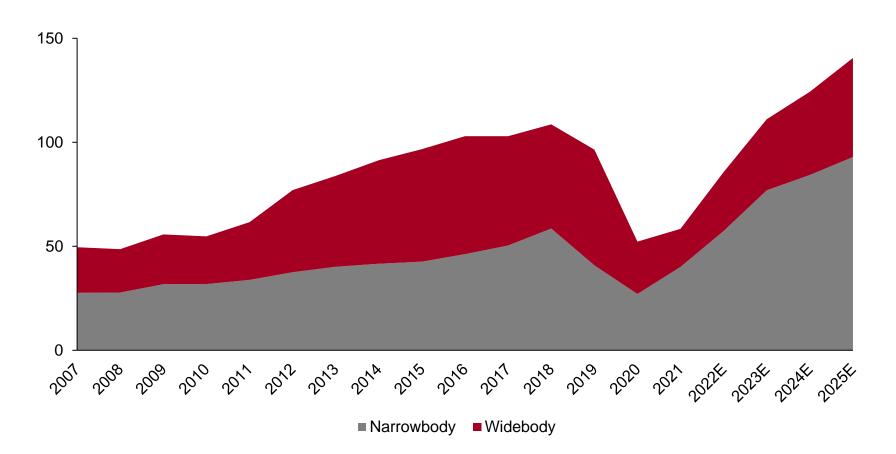


Sharp appreciation of USD since 2021



### Value of Deliveries to Exceed US\$120 Billion in 2025

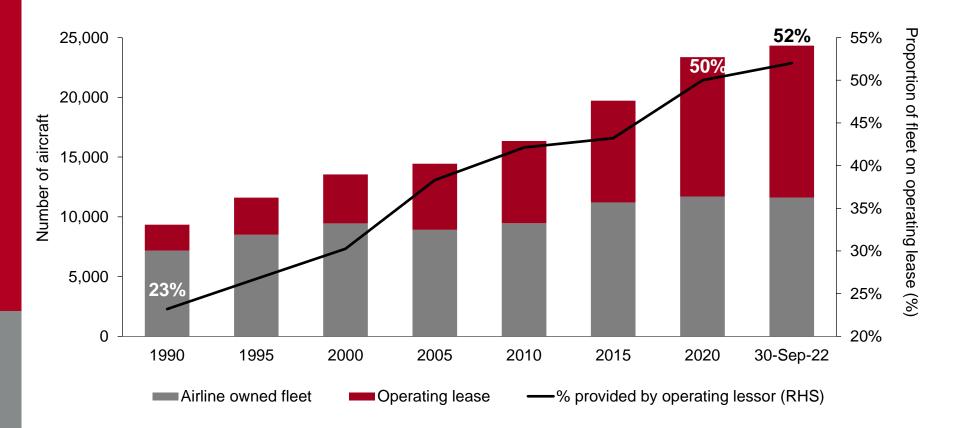
Annual capex - US\$ billion





### Lessors Own 52% of the Aircraft Market Today

Proportion of fleet on operating lease



Lessors own 52% of the aircraft market today; this proportion has potential to increase

**BOC AVIATION** 

All data as at 30 September 2022 See Appendices - Endnotes

## **Looking Ahead**

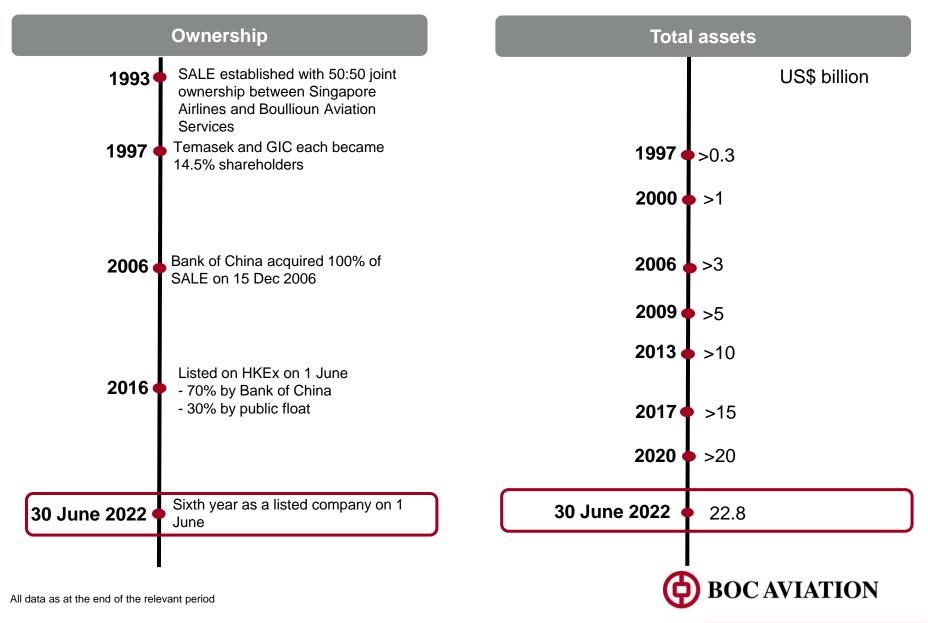
- Improving airline traffic visible globally
  - Long-haul markets recovering
  - Asia is poised to follow suit as more markets are opening up
  - China re-opening will drive upside for Southeast Asia
  - Russian airspace closure having limited effect on overall travel demand
- Higher interest rates, fuel prices and USD provide financing opportunities for well-capitalised operating lessors
  - Airline capex showing signs of distinct recovery
- A global aircraft operating lessor committed for the long-term
  - Resilient 1H 2022 performance achieved amidst a challenging backdrop
  - Orderbook and available liquidity of US\$6 billion position us well to capture airline demand upturn
  - Committed lease revenues of US\$17 billion
  - Three female Directors out of Board of 11



# **APPENDICES**



### **The BOC Aviation Journey**



## **BOC Aviation – Who Are We?**

Top 5

Global aircraft operating lessor<sup>1</sup>

# Listed on HKEX

HKEX code: 2588

# >US\$5.0 billion

Cumulative profits since inception<sup>2</sup>

# US\$6.0 billion

Available liquidity

**181** Aircraft on order<sup>3</sup>

# Bank of China

70% owned by BOC

### **A-**

Investment grade credit ratings from S&P and Fitch

# US\$22.8 billion

Total assets<sup>2</sup>

612 Aircraft in fleet<sup>4</sup>

# 4.3 years; 8.2 years

Average fleet age & lease term remaining<sup>5</sup>

### Industry leader focused on long-term sustainable earnings

All data as at 30 September 2022 unless otherwise indicated See Appendices - Endnotes



### **Globally Diverse Management Team**











Deng Lei



Robert Martin Managing Director & Chief Executive Officer

Zhang Xiaolu Vice-Chairman & Deputy Managing Director

Deputy Managing Director & Chief Financial Officer

**Steven Townend** 

Deputy Managing Director & Chief Operating Officer

**David Walton** 

Chief Commercial Officer (Asia Pacific & the Middle East)

Paul Kent Chief Commercial Officer (Europe, Americas, Africa)

		2E veore of	22 years of		21 years of		26 years of legal		24 years of	OC vegera of	
	•	35 years of	32 years of	•	31 years of	•	36 years of legal,	•	24 years of	26 years of	
		banking and	banking		banking and		aviation finance		banking	aircraft finance	
		leasing	experience		leasing		and leasing		experience	and leasing	
		experience •	In charge of Risk		experience		experience	•	In charge of	experience	
	•	Managing Director	Management,	•	In charge of	•	In charge of		revenue activities •	In charge of	
		and Board	Market Research.		Finance,		Procurement, all		for Asia Pacific	revenue activities	3
		Director since July	Board Secretariat		Treasury, Tax,		operations and		and Middle East	for Europe,	
		1998	and Corporate		Investor Relations	:	related			Americas and	
		1000	Affairs		and Settlement		departments			Africa	
							departments			Anica	
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Highly experienced senior management team



All data as at October 2022

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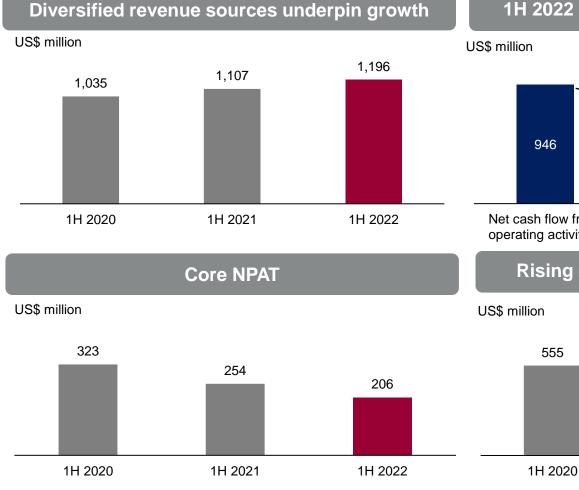
### **Core Competencies - BOC Aviation Track Record**

### Since inception in 1993:

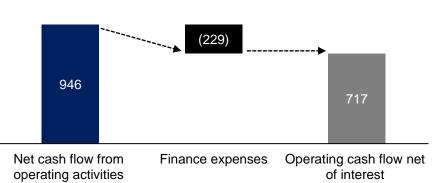
Purchasing	More than 990 aircraft purchased totalling close to US\$57 billion					
Leasing	More than 1,190 leases executed with >180 airlines in 61 countries and regions					
• Financing <sup>1</sup>	<ul> <li>Financing<sup>1</sup></li> <li>More than US\$38 billion in debt raised since 1 January 2007</li> </ul>					
Sales	More than 400 aircraft sold					
Transitions	More than 110 transitions					
Repossessions <sup>2</sup>	65 aircraft in 19 jurisdictions					



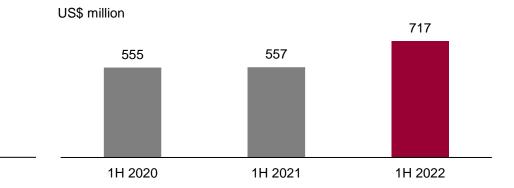
## **Resilient Performance in a Challenging Market**



### 1H 2022 operating cash flow net of interest<sup>1</sup>



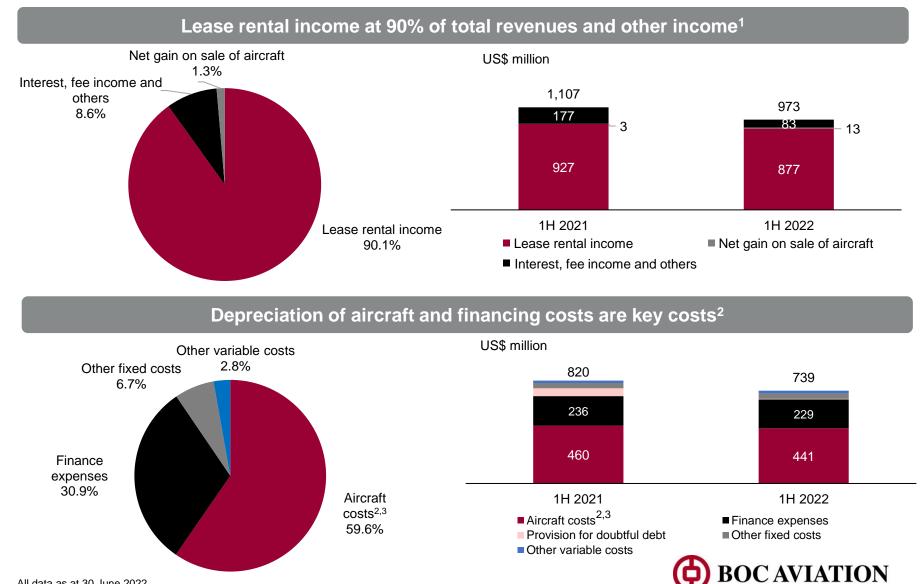
### Rising operating cash flow net of interest<sup>1</sup>



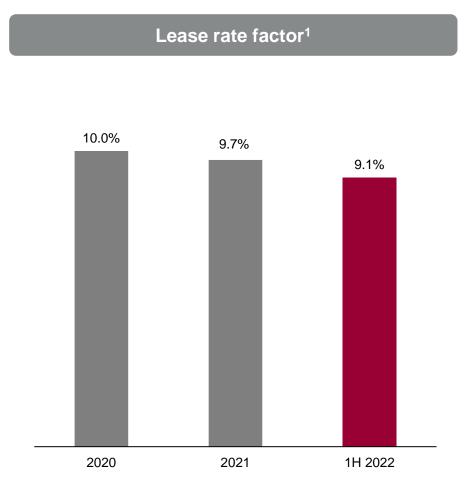
Collection rate rose to 97% from 96% a year ago



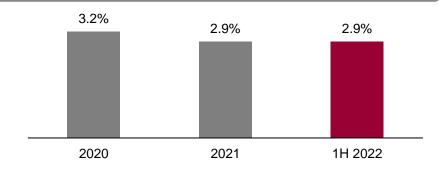
### **Lease Rental Income Continues to Dominate Revenue**



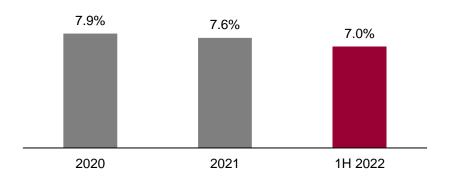
### Lease Yields Reflect Market Environment During Covid



### Maintained low cost of debt<sup>2</sup>

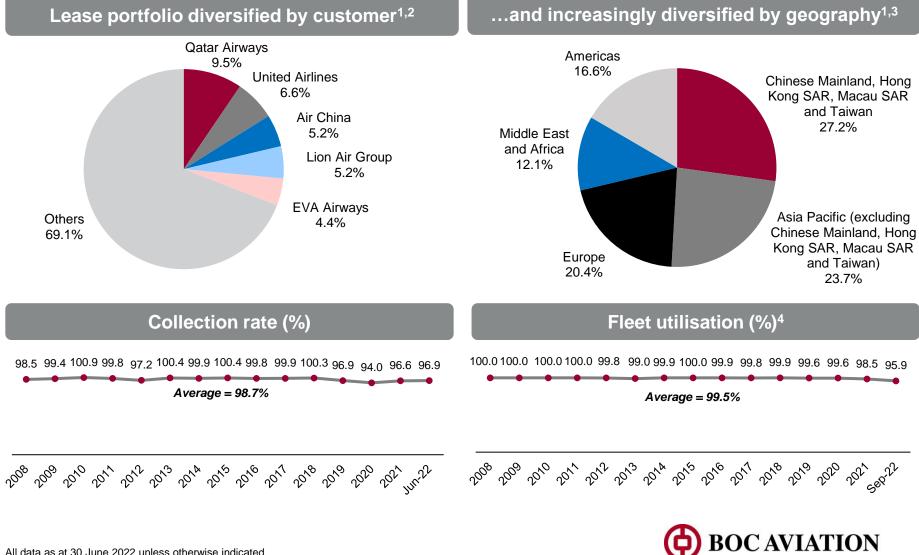


### Net lease yield<sup>3</sup>



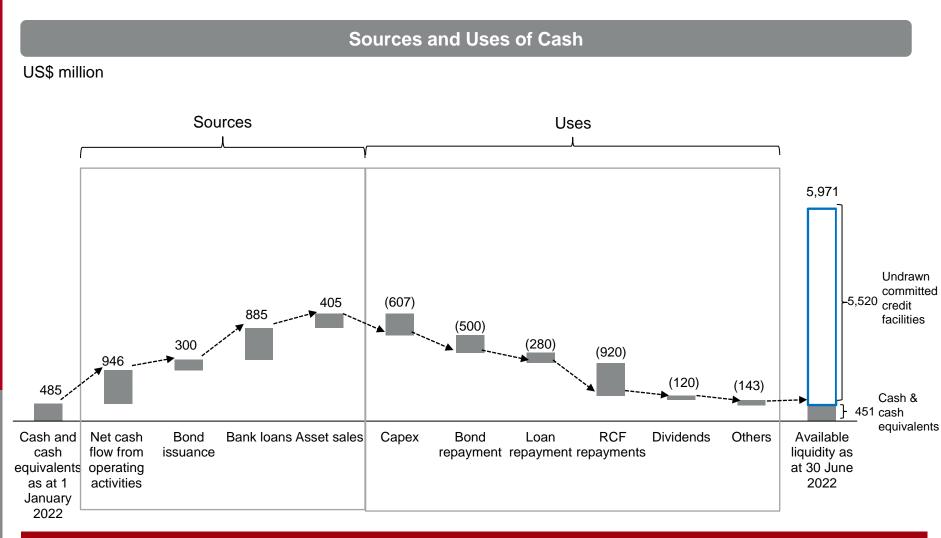


## **Globally Diversified Portfolio**



All data as at 30 June 2022 unless otherwise indicated See Appendices - Endnotes

### **Diverse Funding Channels Utilised in 1H 2022**

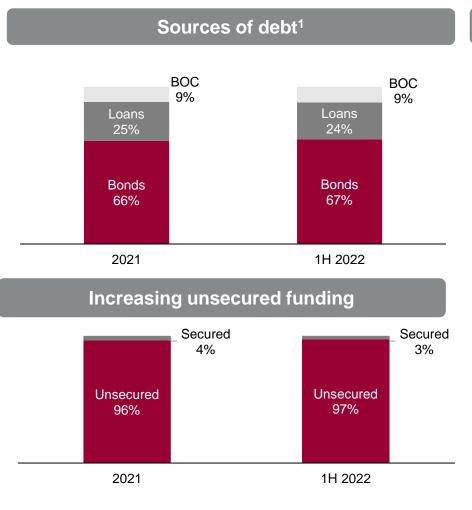


US\$6 billion of committed available liquidity

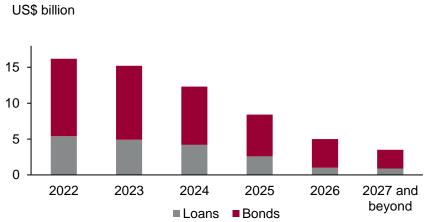


All data as at 30 June 2022

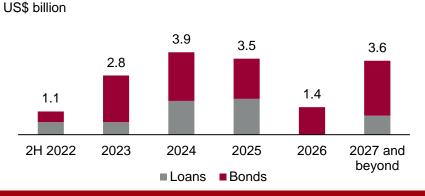
## **Flexible Capital Structure and Ample Backstop Liquidity**



### Outstanding debt amortises over a long term



Near term debt maturities well covered by US\$6 billion available liquidity

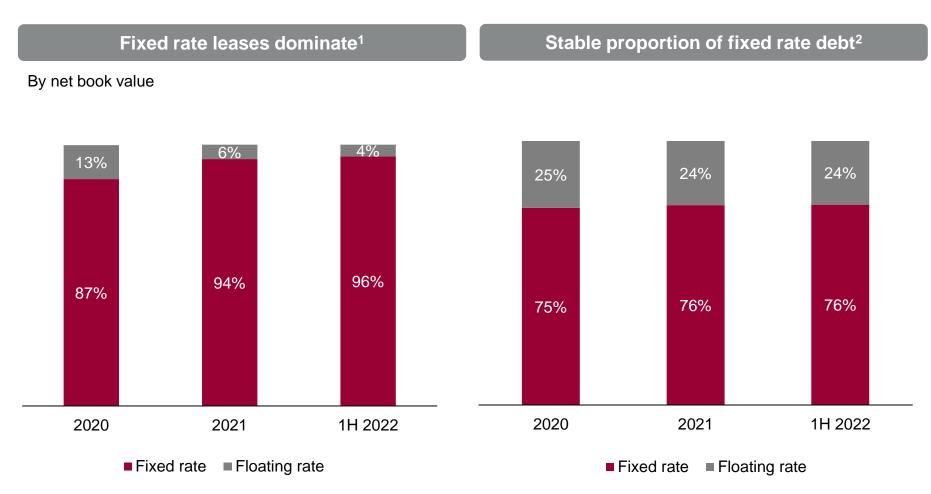


Long-term debt is a key strength



All data as at 30 June 2022 unless otherwise indicated See Appendices - Endnotes

### **Fixed Rate Leases and Debt**



High proportion of fixed rate debt reduces impact of rising interest rates



# **Aviation in a Low Carbon Environment**

	2020	2025	2030	2035	2040	2045	2050
<b>Commuter</b> » 9-50 seats » < 60 minute flights » <1% of industry CO <sub>2</sub>	SAF	Electric and/or SAF	Electric and/or SAF	Electric and/or SAF	Electric and/or SAF	Electric and/or SAF	Electric and/or SAF
<b>Regional</b> » 50-100 seats » 30-90 minute flights » ~3% of industry CO <sub>2</sub>	SAF	SAF	Electric or Hydrogen fuel cell and/or SAF	Electric or Hydrogen fuel cell and/or SAF	Electric or Hydrogen fuel cell and/or SAF	Electric or Hydrogen fuel cell and/or SAF	Electric or Hydrogen fuel cell and/or SAF
Short haul » 100-150 seats » 45-120 minute flights » ~24% of industry CO <sub>2</sub>	SAF	SAF	SAF	SAF	Electric or Hydrogen combustion and/or SAF	Electric or Hydrogen combustion and/or SAF	Electric or Hydrogen combustion and/or SAF
Medium haul » 100-250 seats » 60-150 minute flights » ~43% of industry CO <sub>2</sub>	SAF	SAF	SAF	SAF	SAF	SAF	SAF potentially some Hydrogen
Long haul » 250+ seats » 150 minute + flights » ~30% of industry CO <sub>2</sub>	SAF	SAF	SAF	SAF	SAF	SAF	SAF



## Endnotes (1)

#### SLIDE 3: 3Q 2022 and Recent Developments

- 1. Includes all commitments to purchase aircraft including those where an airline customer has the right to acquire the relevant aircraft on delivery
- 2. Weighted by net book value of owned fleet as at 30 June 2022
- 3. As at 30 June 2022

#### SLIDE 5: Popular and Fuel-Efficient Fleet

- 1. Includes all commitments to purchase aircraft including those where an airline customer has the right to acquire the relevant aircraft on delivery
- SLIDE 6: Major Passenger Markets See Strong Rebound in Travel Sources: China MoT (Air Pax YoY) TravelSky (Traffic), TSA (Throughput), Eurocontrol (Flights), AWN ADS-B (Flights)
  - 1. Changes compared to 2021 with effect from January 2022
- SLIDE 7: Global Passenger Traffic Recovering Rapidly Source: IATA Air Passenger Market Analysis (September 2022)
- SLIDE 8: Rising Aircraft Utilisation Sources: AWN ADS-B
- SLIDE 9: Improving Forward Bookings Drive Traffic Recovery Source: IATA Air Passenger Market Analysis
   (September 2022)
- SLIDE 10: Jet Fuel Prices Source: Bloomberg, 7 November 2022
- SLIDE 11: Strengthening USD Source: Bloomberg, 7 November 2022
- SLIDE 12: Value of Deliveries to Exceed US\$120 Billion in 2025 Sources: BOC Aviation Analysis



## Endnotes (2)

 SLIDE 13: Lessors Own 52% of the Aircraft Market Today – Sources: Ascend, as at 30 September 2022, based on aircraft of 100+ seats. Fleet data for 2020 onwards includes aircraft in-service and aircraft additionally parked from end-2019 due to Covid-19 fleet grounding

#### • SLIDE 17: BOC Aviation – Who Are We?

- 1. By net book value of owned aircraft
- 2. As at 30 June 2022
- 3. Includes all commitments to purchase aircraft including those where an airline customer has the right to acquire the relevant aircraft on delivery
- 4. Includes owned, managed and aircraft on order as at 30 September 2022
- 5. Weighted by net book value of owned fleet as at 30 September 2022

#### SLIDE 19: Core Competencies - BOC Aviation Track Record

- 1. As at 30 June 2022
- 2. Includes repossessions and consensual early returns

#### • SLIDE 20: Resilient Performance in a Challenging Market

1. Calculated as net cash flow from operating activities less finance expenses paid

#### SLIDE 21: Lease Rental Income Continues to Dominate Revenue

- 1. Excludes income of US\$223 million arising from the termination of leases of aircraft that remain in Russia
- Excludes the effects of the one-time write-down of the net book value of aircraft that remain in Russia of US\$804
  million
- 3. Comprises aircraft depreciation and impairment charges



## Endnotes (3)

### SLIDE 22: Lease Yields Reflect Market Environment During Covid

- 1. Calculated as operating lease rental income divided by average net book value of aircraft and multiplied by 100%
- 2. Calculated as the sum of finance expenses and capitalised interest, divided by average total indebtedness. Total indebtedness represents loans and borrowings before adjustments for deferred debt issue costs, fair values, revaluations and discounts/premiums to medium term notes
- 3. Calculated as operating lease rental income less finance expenses apportioned to operating lease rental income, divided by average of aircraft net book value. Net lease yield for 1H 2022 is calculated on an annualised basis.

#### SLIDE 23: Globally Diversified Lease Portfolio

- 1. Based on net book value including aircraft subject to finance leases and excluding aircraft off lease and aircraft that remain in Russia as at 30 June 2022
- 2. For certain airlines, the percentage includes leases to affiliated airlines whose obligations are guaranteed by the named airline
- 3. Based on the jurisdiction of the primary obligor under the relevant operating lease
- 4. Fleet utilisation is the total days on-lease in the period as a percentage of total available lease days in the period

#### SLIDE 25: Flexible Capital Structure and Ample Backstop Liquidity

- 1. Drawn debt only
- SLIDE 26: Fixed Rate Leases and Debt
  - 1. By net book value including aircraft subject to finance lease, and excluding aircraft off lease
  - 2. Represents the position net of any hedging
- SLIDE 27: Aviation in a Low Carbon Environment Source: ATAG Waypoint 2050 Report





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