

# ASCEND



**Advisory**



## **Hong Kong Business Briefing Diving for Pearls**

Tuesday 30th October, 2012  
5.30pm - 9pm

**The American Club**



## **Hong Kong Business Briefing Diving for Pearls**

**Welcome**  
**Eddy Pieniazek**  
Global Head of Consultancy



Since we last met in Hong Kong.....

.....the team has got a whole lot bigger!

**New starters in Hong Kong**

Adam Zhong

Gary Tse

Herman Ng

Lukasz Pawlowski

Jacqueline Feder

David Zhang

George Hu

Dennis Lau

Ken Chan

Chris Keene





One







Building **ONE** business

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New, simplified architecture for our combined product portfolio



Ascend is the lead brand for our advisory services and finance sector

 News	 Data	 Analytics	 Advisory
Flightglobal.com Airline Business Flight International Flight Daily News Flightglobal Pro Accident Alerts	ACAS Flightglobal Pro Ascend Fleets Ascend Values Safety (WAAS, JOS) ICAO Capstats Airport Changes SpaceTrak Data Feeds	Aviation Exchange Insight Reference Market Commentaries Aircraft Programmes JP Fleets Special Bulletin Profiles Directories Space Review	  Ascend Fleets Ascend Values Ascend Aircraft Ratings Ascend Certified Valuations Market Commentaries



Serving you in your market



# Aviation 2020 Business Briefing: Diving for Pearls



**Welcome**  
**No Hiding Place – 10 issues for 2012**  
**Eddy Pieniazek, Global Head of Consultancy**



**Pump it up:**  
**Asia-Pacific route development analysis**  
**Joanna Lu, Managing Consultant**



**Reasons to be cheerful:**  
**How does the market compare to post 9/11**  
**Paul Sheridan, Head of Consultancy Asia**



**You can't always get what you want:**  
**Focus on values**  
**Eddy Pieniazek, Global Head of Consultancy**





# AVIATION

EMISSIONS

THE AVIATION CYCLE

HANDLING THE UNEXPECTED

NEW MARKETS

THE NEXT GENERATION

# 2020

*Share the Vision*



## **Hong Kong Business Briefing Diving for Pearls**

**No Hiding Place –  
10 Issues for 2012**

**Eddy Pieniazek**  
Global Head of Consultancy



# Airlines? Profits?

Still seeing 5.8% YoY  
Global RPK traffic  
growth

Global economy growth  
2012: 3.1%  
2013: 3.4%

Some US airlines  
have posted bumper  
profits in 3<sup>rd</sup> Qtr, and  
some have not....



# Cargo

Air v Sea

Grasping at Straws

World Production  
Processes

Integrators

Belly cargo operators

Full freighter airlines

Overcapacity + peak in  
new widebody freighter  
deliveries + depressed  
market = ?

Ocean going tactics



# The Economic / Useful Life Debate



# Fuel price



# Major re-alignment in Alliance Framework



# Middle East





# Turboprops

Fuel price drives traffic

TPs great for the 'thin stuff'  
– light but frequent loads

Markets are fragmented

Fascinating dilemma –  
markets want a 30 seater  
and a 90-100 seater, but no  
one is building (yet)



# Used Aircraft – victim of ‘musical chairs’

Capital still drawn to ‘new’ - 50% fewer used trades than anticipated

Downturn has a drawn out floor, longer than seen in last 40 years

Aircraft are being retired in increasing numbers, some earlier than anticipated.



# Airbus vs. Boeing

Boeing 787, 787-9 and 787-10

Airbus A350

Airbus A380

Boeing 777-X



# Low cost carriers



2013...



## **Hong Kong Business Briefing Diving for Pearls**

**Pump it Up:  
Asia-Pacific route development  
Joanna Lu, Managing Consultant**



# Agenda

Monitoring Capacity Changes - New Tools

Recent route development in Asia Pacific market

High growth routes, airlines and aircraft use



# New Tools- Flightmaps analytics

The screenshot shows the Flightglobal website interface. At the top, there is a navigation bar with the Flightglobal logo, a user profile for 'joanna.lu@ascendworldwide.com', and a 'Sign out' button. Below the navigation bar is a menu with categories like Home, News, My, Research, Aircraft, Jobs, Airspace, Images, Cutaways, Historic, Air Shows, Shop, and More. A secondary menu includes My Account, My News, and My Alerts. The main content area features a 'Sector news' section with a list of articles such as 'Hawaiian cash and debt down in Q3' and 'Alaska to grow with increased discipline in 2013'. On the right side, there is a 'Welcome to' section with helpful links and a 'November' section with featured content. A blue arrow points to the 'FlightMaps Analytics' dropdown menu in the top right corner, which lists options like 'Airline Business Premium', 'Airport Charges', 'Capstats', 'FlightMaps Analytics', and 'ICAO Data'. Below the main content, there are three search boxes: 'News Search', 'Airline, airport & MRO profile search', and 'Airlines Fleet Search'. The 'News Search' box includes fields for keywords, criteria, and date range. The 'Airline, airport & MRO profile search' box includes a dropdown for 'Airlines', a keyword field, and location filters. The 'Airlines Fleet Search' box includes filters for market groupings, manufacturer, type, and model.

Flightmaps analytics



# Easy way to see the routes on the market

The screenshot displays the FlightMaps Analytics interface. At the top left is the logo for FlightMaps ANALYTICS, with navigation links for Contact Us, FAQ & Videos, and Region Definitions. On the top right, it says "Brought to you by Flightglobal".

The main interface features a sidebar on the left with various filters:

- Date Period: October 2012
- Leaving from: eg: LHR, London, United Kingdo
- Going to: eg: LHR, London, United Kingdo
- Carrier: No Preference
- Service type group: No Preference
- Alliance: No Preference
- Aircraft Manufacturer: No Preference
- Aircraft Type: No Preference
- Aircraft Subtype: No Preference
- Non-stop flights only

Below the filters, it shows "Number of results: 106,407 (Too many to plot)" and buttons for "Start Over" and "Search".

The main area is a world map with flight routes plotted as blue lines and dots. The map is labeled with "ATLANTIC OCEAN" and "INDIAN OCEAN". A legend in the bottom left corner identifies the route types: Domestic (yellow), Regional (blue), and Intercontinental (red). The map also includes a "Select Filter..." dropdown and an "Add Filter" button.

At the bottom of the map, it says "World Map: © 2012 Europa Technologies".



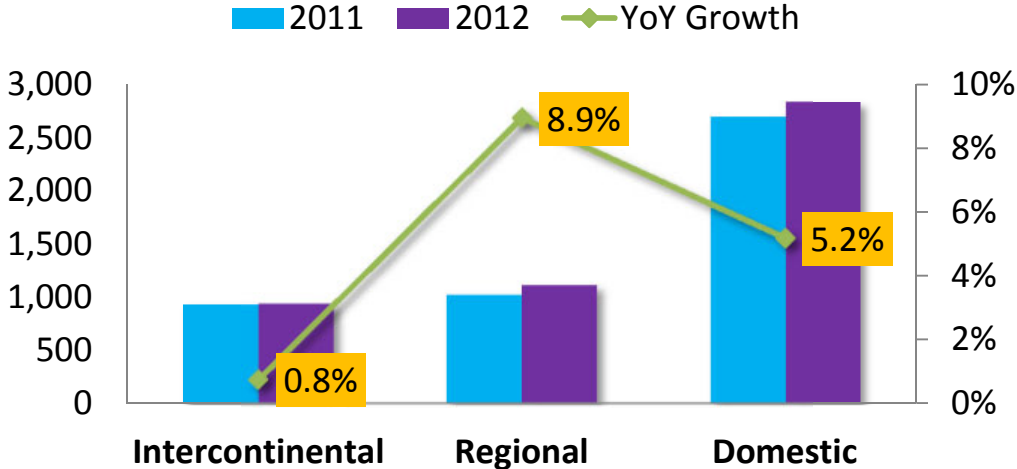
# 2012: Where are the stars?



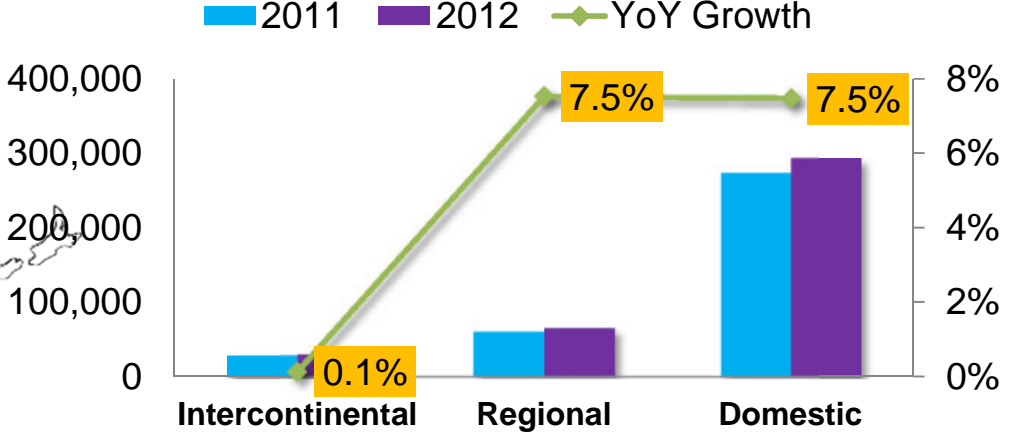
**Aggressive regional and domestic route development**

Source: Capstats, October 2012

**Growth of Destinations**

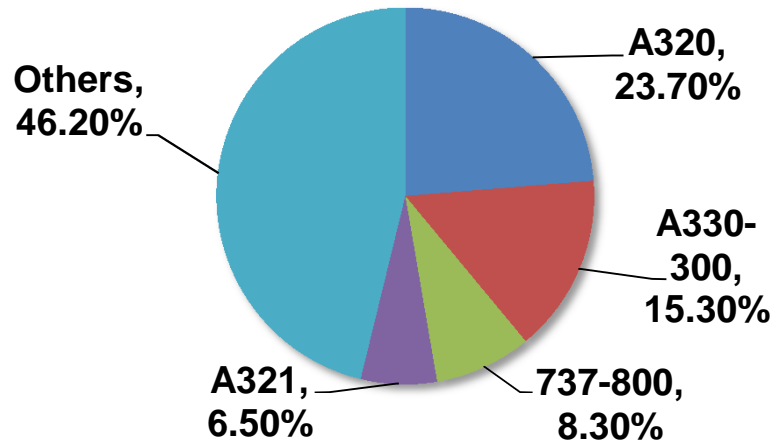


**Growth of Total Operations**



# All countries have had decent expansion on regional routes

Aircraft Seats Share Oct 2012



Regional Routes Growth  
(Total operations Oct 2012 vs. Oct 2011)

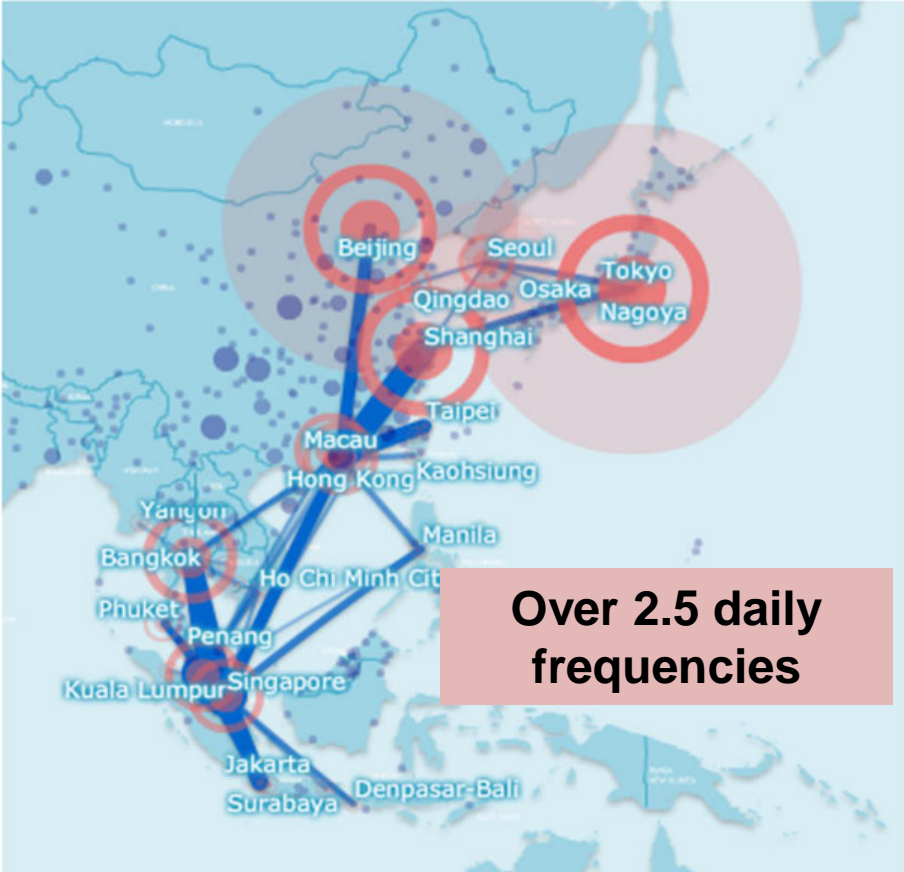


# Sweet spot: Major hub city pairs

Top 10 high growth country pairs in 2012

	Orig. Country	Dest. Country
1	Rep. of Korea	China
2	Philippines	Hong Kong
3	Malaysia	Brunei
4	Guam	Rep. of Korea
5	Philippines	Malaysia
6	Bangladesh	Singapore
7	Malaysia	China
8	Hong Kong	Japan
9	China	Singapore
10	Rep. of Korea	Japan

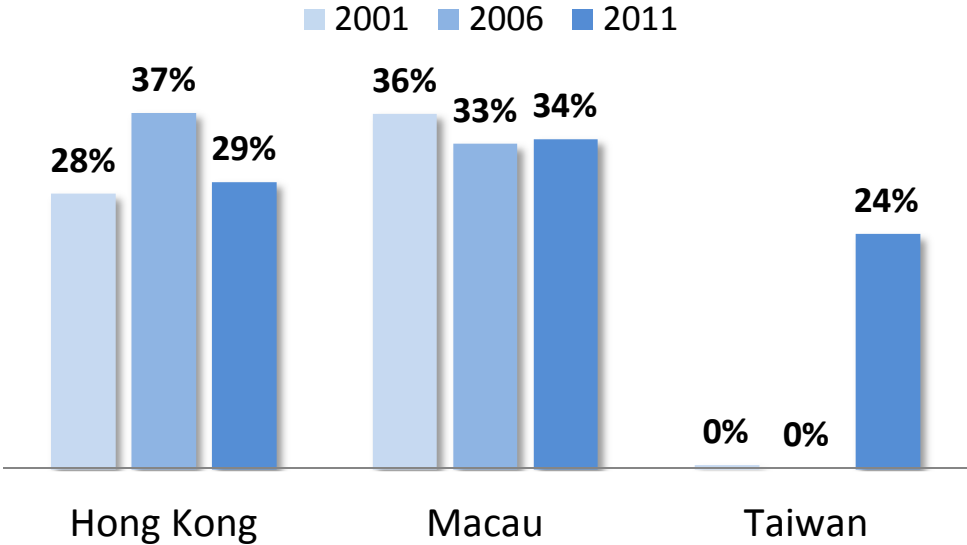
Major intra-Asia routes in 2012



# Cross-strait flights trigger the incremental demands on regional routes



Share of Mainland China flights in airport total operations

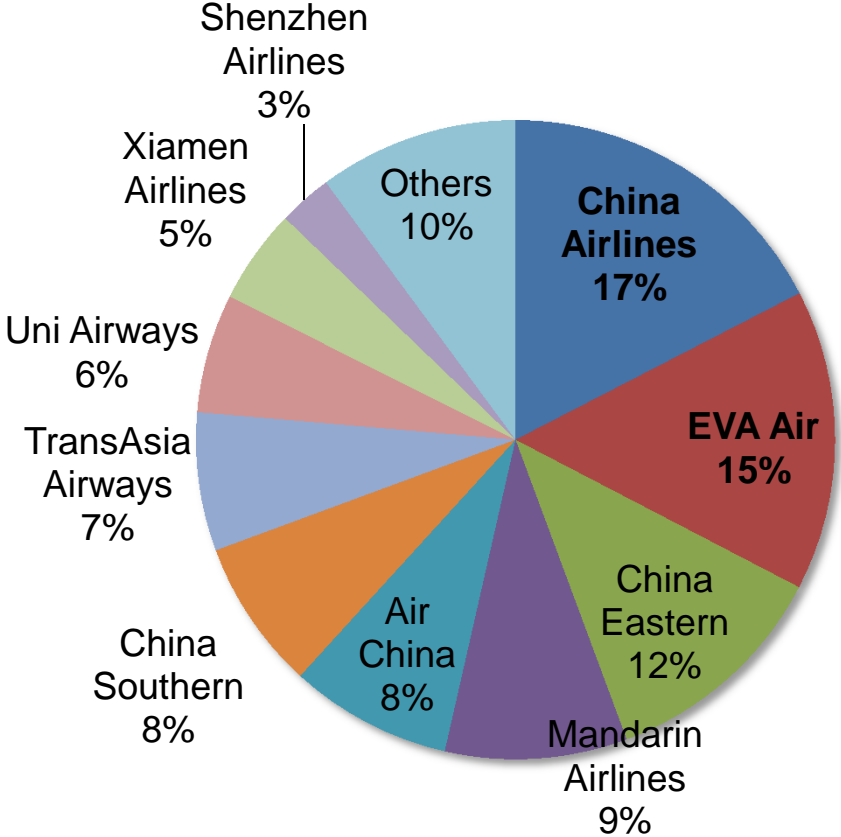


Source: Capstats

# Airlines benefit from the new Cross-strait flights pattern

Taiwanese airlines have been benefiting more from the Cross-strait flights; they provide more than 54% of the total seats in the cross-strait routes.

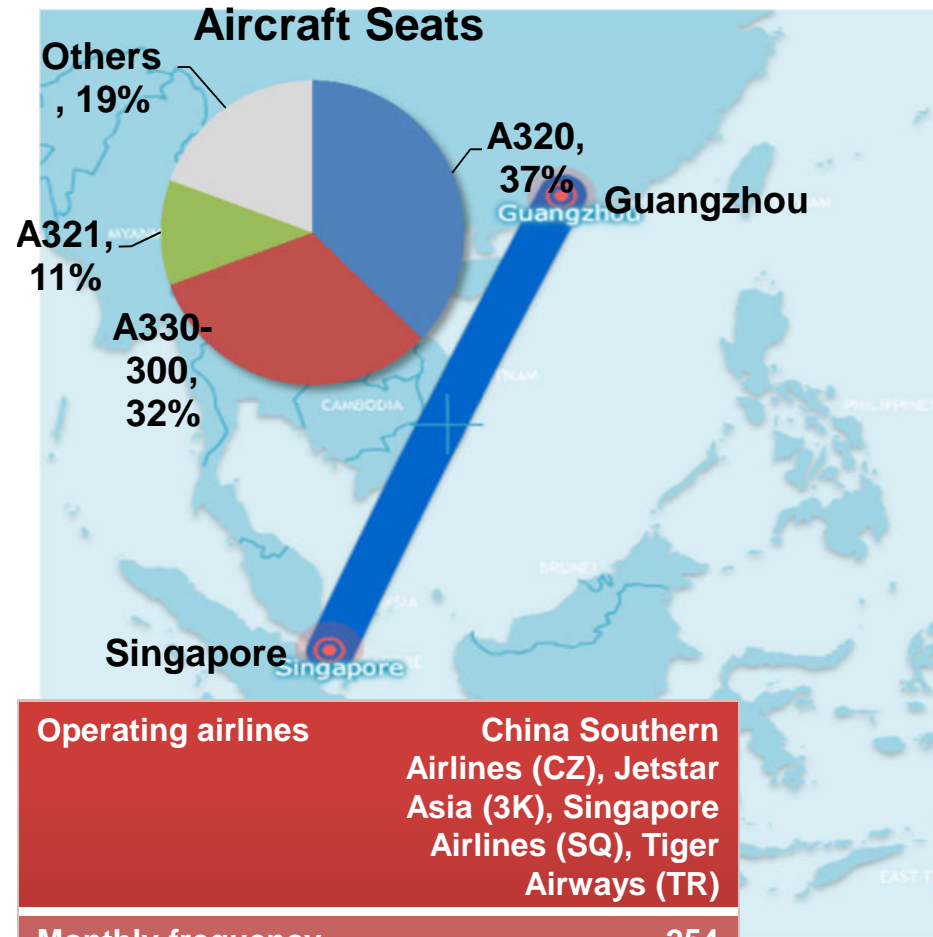
Airlines market share by Cross-strait seats



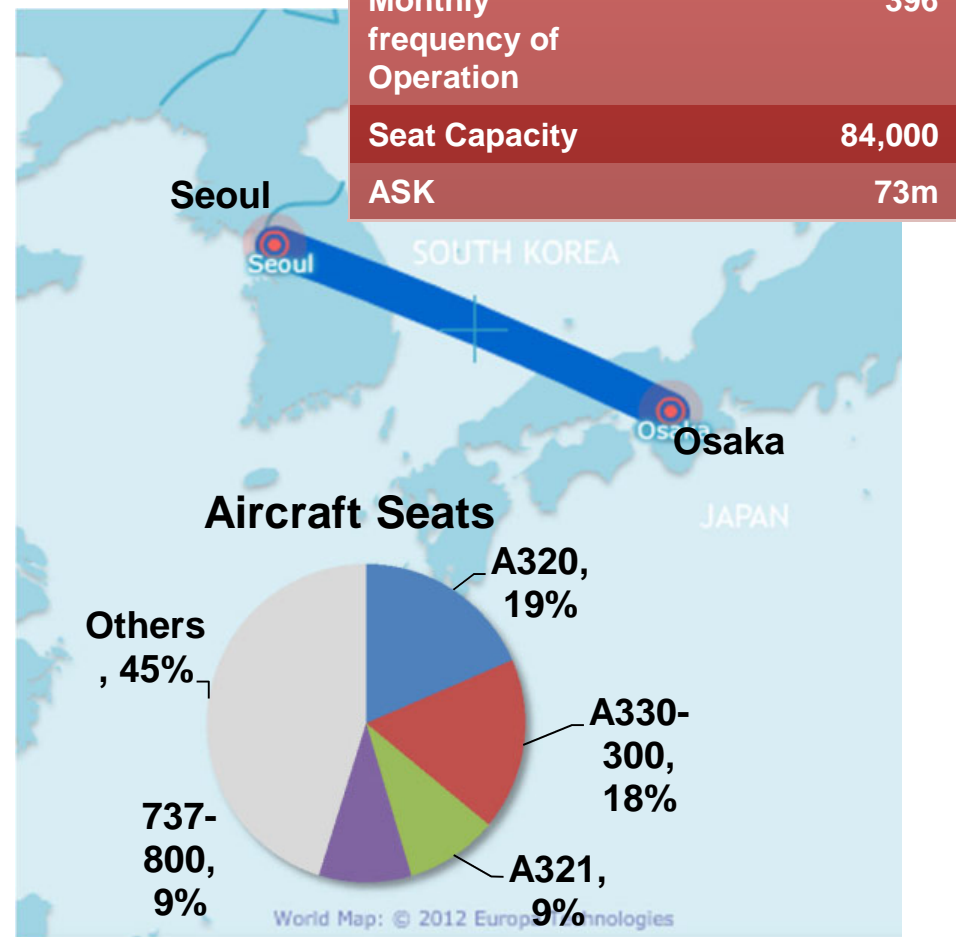
Source: FlightMaps Analytics November 2012



# Some high growth regional routes



Operating airlines	China Southern Airlines (CZ), Jetstar Asia (3K), Singapore Airlines (SQ), Tiger Airways (TR)
Monthly frequency of Operation	254
Seat Capacity	48,000
ASK	125m



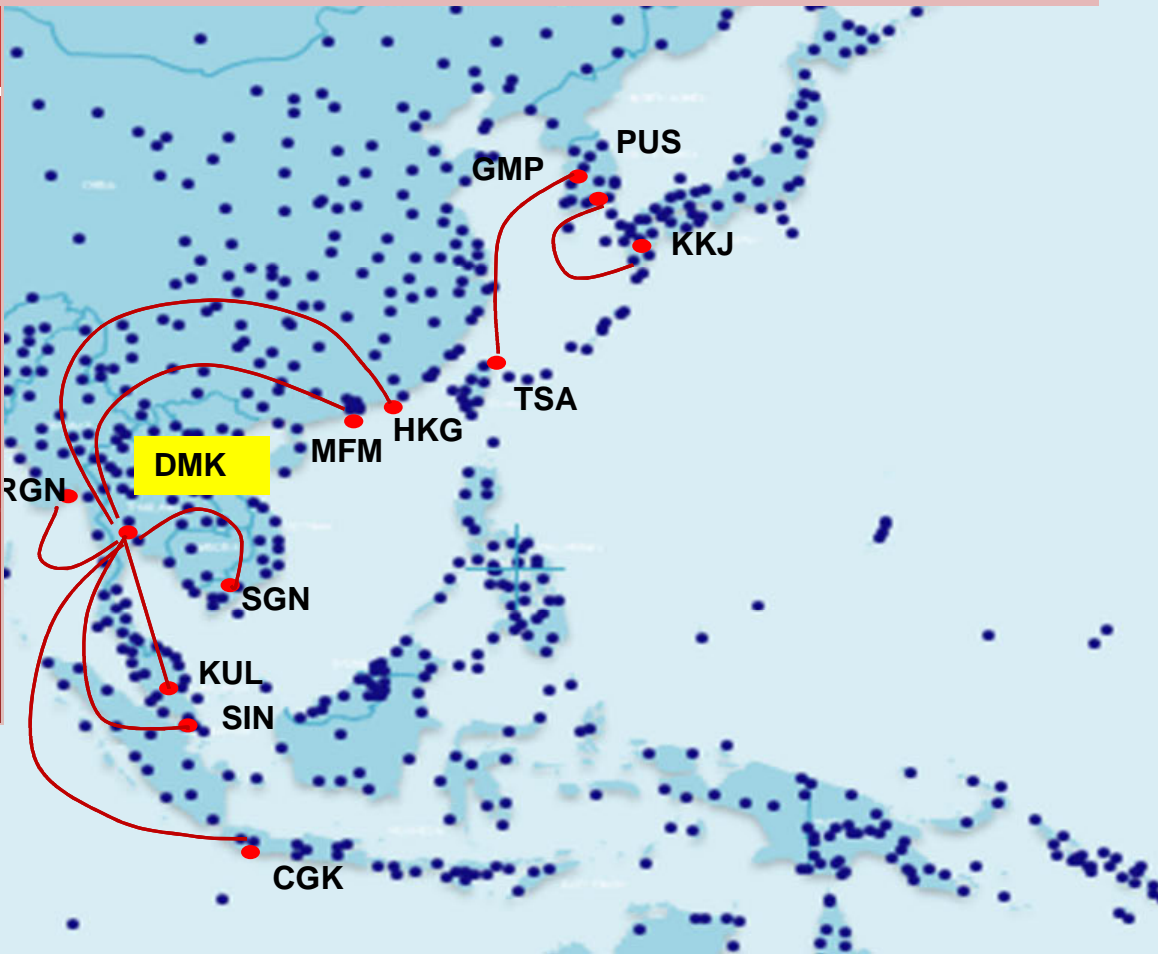
Operating airlines	ANA (NH), Asiana Airlines (OZ), EASTAR JET (2E), Jeju Air (7C), Korean Airline (KE), Peach Aviation (MM)
Monthly frequency of Operation	396
Seat Capacity	84,000
ASK	73m

Source: FlightMaps Analytics November 2012

# Thai AirAsia and its A320 dominates the new regional routes

Top new regional routes with two daily services and above

	Airlines	Monthly Frequency	Aircraft
DMK-KUL	AirAsia (AK), Thai AirAsia (FD)	248	A320
DMK-SIN	Thai AirAsia	155	A320
DMK-MFM	Thai AirAsia	124	A320
DMK-RGN	Thai AirAsia	90	A320
KKJ-PUS	Star Flyer (7G)	62	A320
	China Airlines (CI), EASTAR JET (ZE), EVA Air (BR), T'Way (TW)	737, MD-90	
GMP-TSA		62	90
DMK-SGN	Thai AirAsia	62	A320
DMK-HKG	Thai AirAsia	62	A320
CGK-DMK	Indonesia AirAsia (QZ)	62	A320

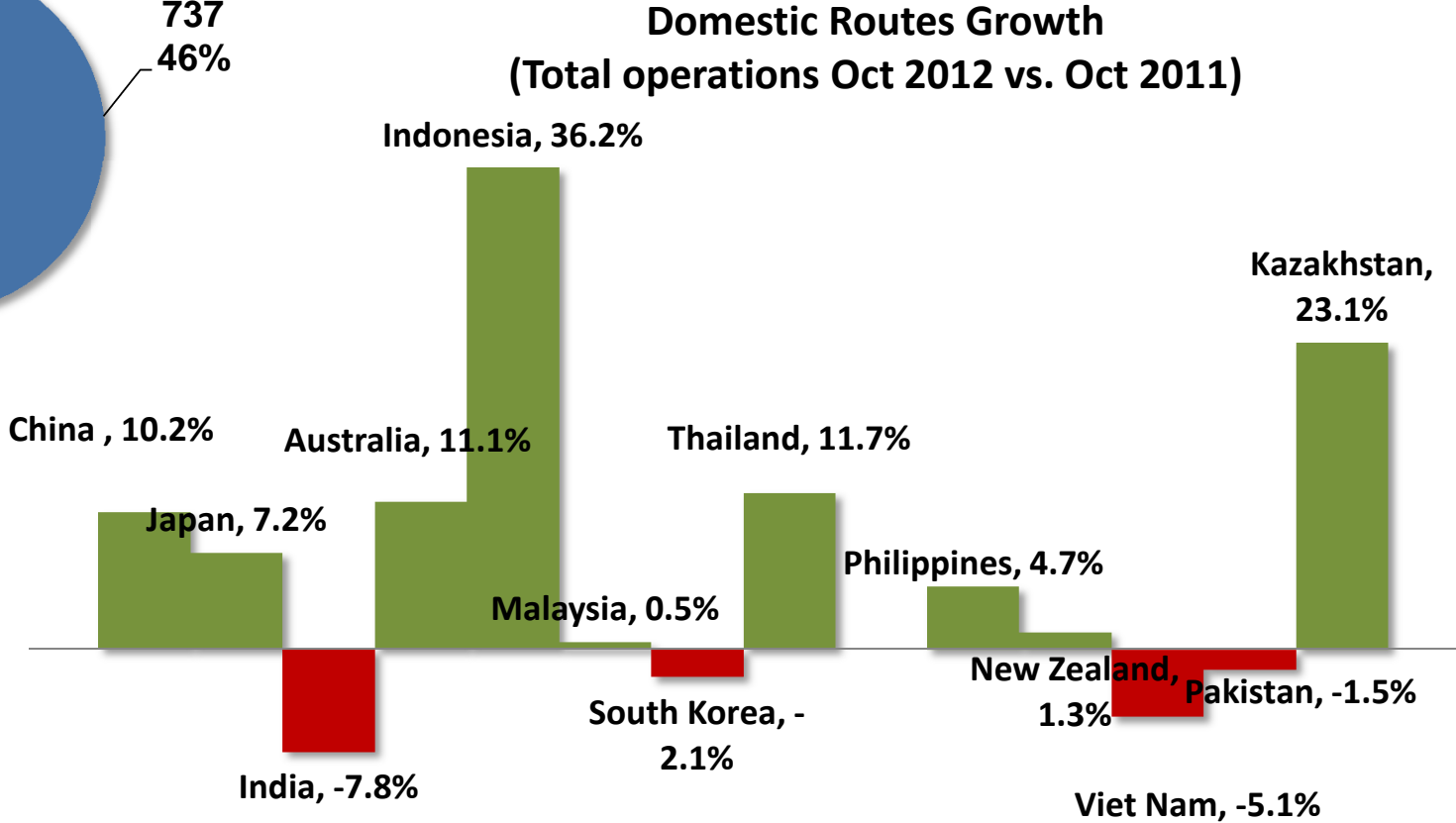
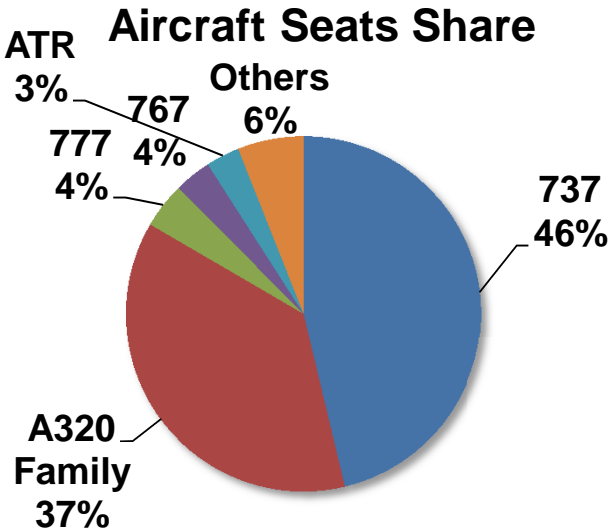


Source: Capstats, October 2012

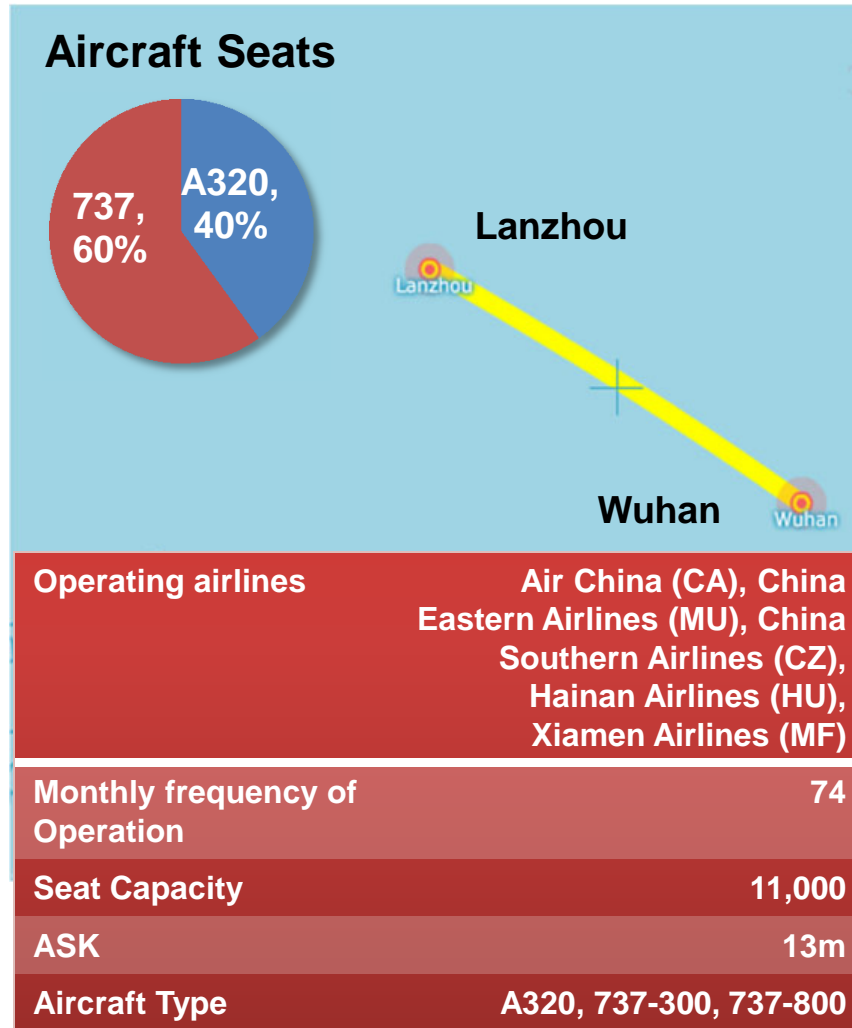




# Indonesia and Kazakhstan – continued domestic growth



# 737-800 & A320 serve the highest growth domestic routes



# ATR is heavily used on domestic Indonesia market

Top new domestic routes with three daily services and above



Source: Capstats, October 2012

World Map: © 2012 Europa Technologies

	Airlines	Monthly Frequency	Aircraft Type
LOP-SUB	Batavia Air (Y6), Wings Abadi Airlines (IW)	186	ATR42/ATR72, 737-400, Bombardier Regional Jet 1000
DPS-LOP	Garuda Indonesia (GA), TransNusa (M8), Wings Abadi Airlines (IW)	186	ATR42/ATR72, Fokker 50, 737-800
CGK-LOP	Garuda Indonesia (GA), Lion Airlines (JT)	155	737-800, 737-900
GEA-LIF	Air Caledonie (TY)	133	ATR42/ATR72
DMK-KBV	Thai AirAsia (FD)	124	A320

# Summary

Regional and domestic route development in Asia Pacific has been aggressive

## Regional routes

Sweet spot: The major hub city pairs, Cross-strait flights

Star airlines: Taiwanese carriers for cross-strait flights, Thai AirAsia

Star aircraft: A320, A330-300

## Domestic routes

Sweet spot: China, Thailand, Japan, Indonesia

Star aircraft: 737-800, A320, ATR



## **Hong Kong Business Briefing Diving for Pearls**

**Managing the cycle:  
Survival of the fittest and flexible  
Paul Sheridan  
Head of Consultancy Asia**



## **William Shakespeare on the aviation cycle...**

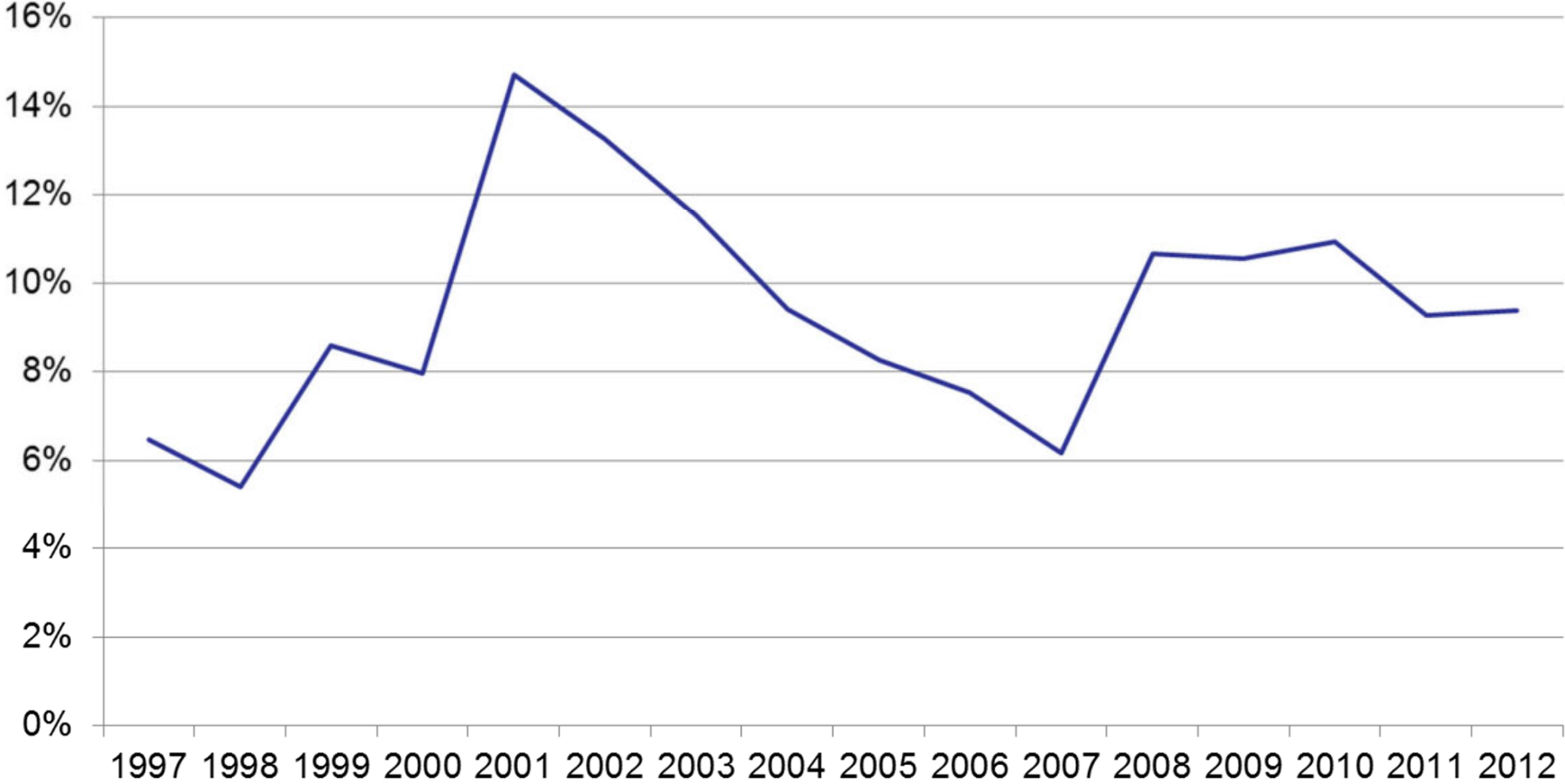
**The worst is not  
So long as we can say,  
'This is the worst'**

And in some respects this is not the worst we have seen



# Lessor storage rates are lower than post-9/11

% of operating lease aircraft in storage

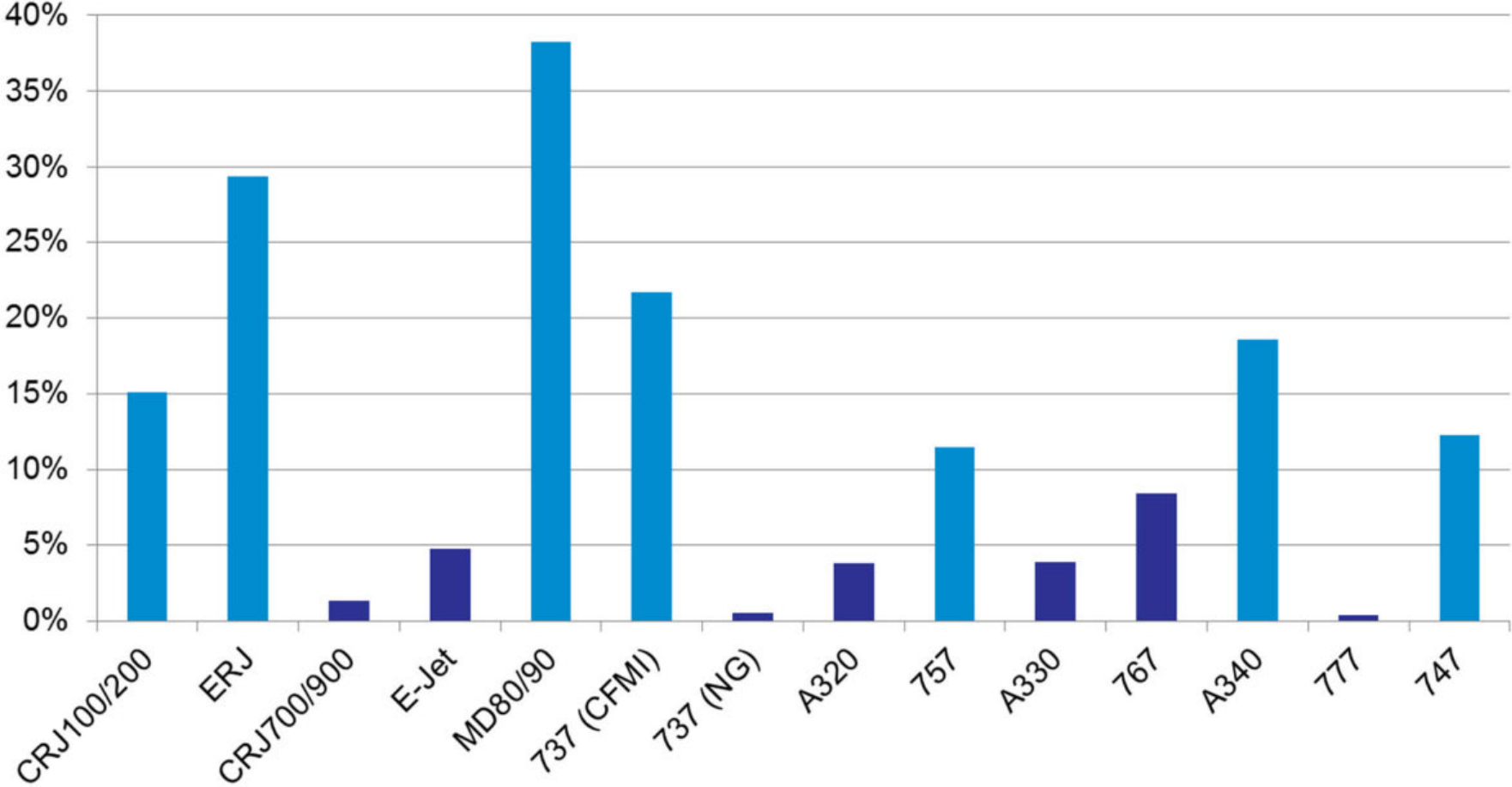


Source Ascend Online Fleets



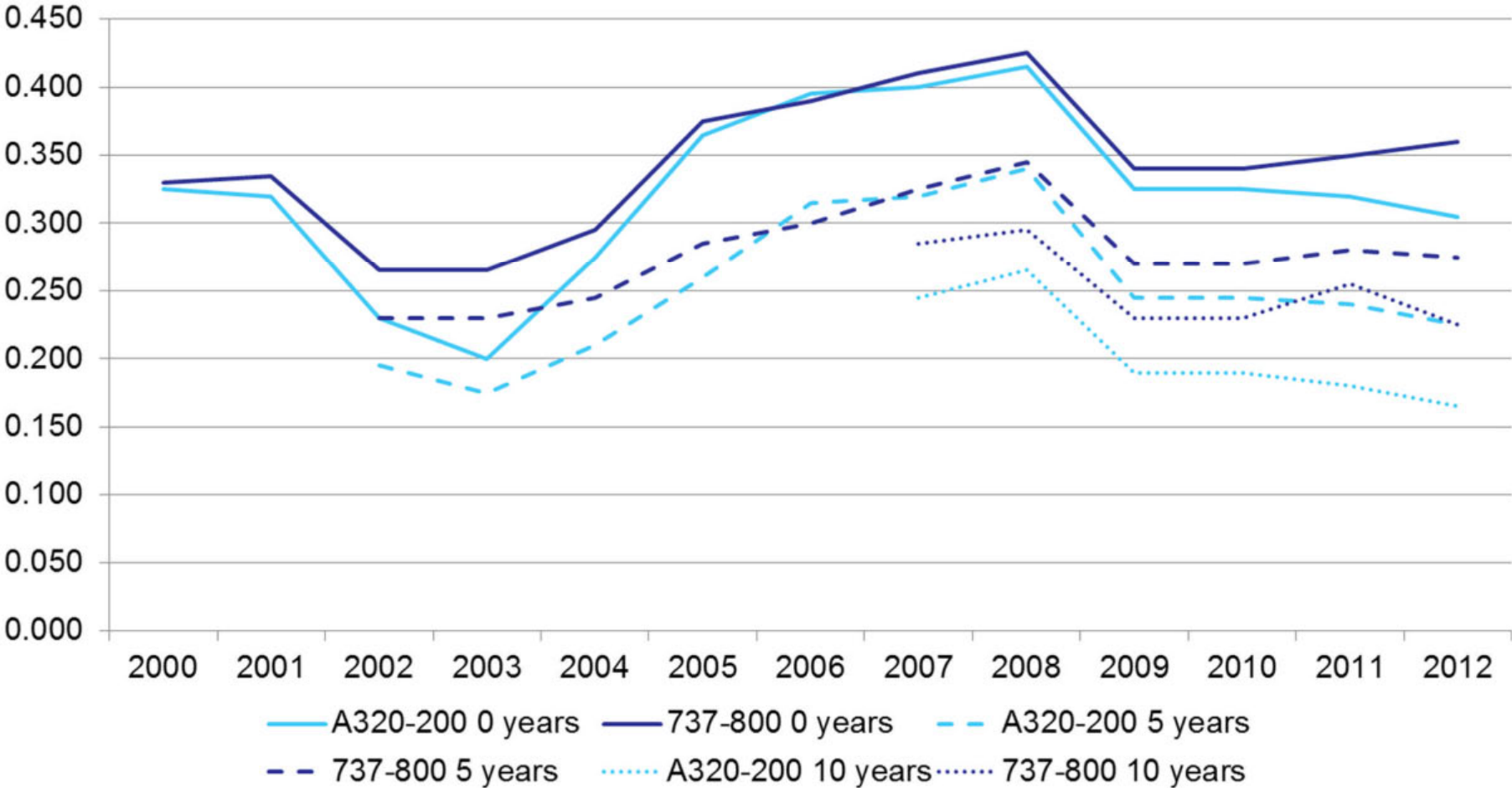
# In production storage rates are even lower

% of leased aircraft in storage by type



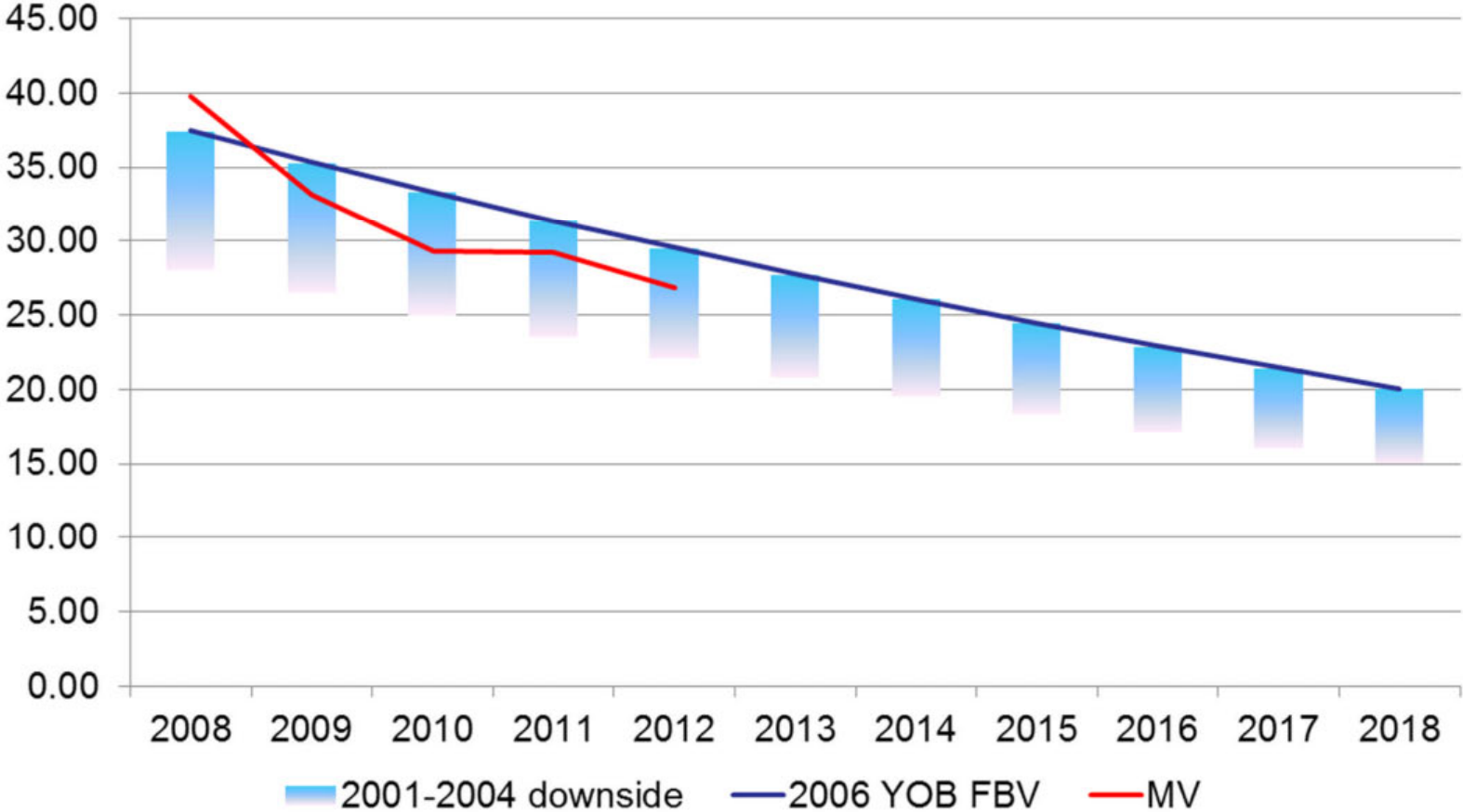


# Lease rentals are weak but are higher than 2001-2003



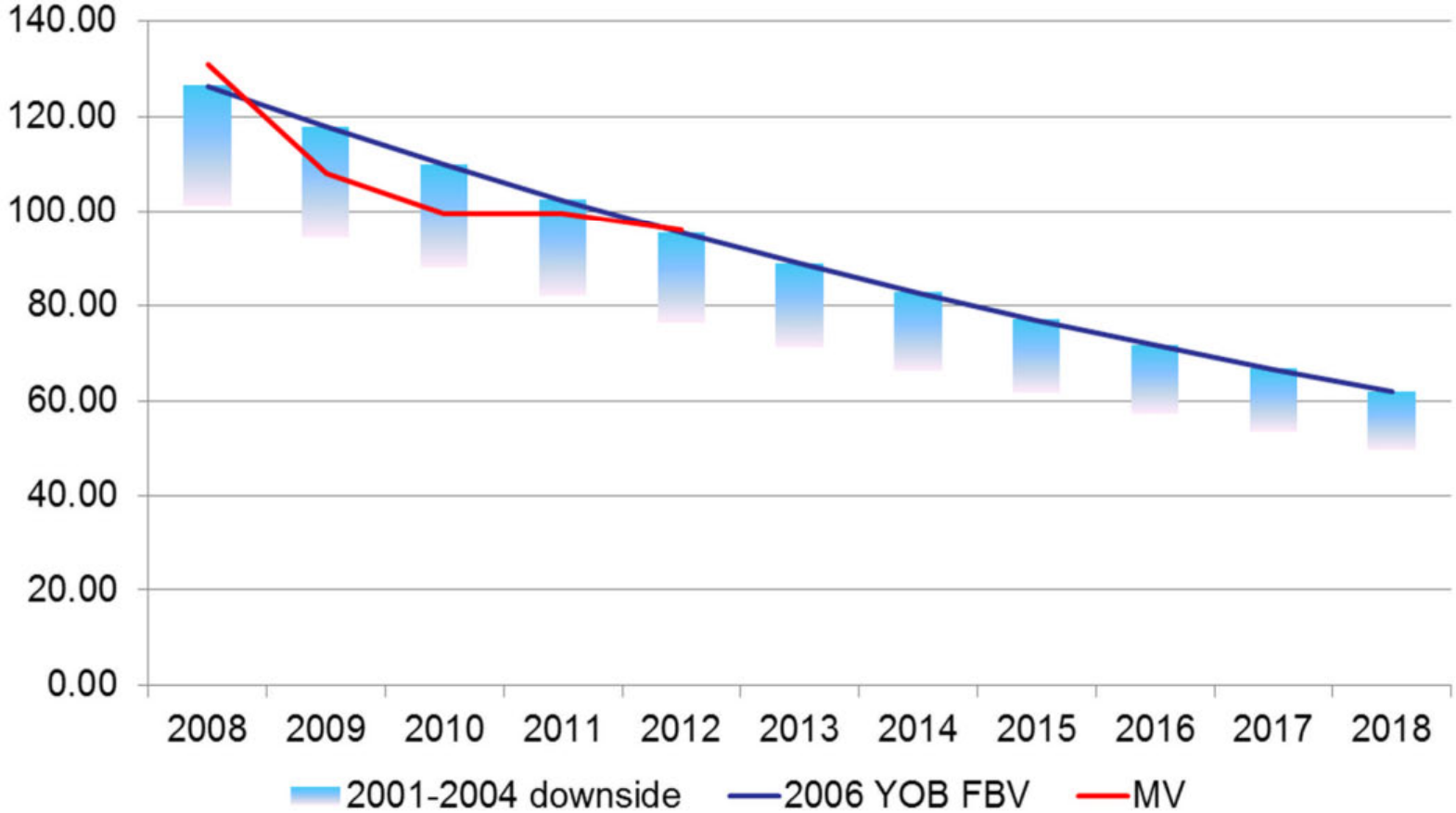
# Some MVs are holding up better

737-800



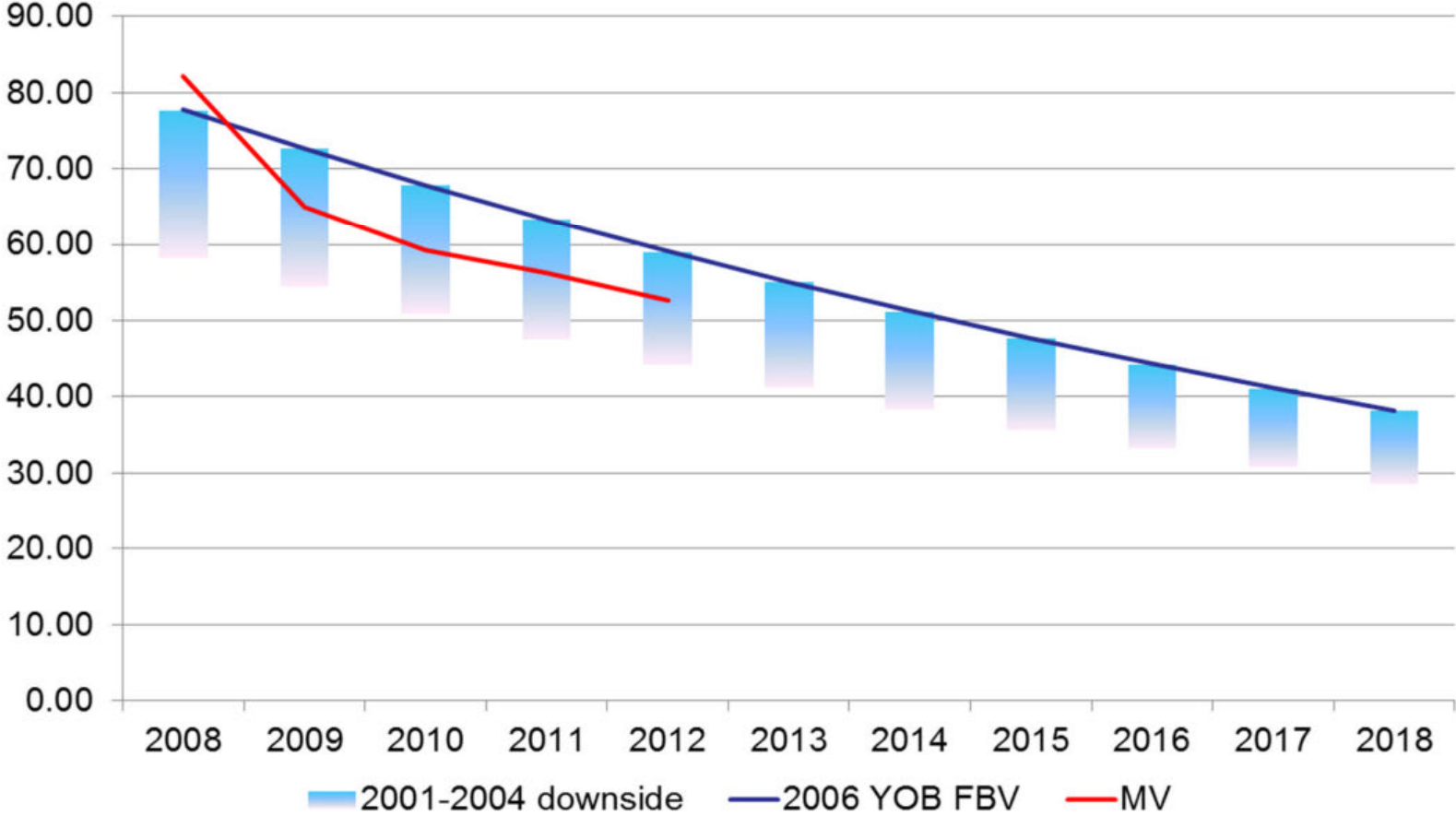
# Some MVs are holding up better

## 777-300ER



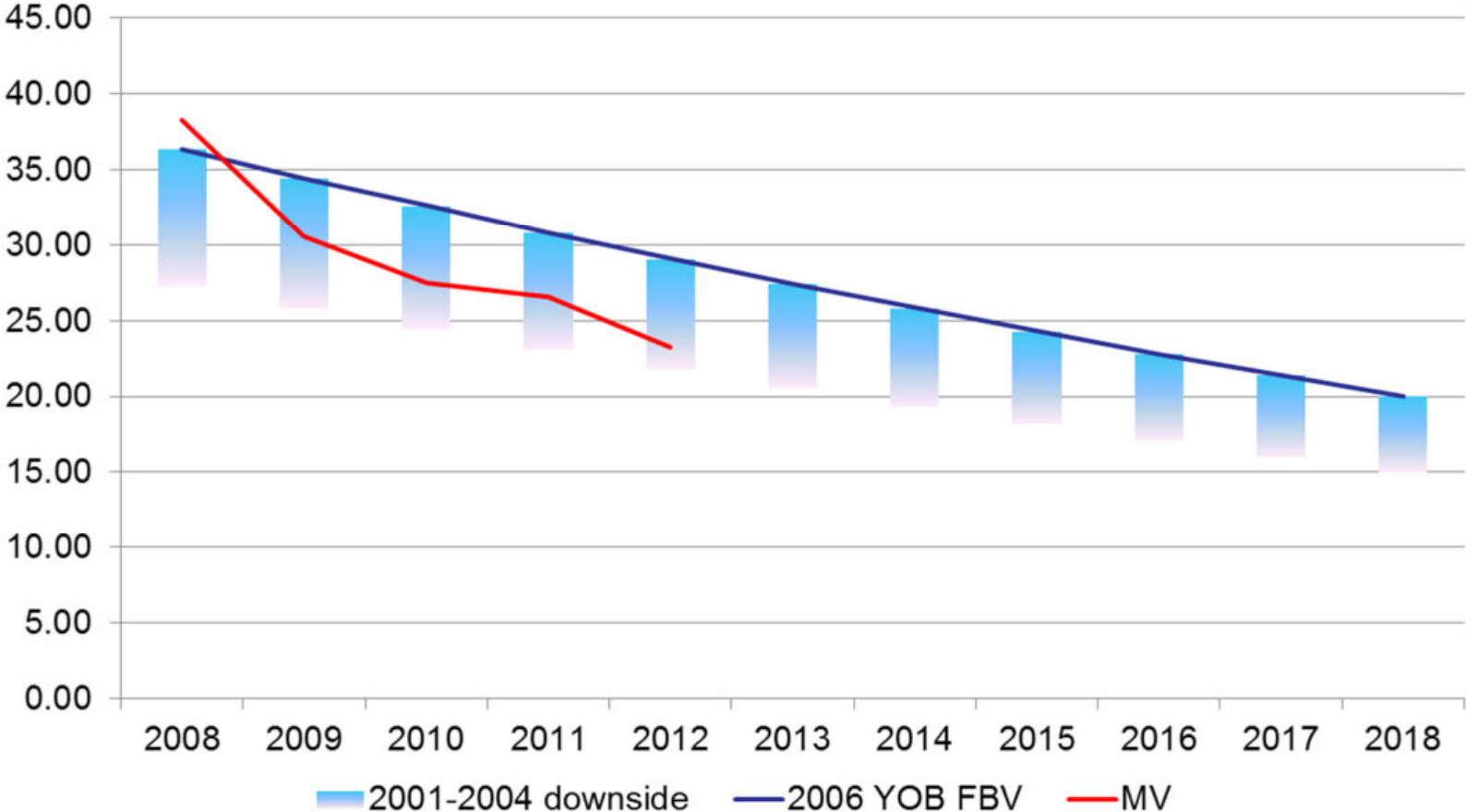
# Some MVs are holding up better

## A330-200



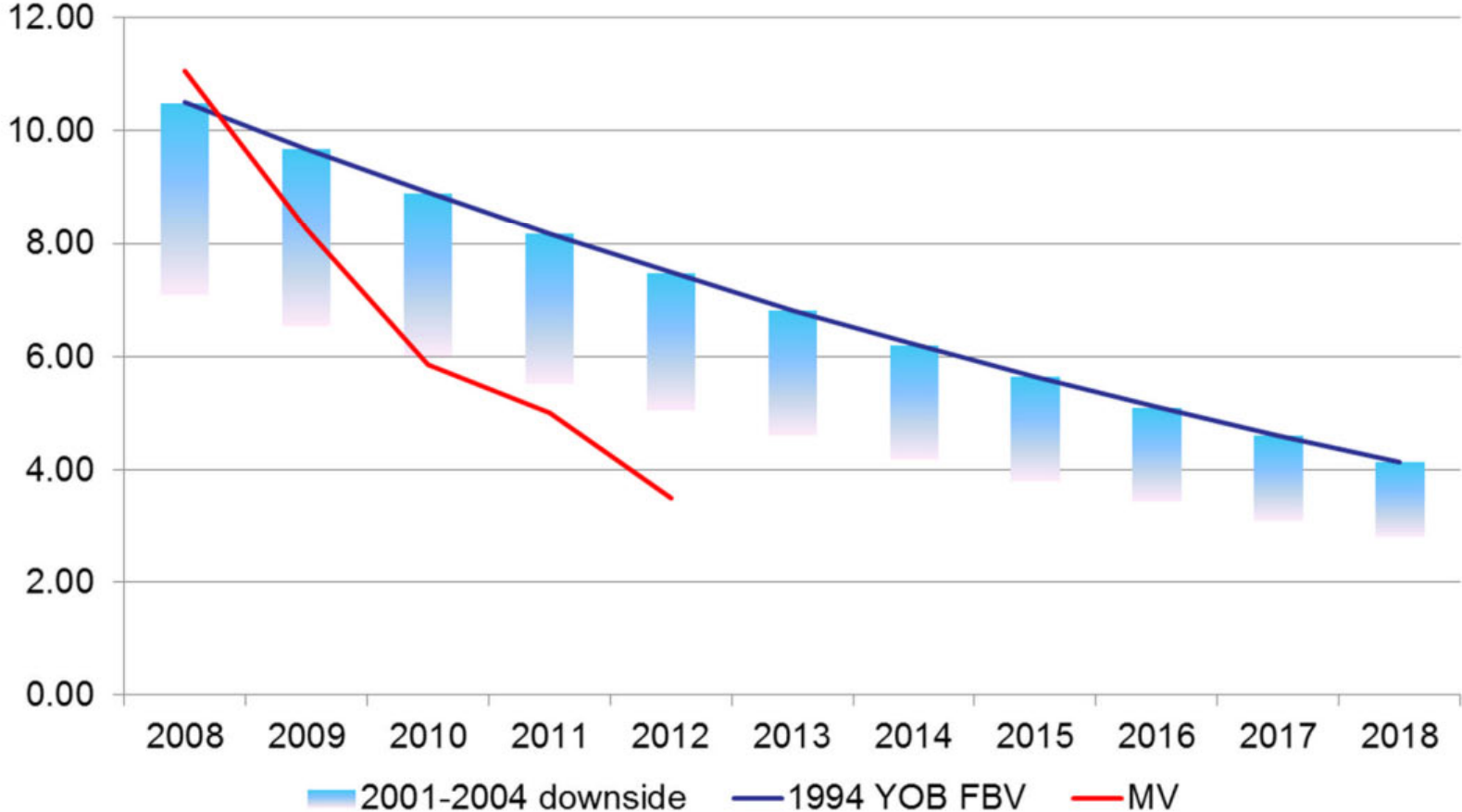
# But not all

### A320-200

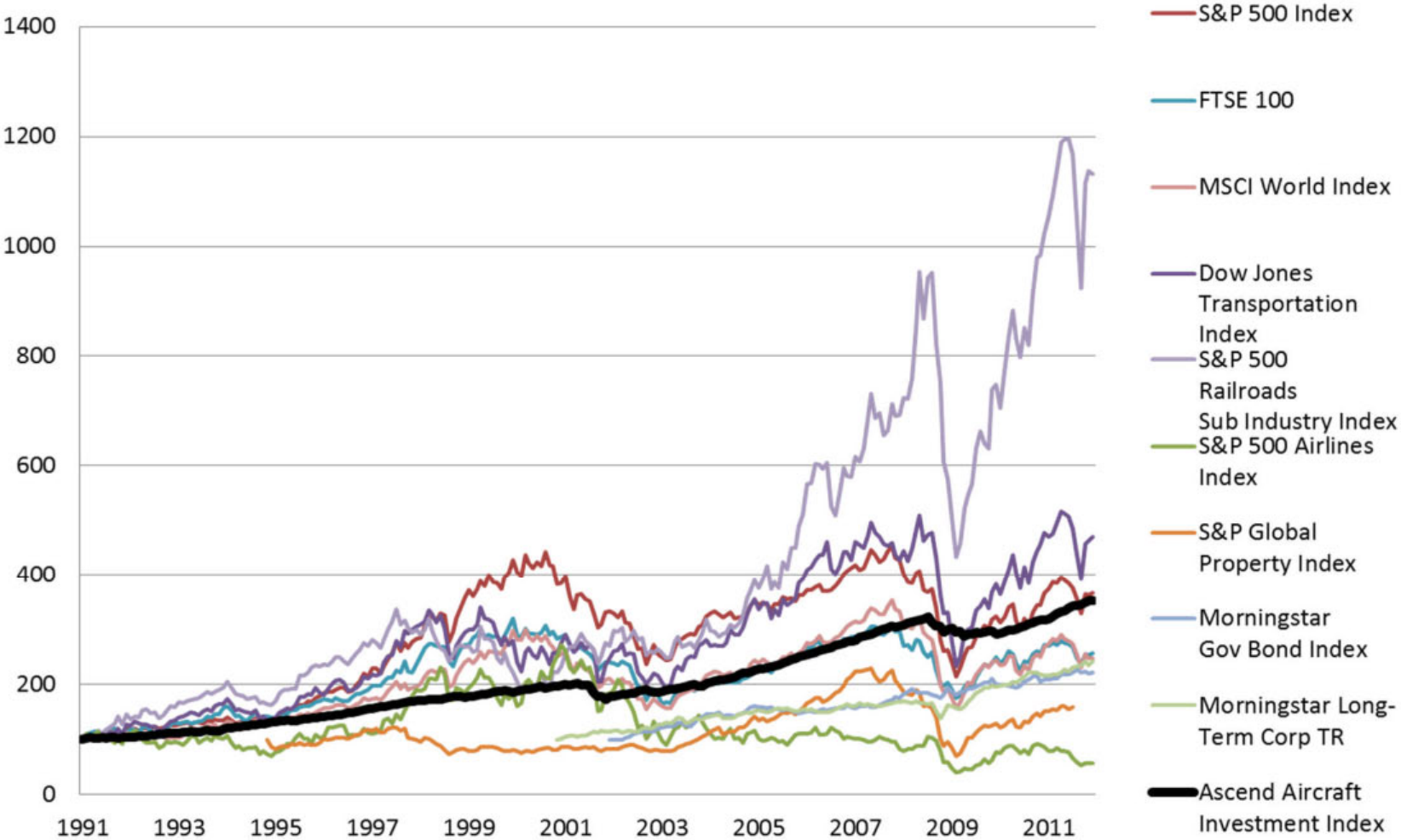


# And some are worse

737-400



# Operating lease returns have held up



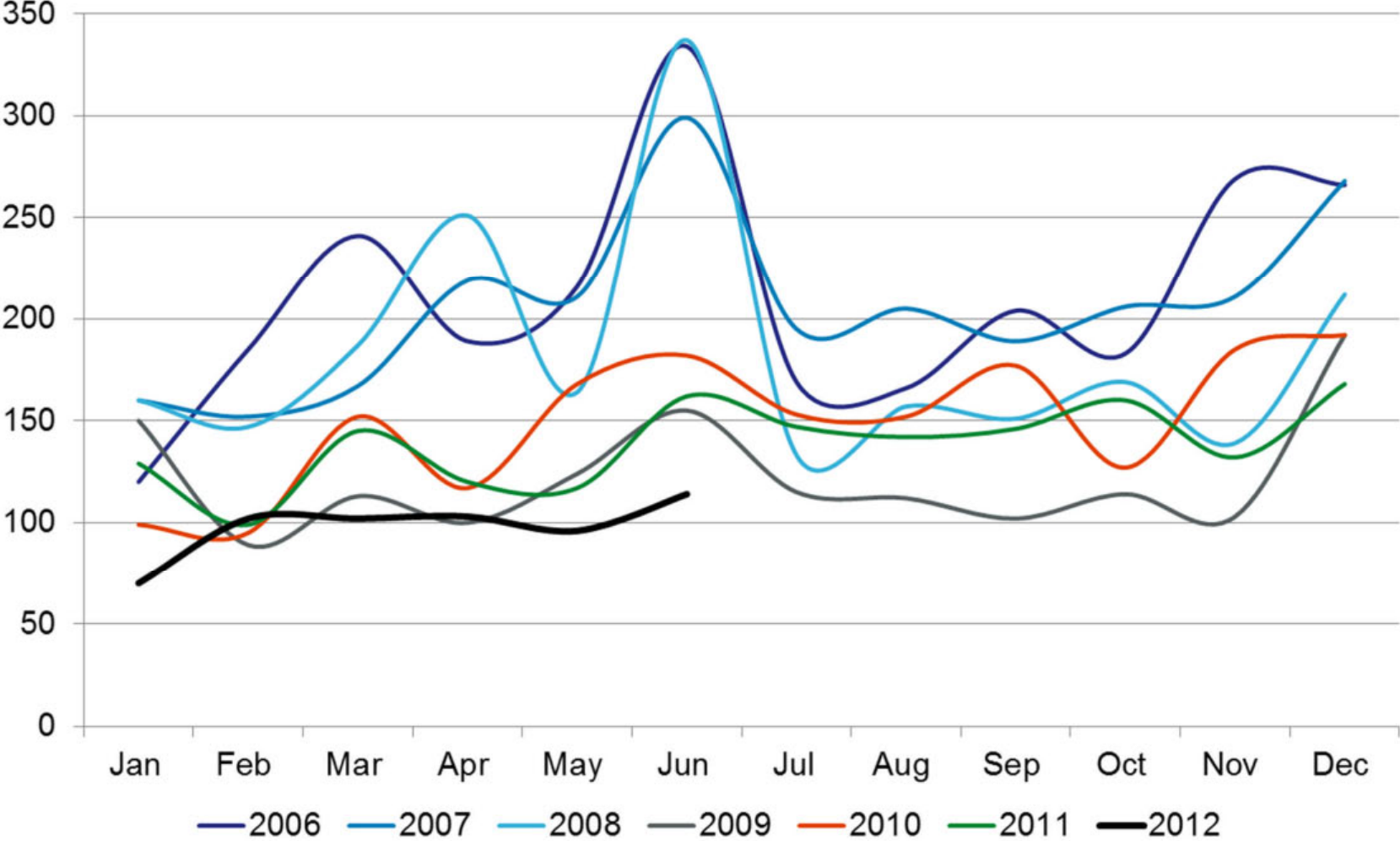
**So...**

**Why are we saying “this is the worst”?**

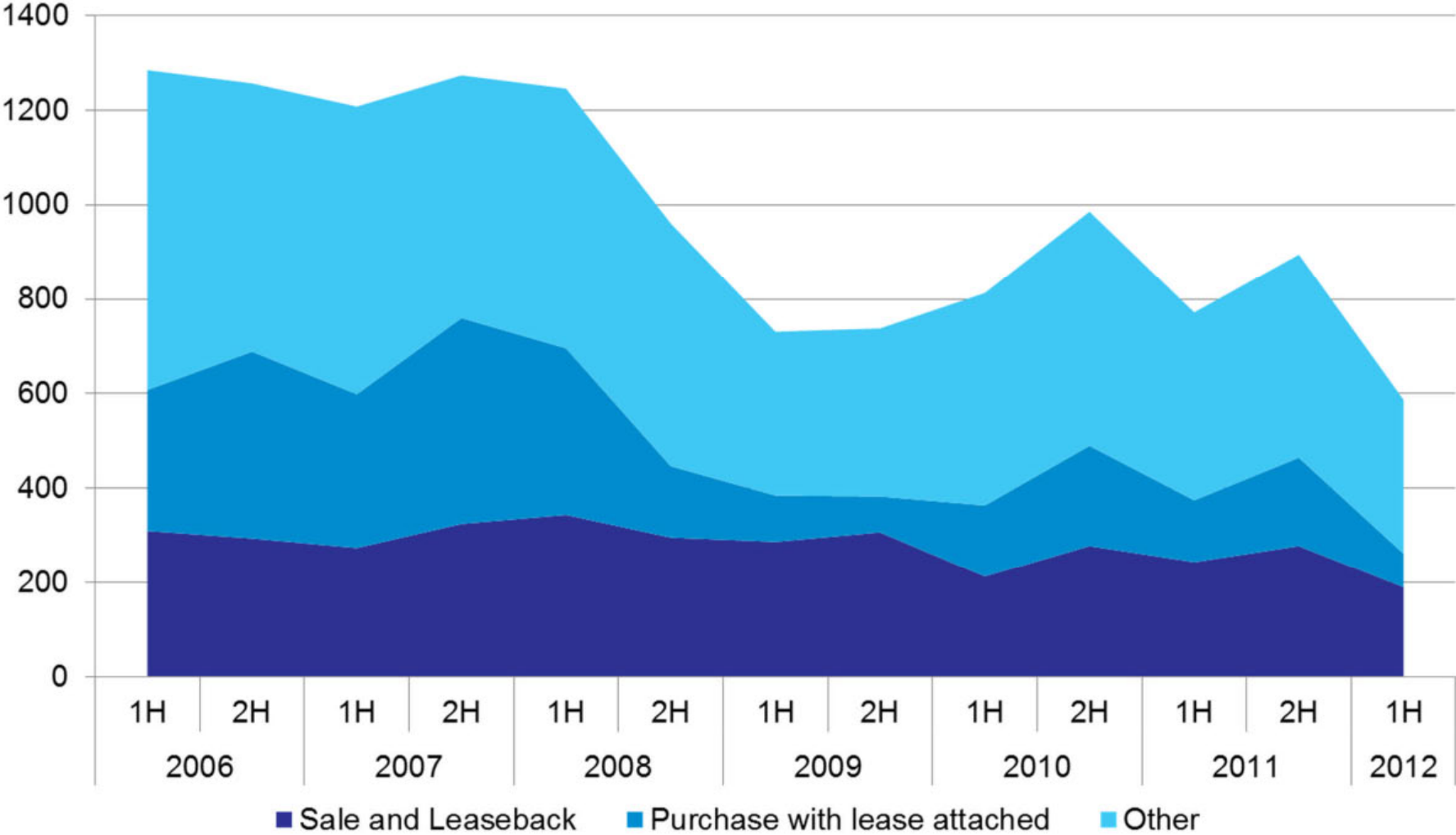




# Transaction counts are stubbornly low

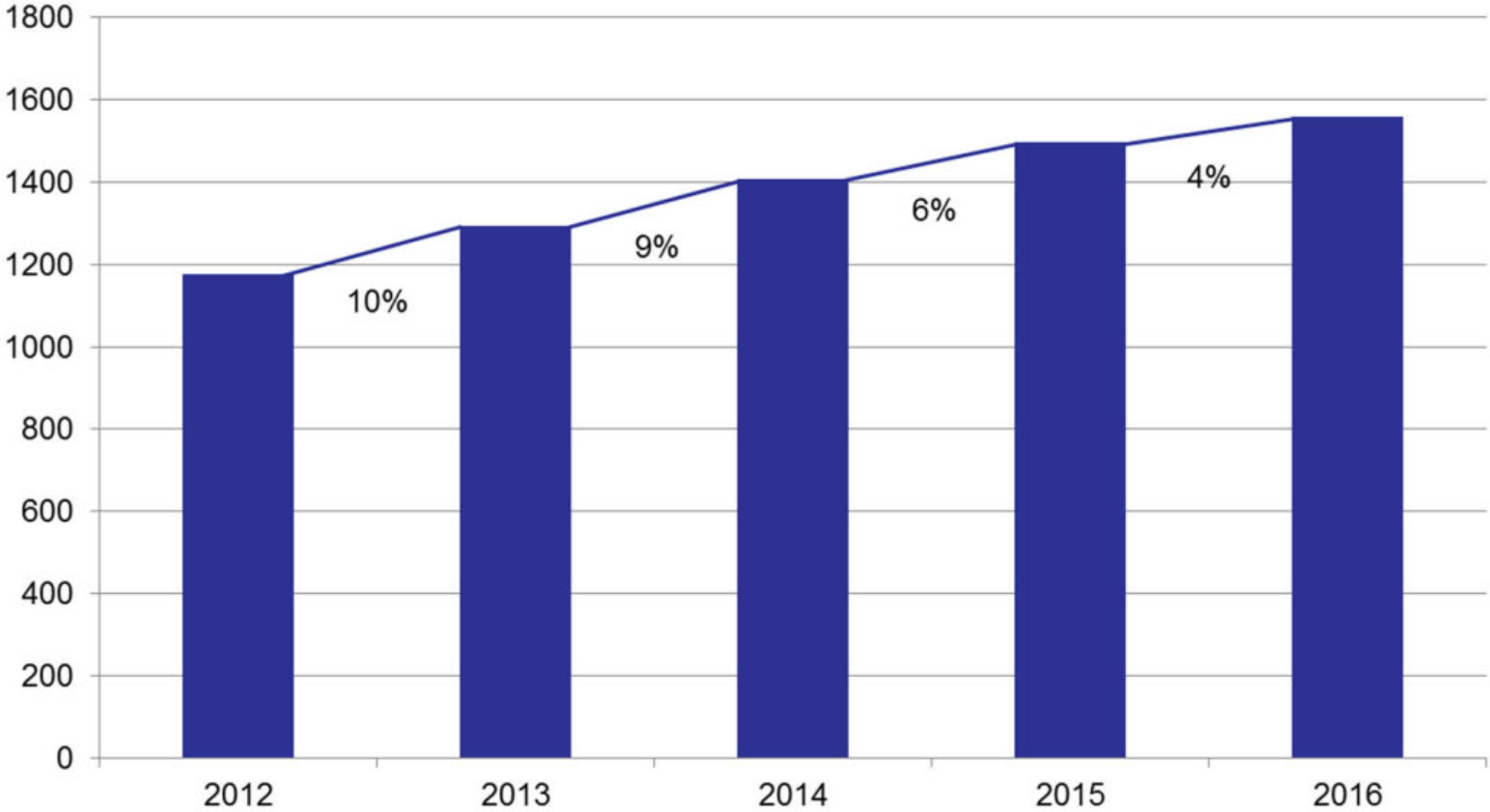


# And trades between lessors are low



# While the number of deliveries is rising

Delivery forecast 2012 to 2016



Each year brings a c.US\$10bn increase in required debt financing and a US\$4bn increase in required equity



# Conclusion

There are reasons to be cheerful

Recovery hinges on increased trading

Which depends on more finance for older aircraft

Which depends on more competition for new aircraft financing

Which is difficult with the increase in deliveries

And also depends on an improvement in the economy

Or is it all about Book Values?



## Hong Kong Business Briefing Diving for Pearls

**You can't always get  
what you want:**

**Focus on values**

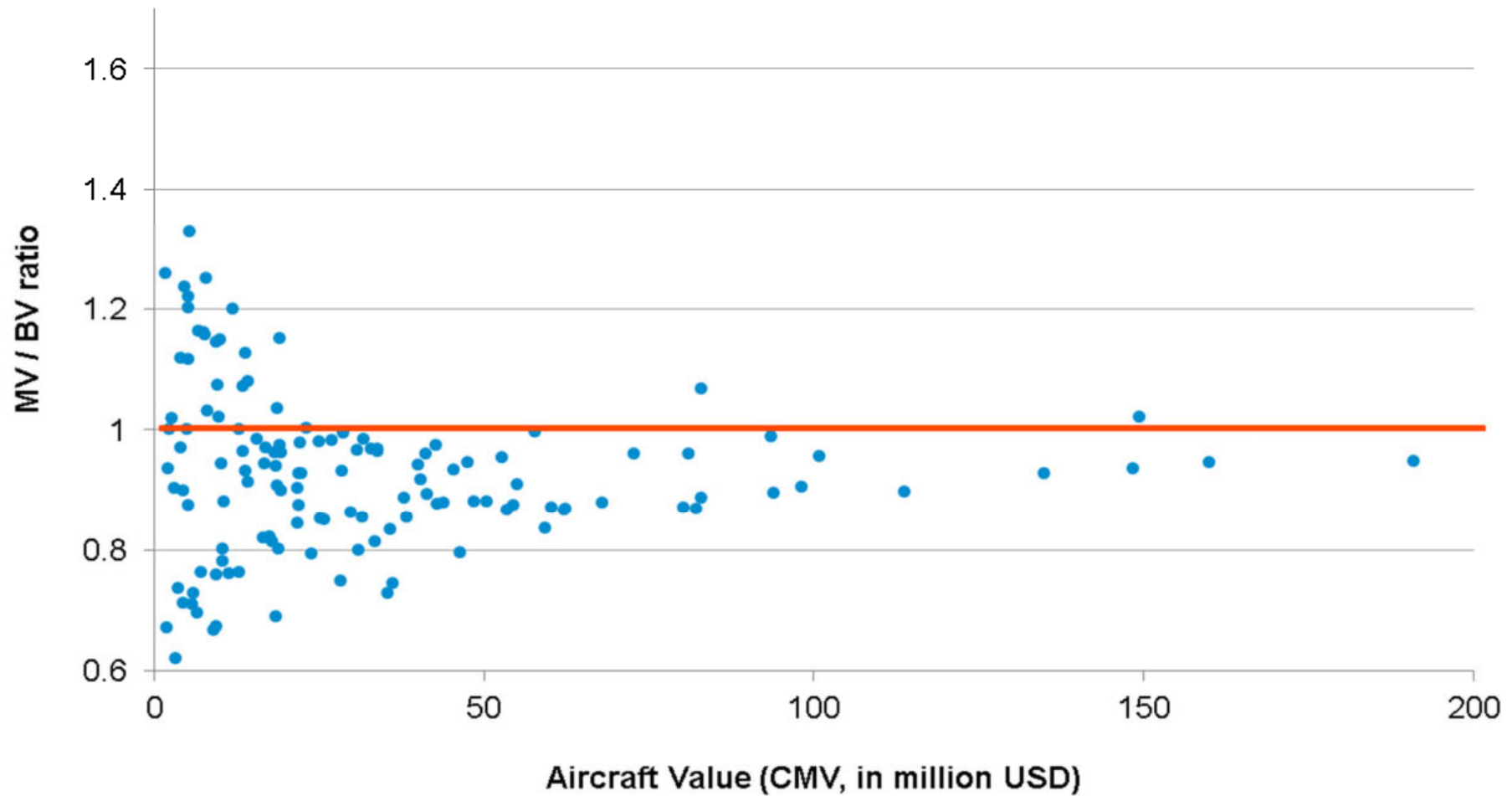
**Eddy Pieniasek**

Global Head of Consultancy



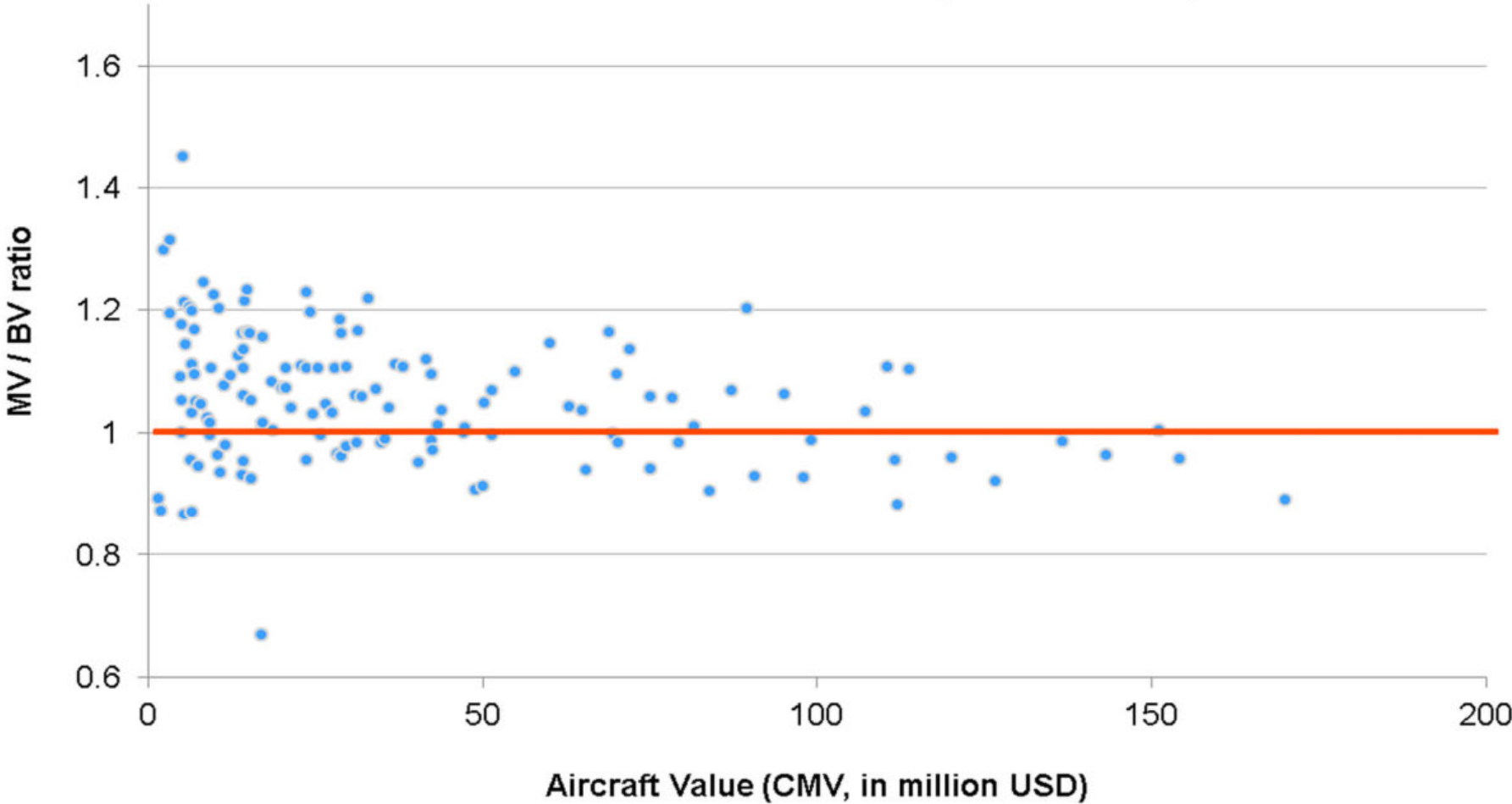
# What does the market look like now?

Market to Base Value Ratio (October 2012)



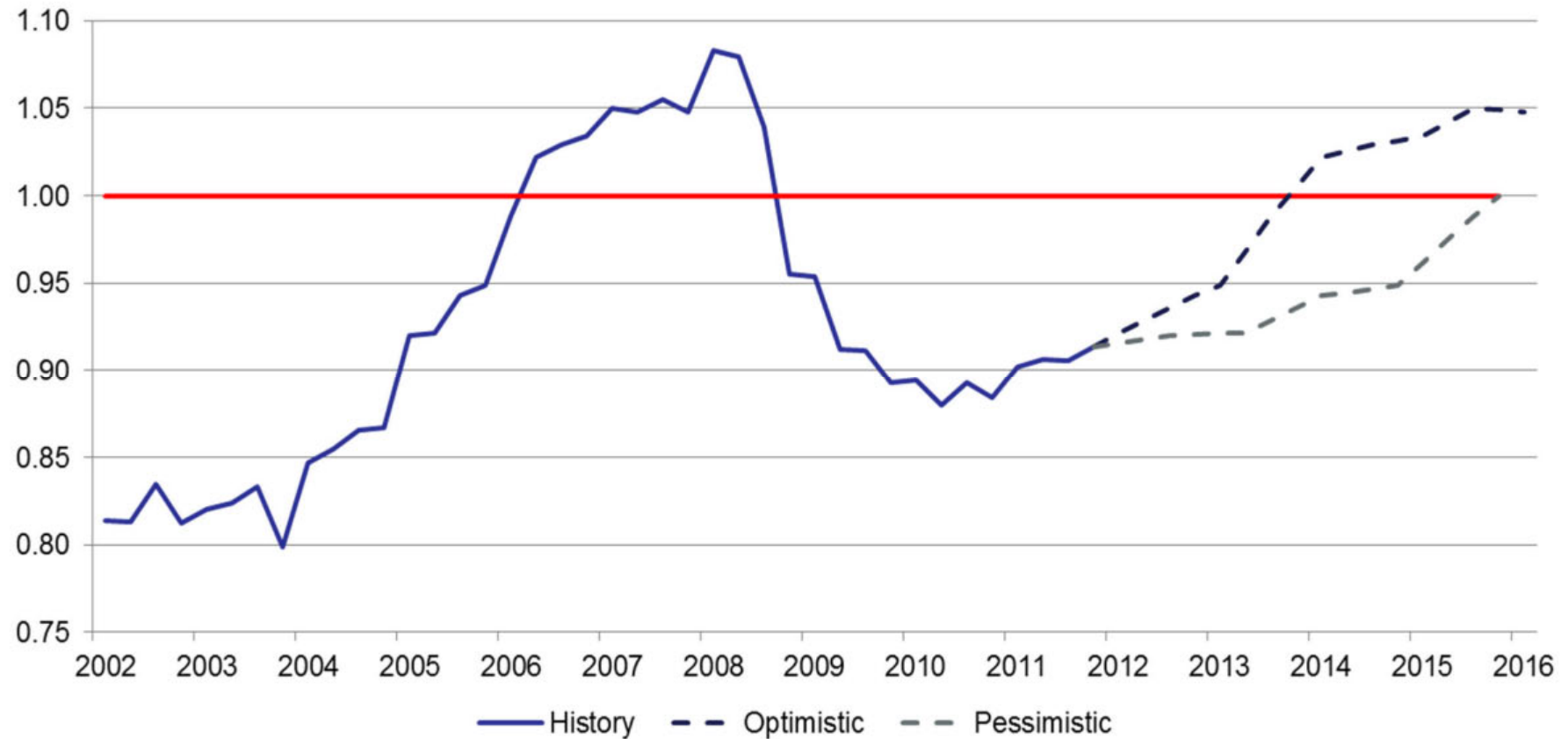
# Reminder of a strong market (2007)

Market Value to Base Value Ratio (October 2007)



# Market Value recovery forecast

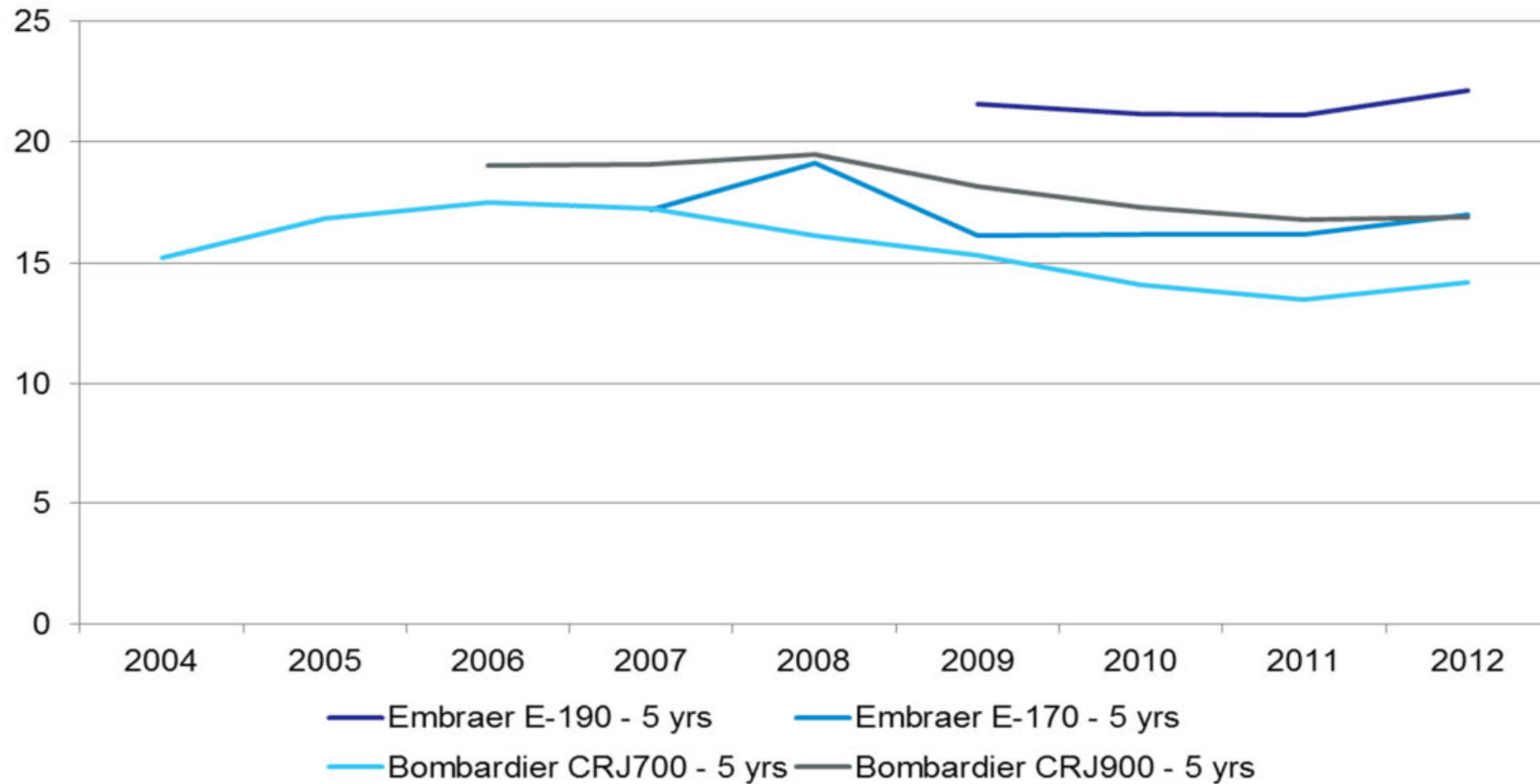
## MV/BV for in production types



**Pessimistic forecast seems more likely**



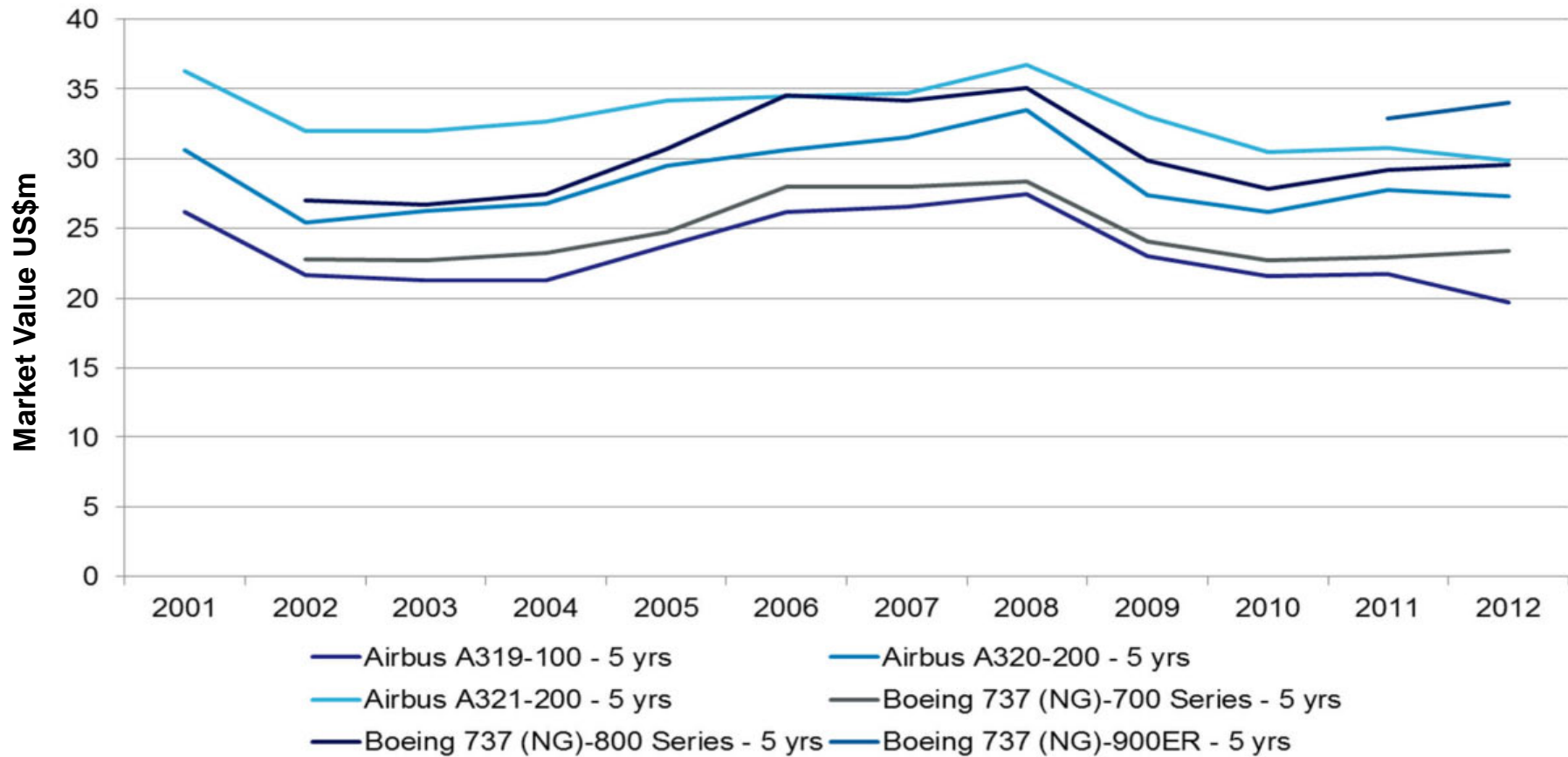
# Aircraft Value trends – Regional Jets



**RJs are among the least volatile aircraft types**



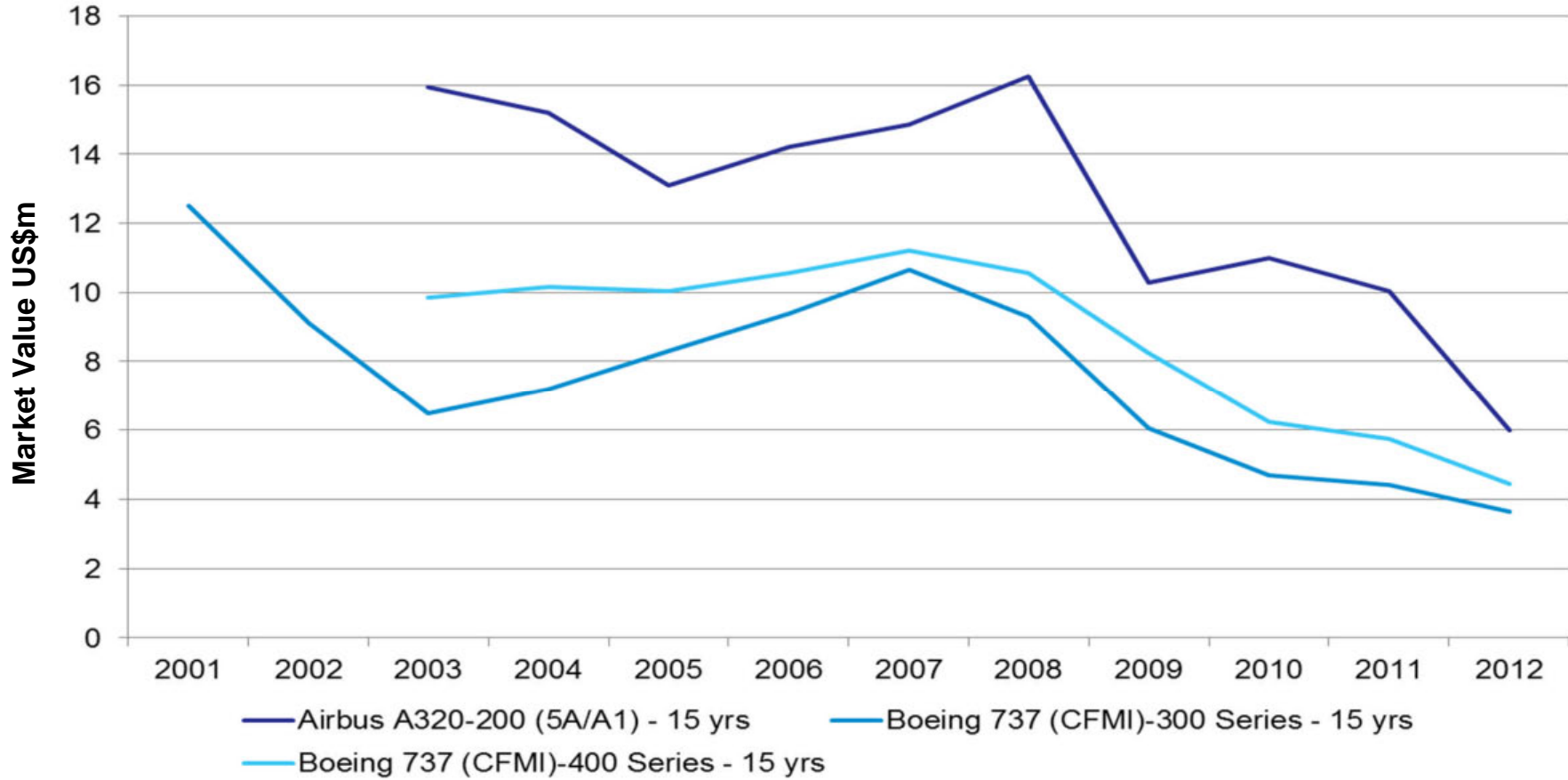
# Aircraft Value trends – Narrowbodies



**737 and A320 families going in opposite directions**



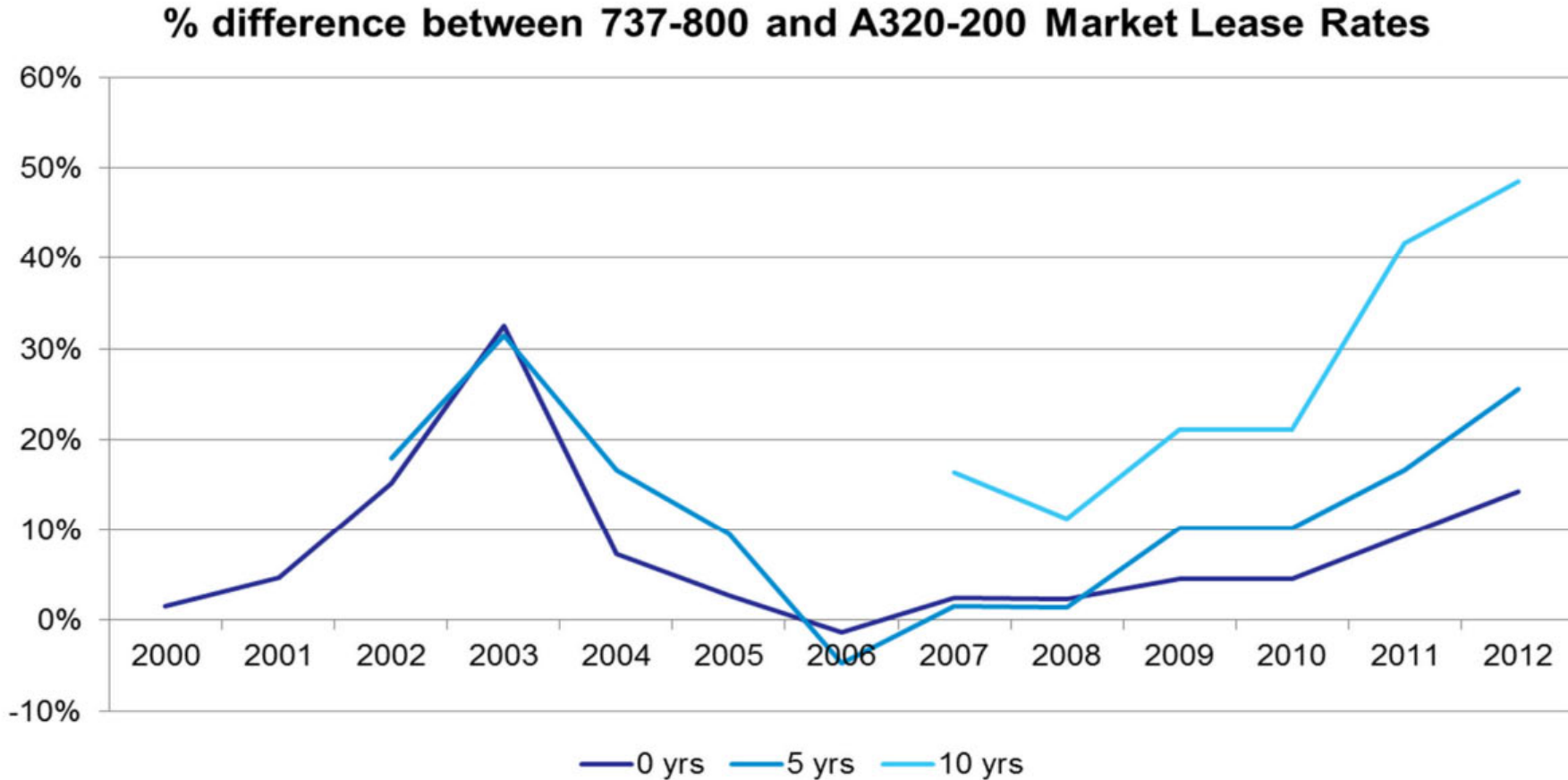
# Aircraft Value trends – Narrowbodies



**Out of production aircraft – limited scope for recovery**

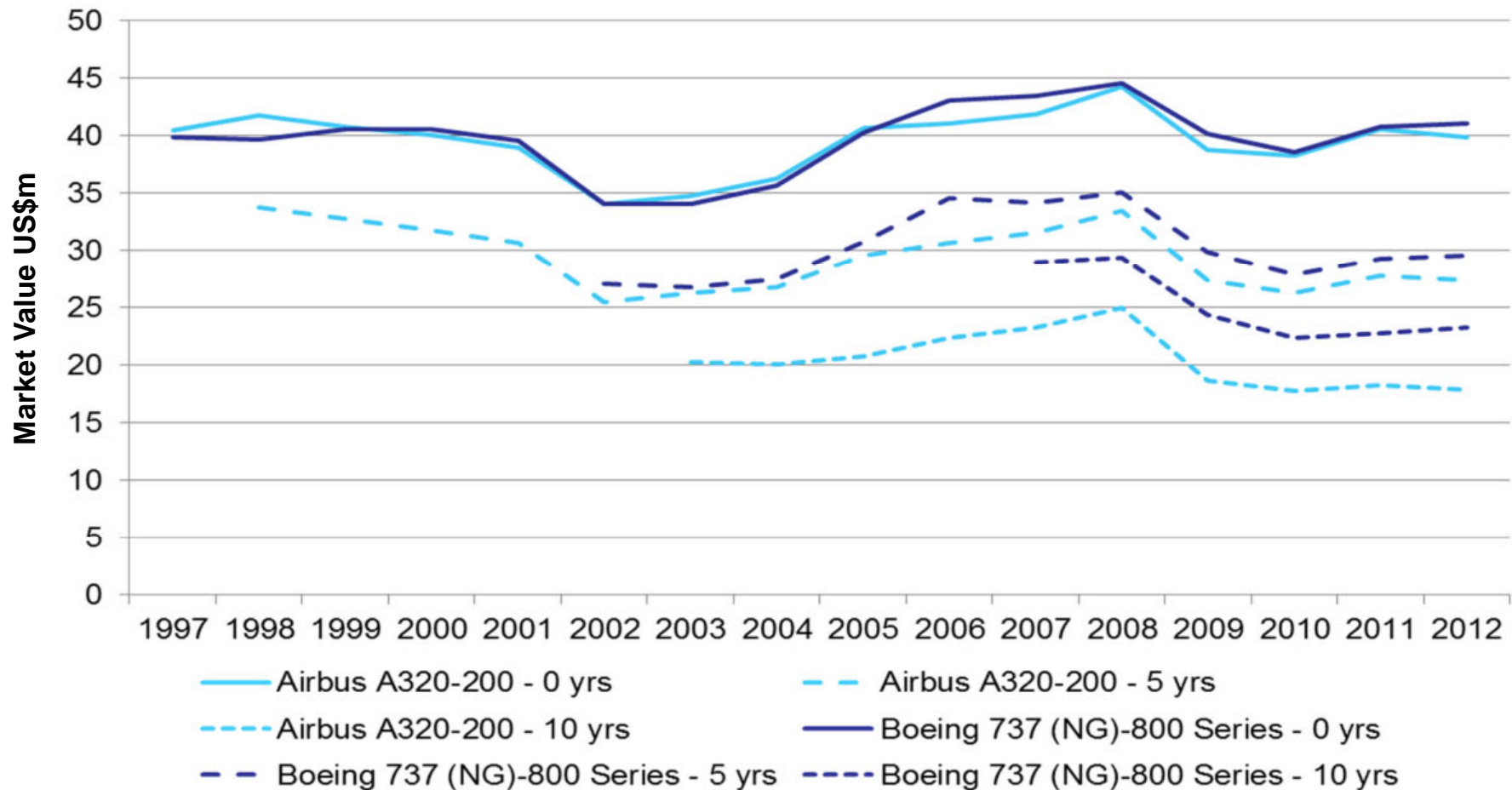


# A320 and 737-800 lease rate spread



**The 737-800 has outperformed in downturns**

# A320 and 737-800 values – widening gap for older aircraft



# Why is the A320 underperforming?

Fewer seats on the A320

Airbus production between 2002 and 2005 now up for re-lease

Higher proportion with lessors (c.20 lessors own A320s but do not own 737-800s)

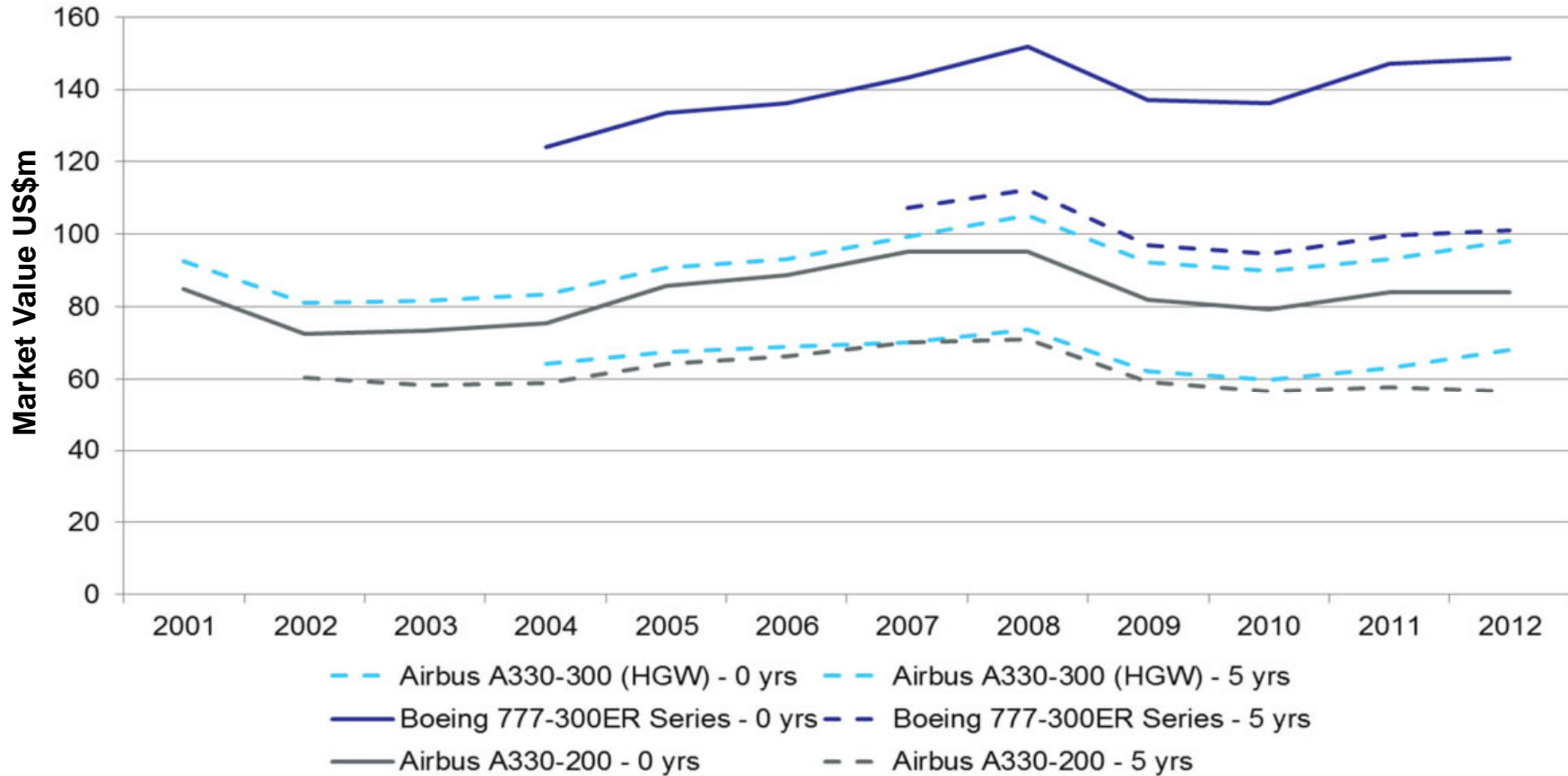
Higher number of speculative orders for the A320 (45% more)

A320 presence with smaller airlines (average fleet size is 12 aircraft per operator compared to 18 for the 737-800)

**No one reason but several smaller ones**



# Aircraft Value trends – Widebodies



**In production widebodies are leading the recovery**



# Base Values

For fixed wing and rotary -  
no big changes  
in the July update



Out of production narrowbodies  
are on negative watch

Manufacturer	Boeing
Aircraft Type	737 (NG)
Aircraft Variant	800 Series
Year of Build	2012
MTOW	155500
Engine	CFM56-7B24
Sustained Inflation Rate	2.0
Forecast Horizon	2033
Include soft market	<input checked="" type="checkbox"/>
Include full life values	<input checked="" type="checkbox"/>

Default inflation rate is now 2.0%  
This can still be changed when  
an enquiry is performed



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