

# Outperforming The Economy

## Aviation/Defense Industry Overview And Forecast

### **Presentation To The Aerospace Alliance Summit**

Sandestin, FL

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[www.tealgroup.com](http://www.tealgroup.com)

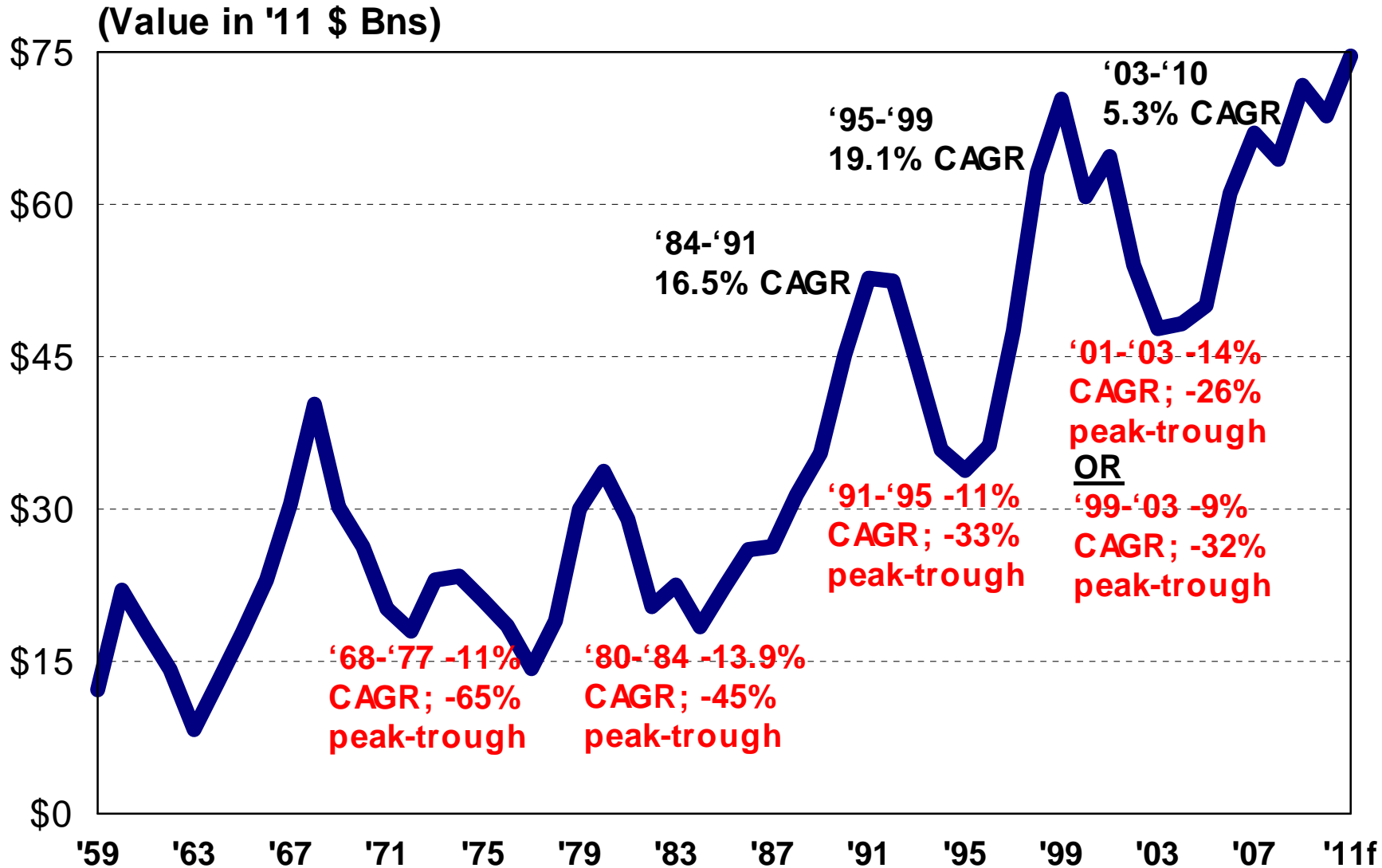
September 2011

# The Great Boom, Followed By Wildly Divergent Markets

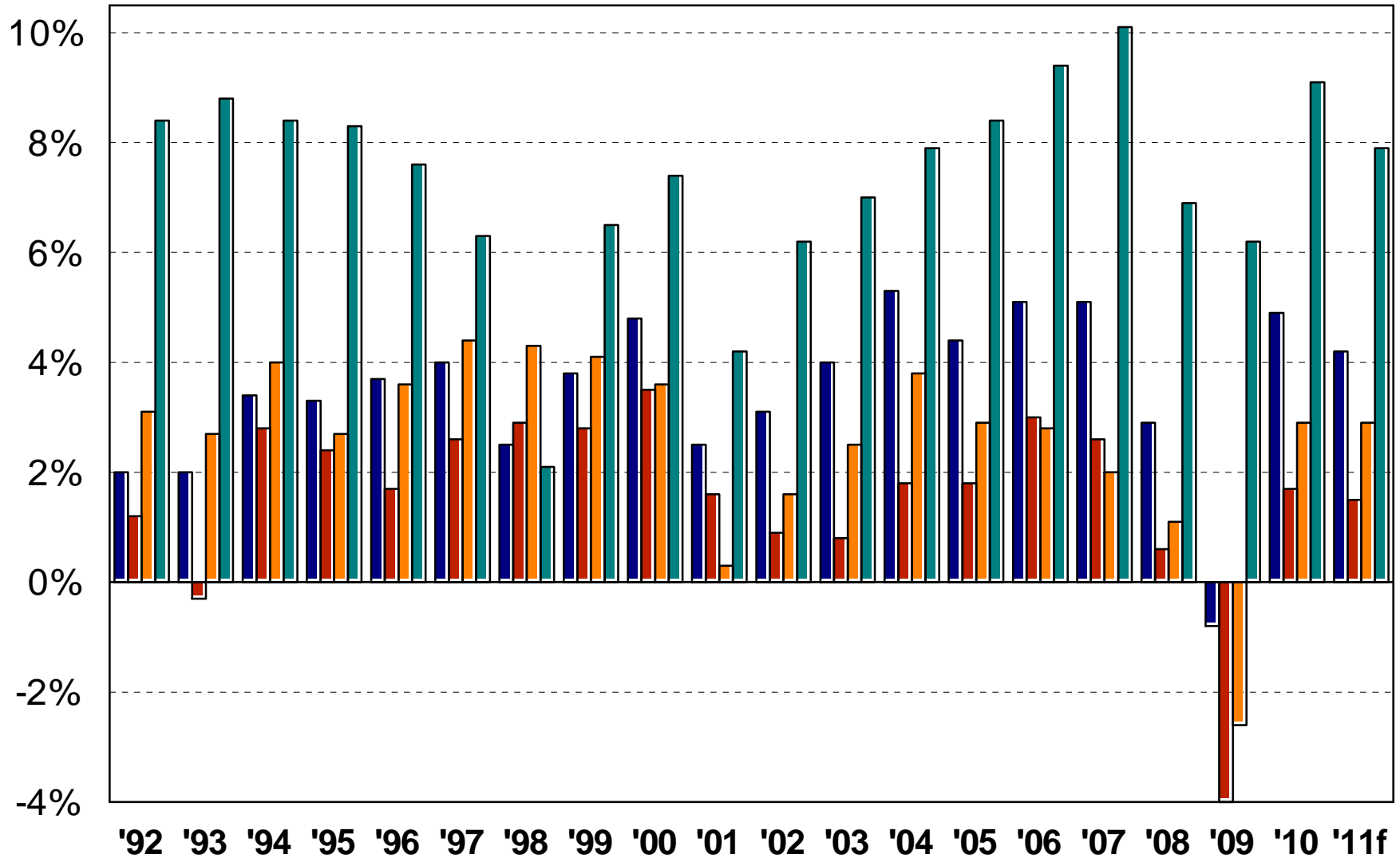
<u>Market</u>	<u>CAGR</u> <u>'03-'08</u>	<u>'08-'09</u>	<u>'09-10</u>
<b>Large Jetliners</b>	7.0%	13.6%	-2.3%
<b>Business Aircraft</b>	17.3%	-23.0%	-13.2%
<b>Regionals</b>	1.2%	-4.9%	-19.6%
<b>Civil Rotorcraft</b>	17.1%	-13.4%	-14.4%
<b>Military Rotorcraft</b>	7.9%	22.1%	5.5%
<b>Fighters</b>	2.2%	12.8%	-2.2%
<b>Military Transports</b>	3.2%	6.9%	2.1%
<b>Total</b>	<b>7.4%</b>	<b>5.0%</b>	<b>-4.5%</b>

# Cycles...Remember Them?

## Commercial Transport Deliveries By Value



# GDP Year/Year Growth Rates

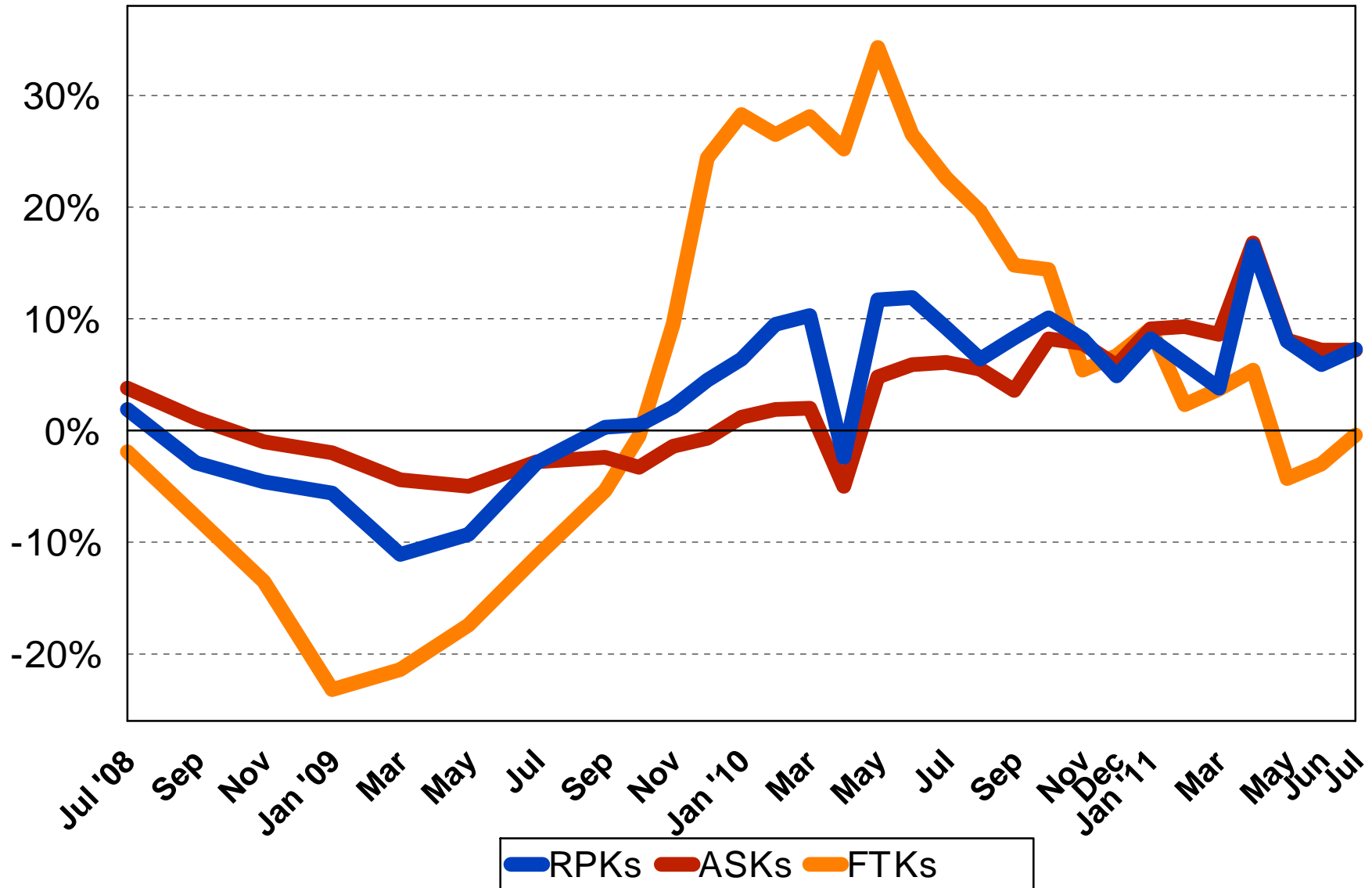


■ World 
 ■ EU 
 ■ US 
 ■ Asia Ex-Japan

Source: Morgan Stanley



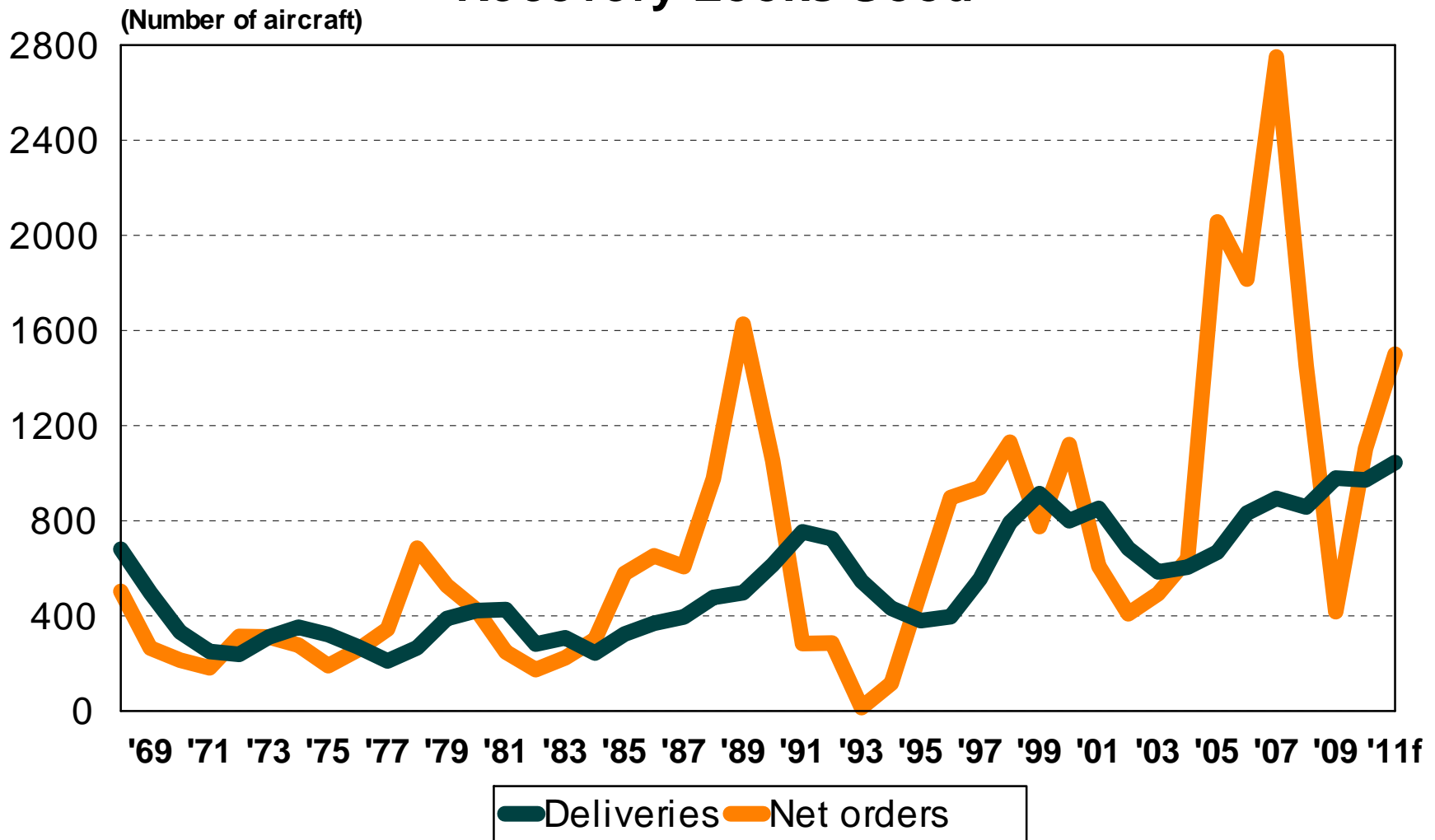
# Y/Y Traffic: Strong Recovery; Watch Freight



Source: IATA

# Historical Jetliner Orders And Deliveries

Four Great Book-To-Bill Years, Followed By A Cliff Dive;  
Recovery Looks Good

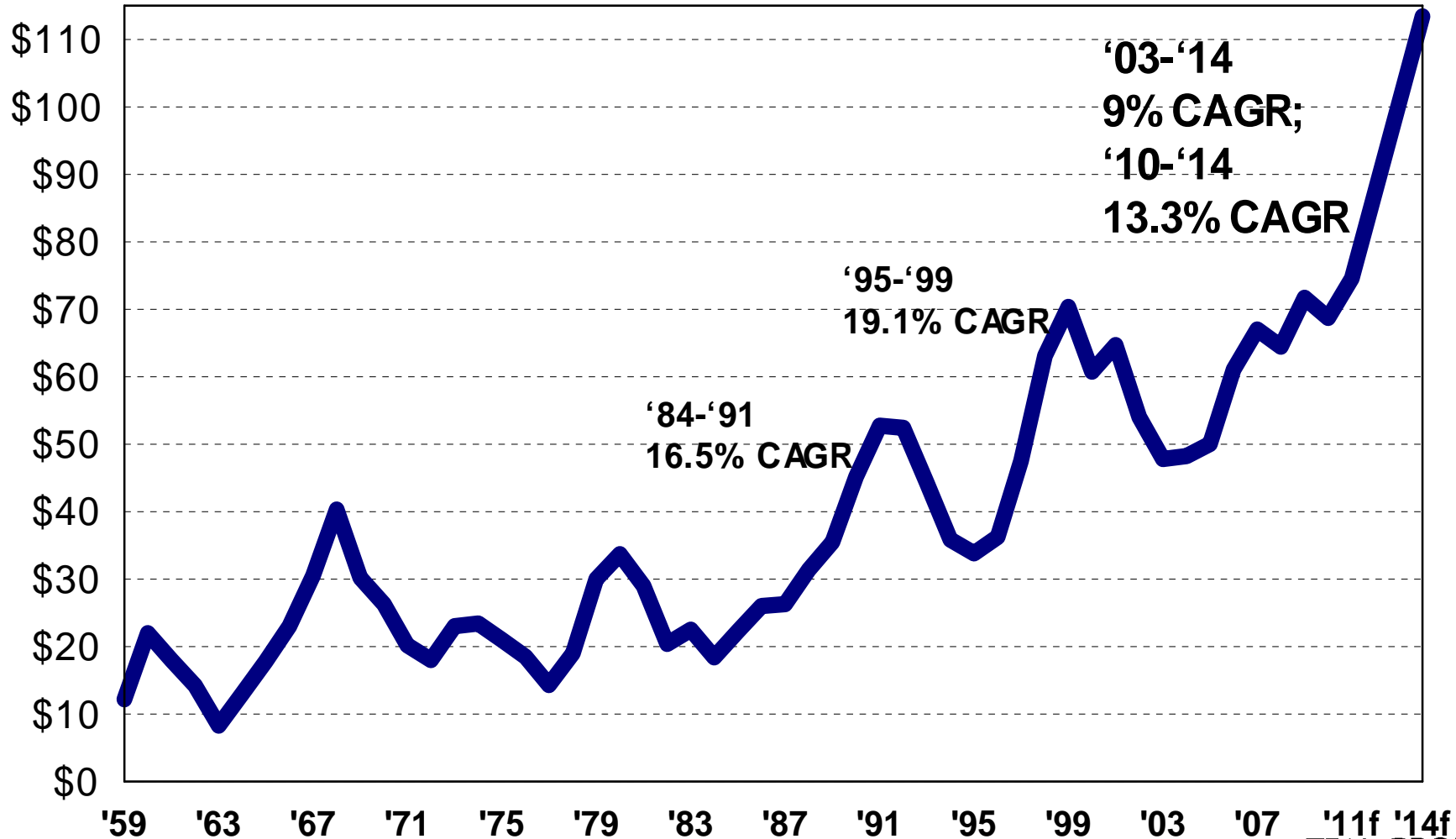


All Airbus and Boeing aircraft

# Do You Believe In Super Cycles?

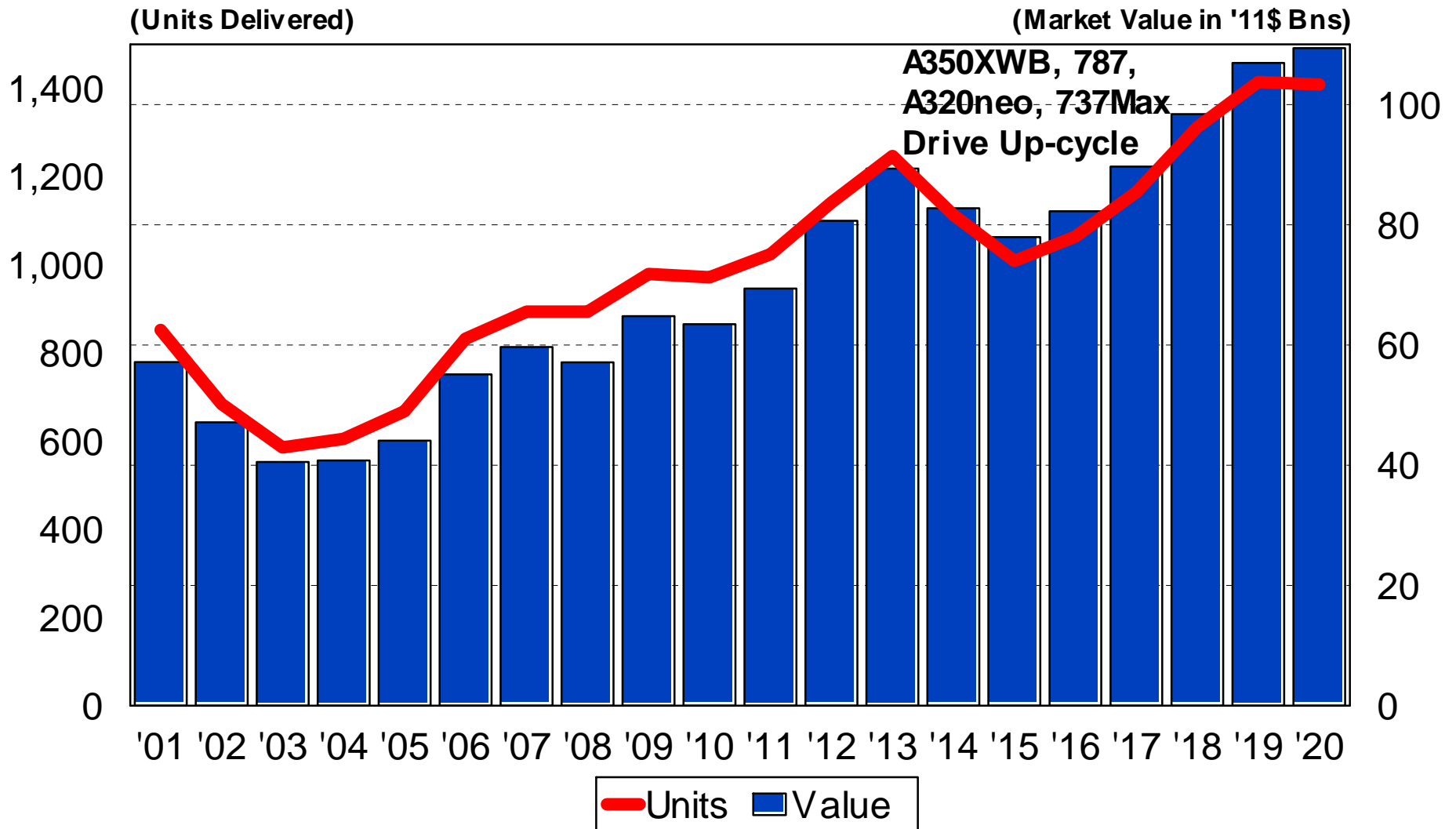
## OEM Plans For Commercial Transport Deliveries By Value

(Value in '11 \$ Bns)



# Commercial Jetliners History And Forecast

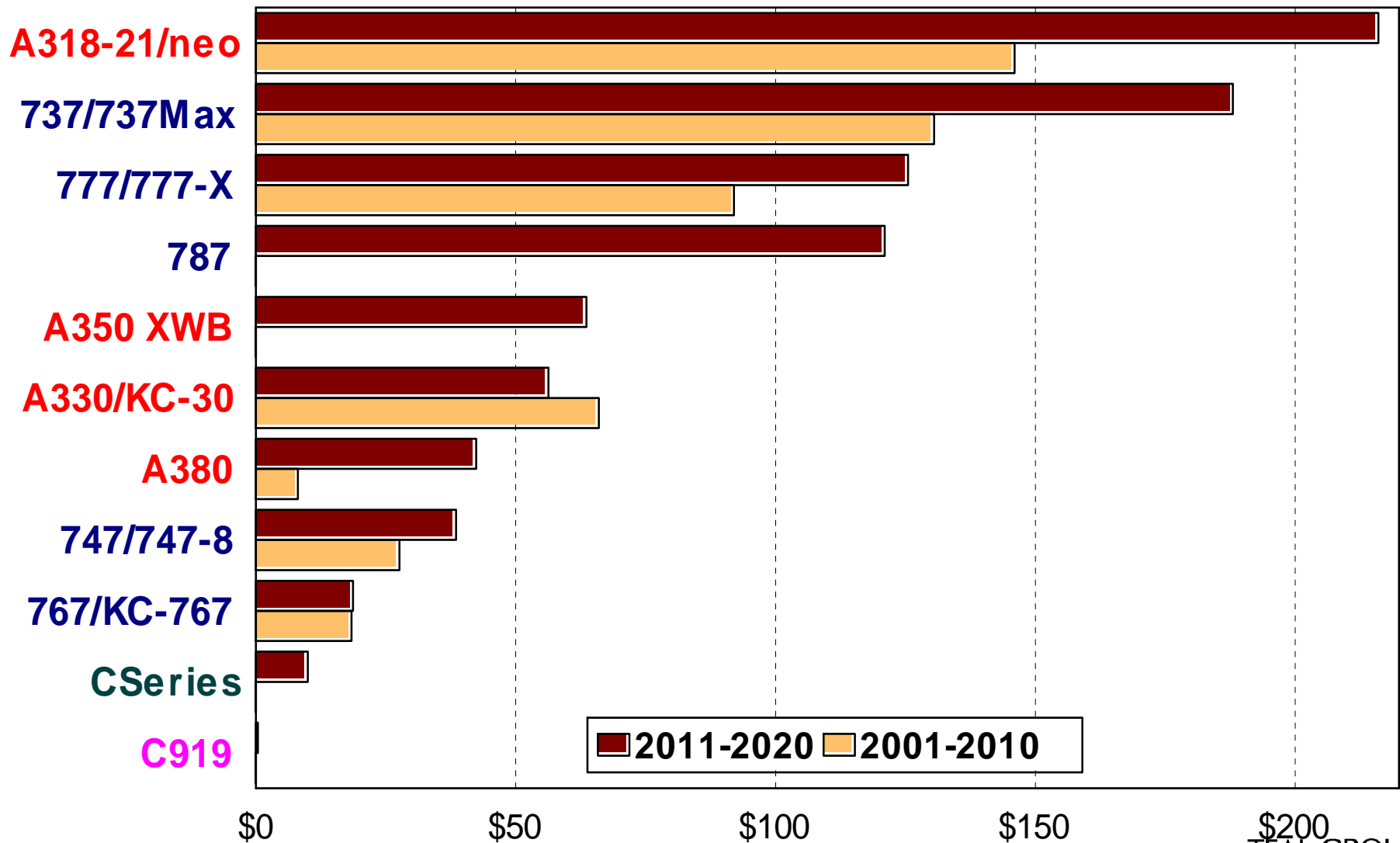
## Dangerous Words: It Really Is Different This Time



Airbus, Boeing, CSeries, C919 only; includes KC-46

# Jetliner Programs: The Importance Of Volume

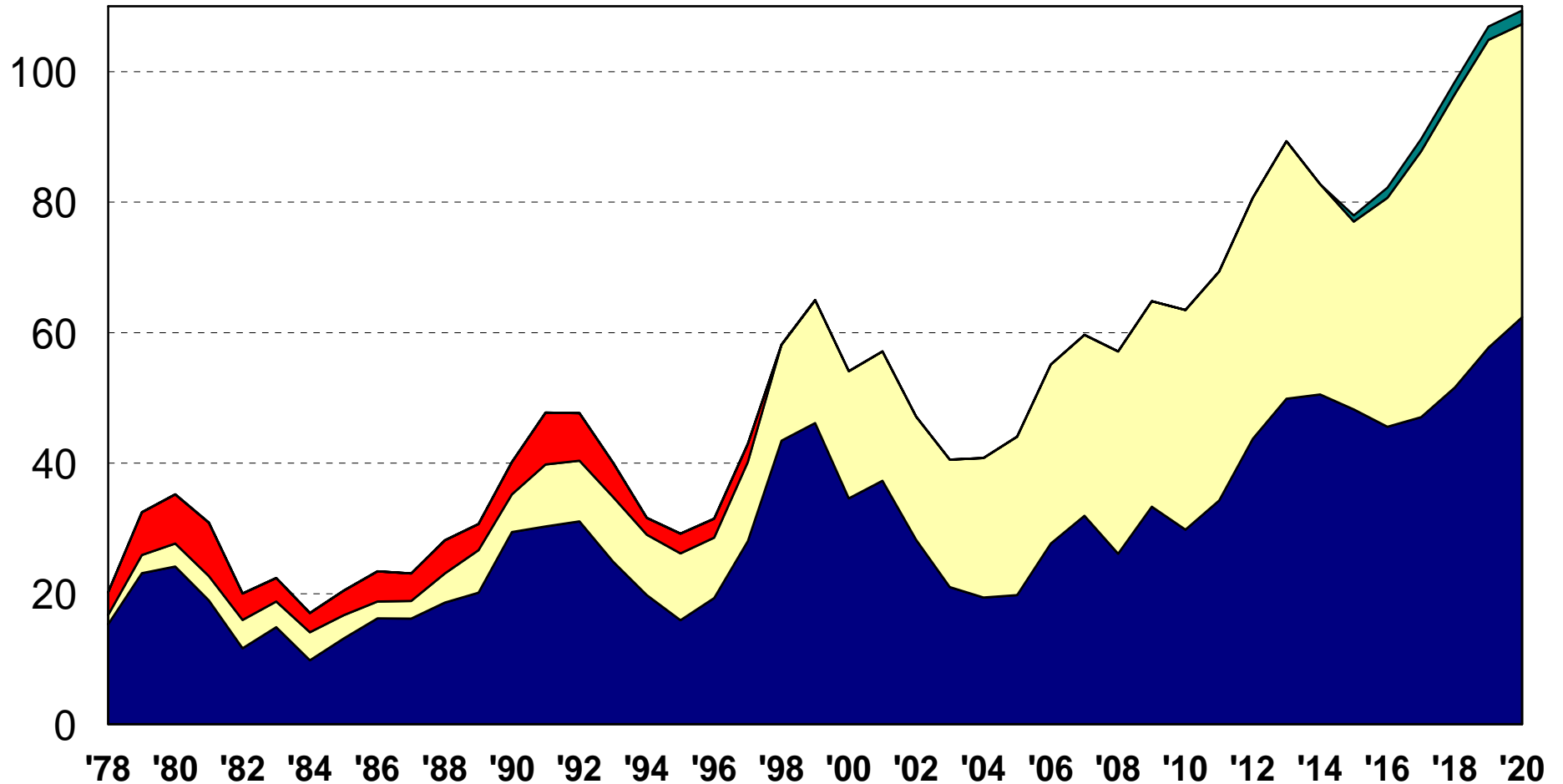
Cumulative Deliveries Value in '11 \$ Bns



# Market Share Outlook By Deliveries Value

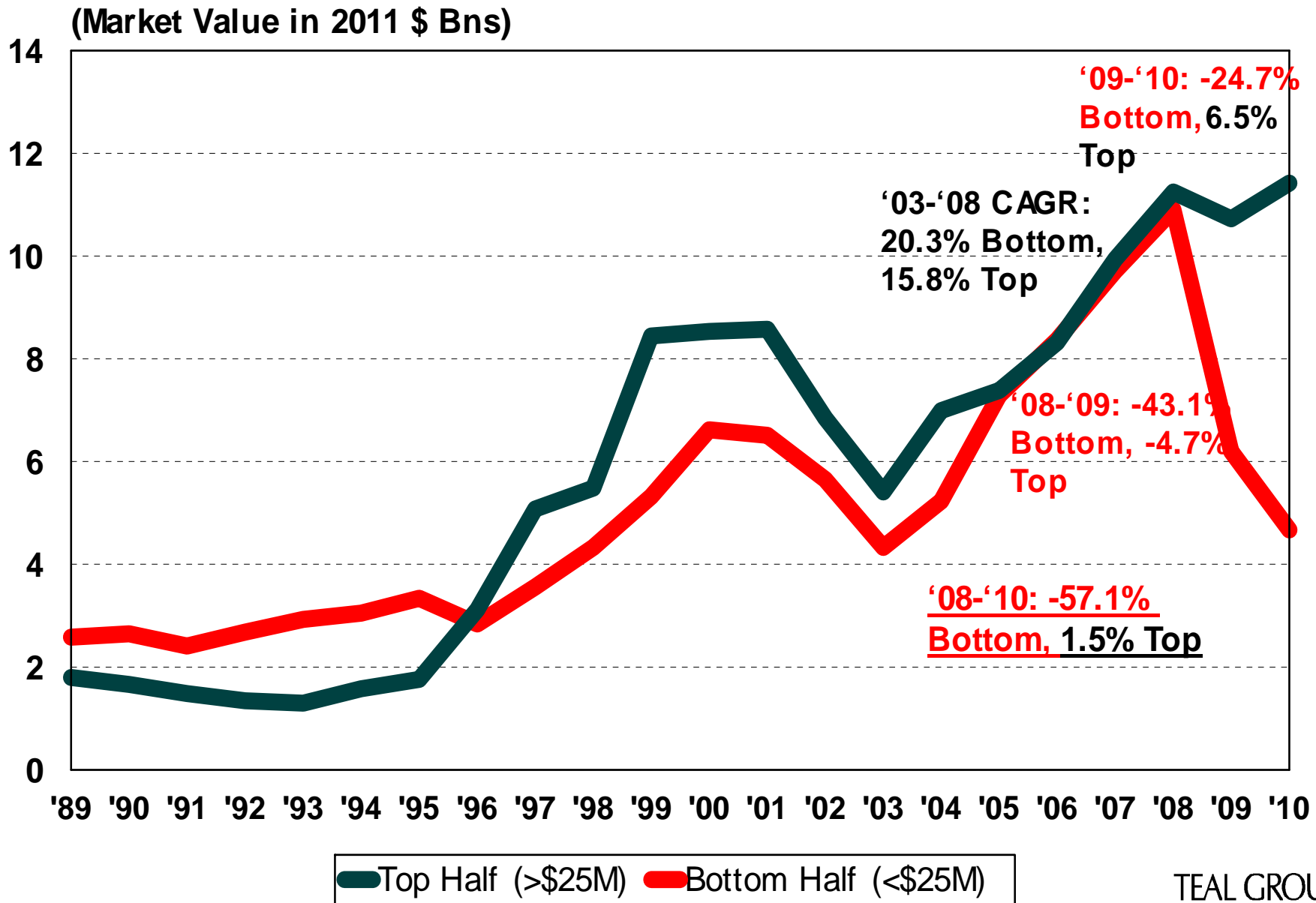
Assumes A350 XWB EIS 2Q2015

(Value in '11\$ Bns)



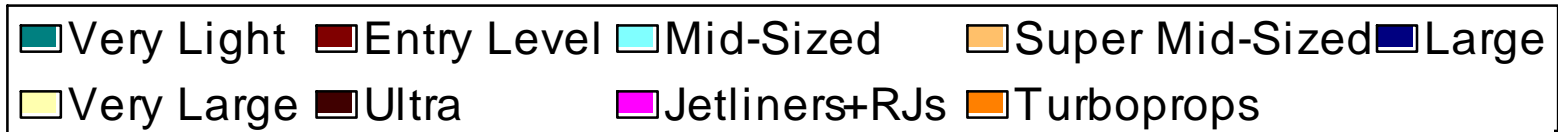
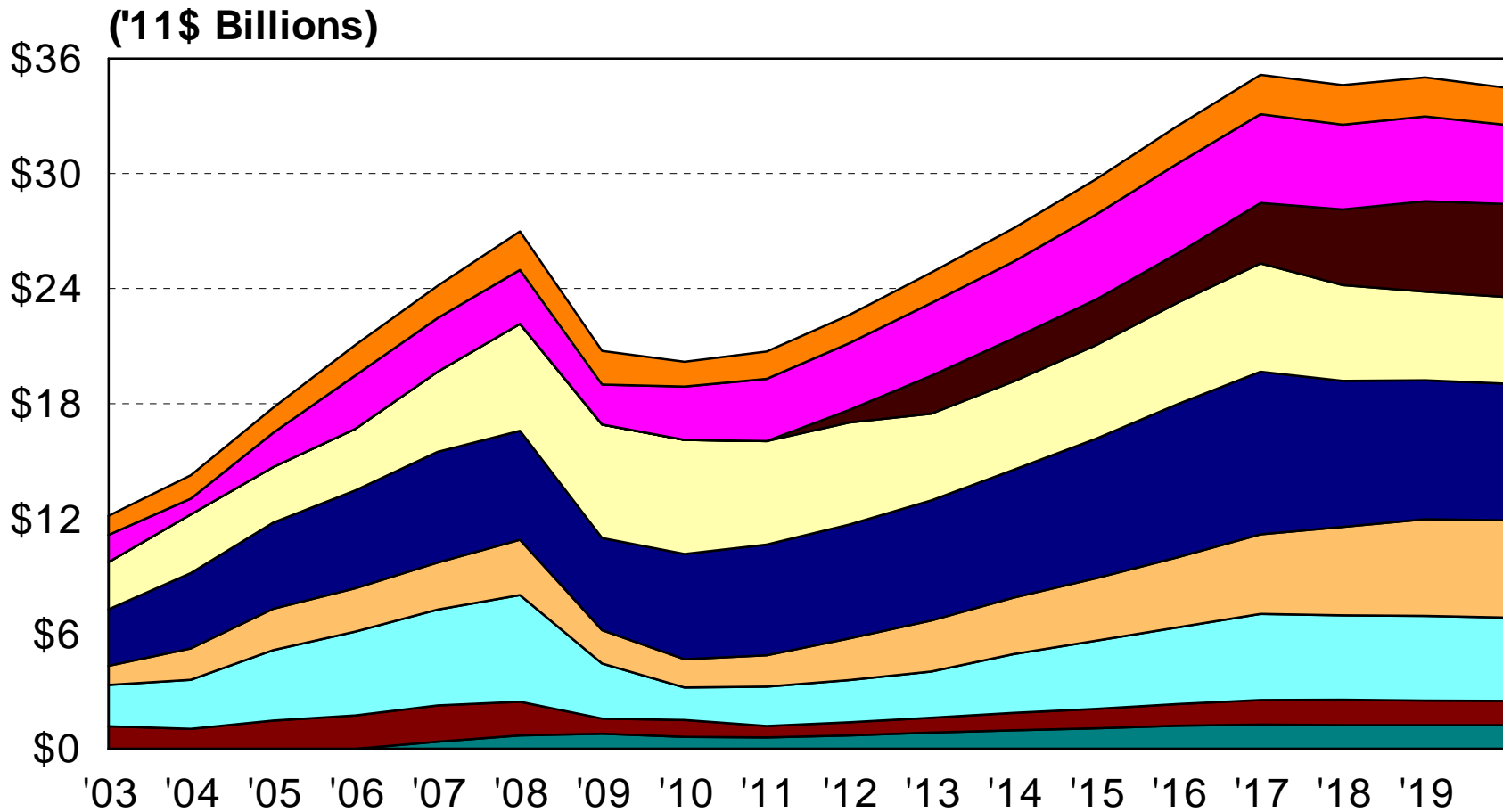
Boeing Airbus Douglas/Lockheed Bombardier/COMAC

# Bottom Half Bizjet Segment V. Top Half

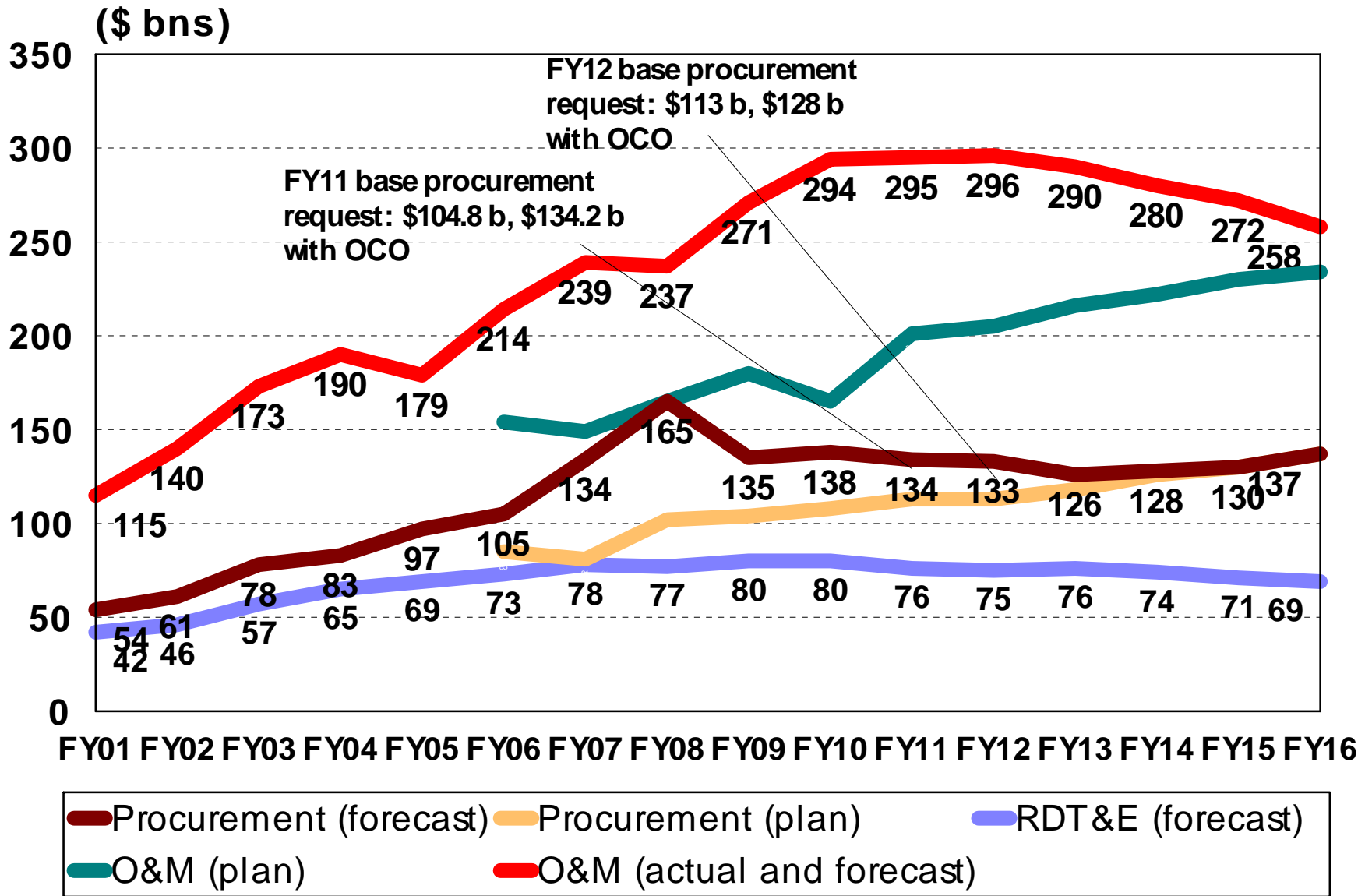


# Business Aircraft Market By Class

From Bottom Half/Top Half To Bottom Third/Top Two Thirds



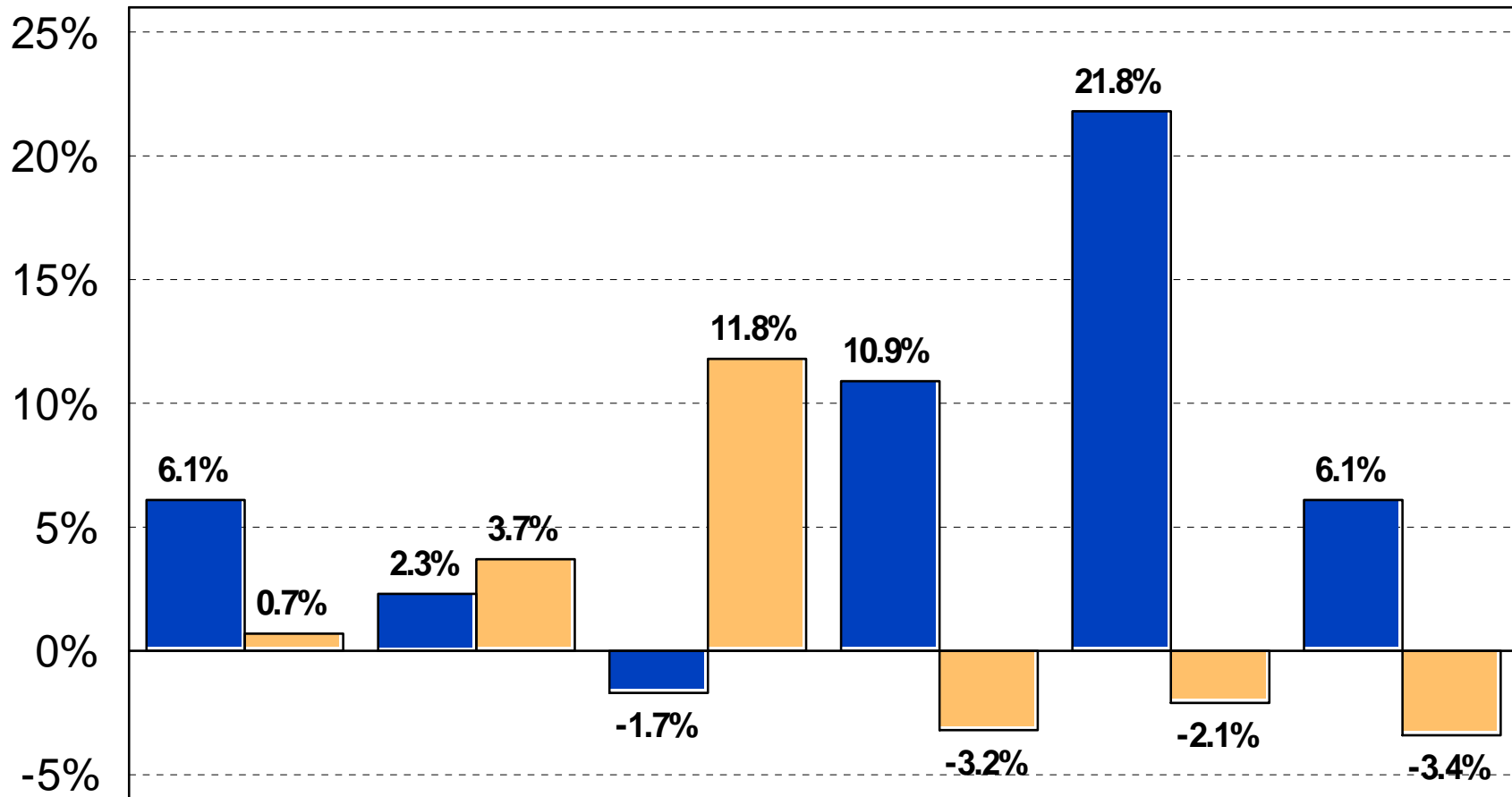
# DoD Investment, O&M Funding



Budget Authority; Forecasts include supplementals

# DoD Spending Growth Rates

## History And Forecast



All Procurement

Tacair

Tanker/Transp.

Rotorcraft

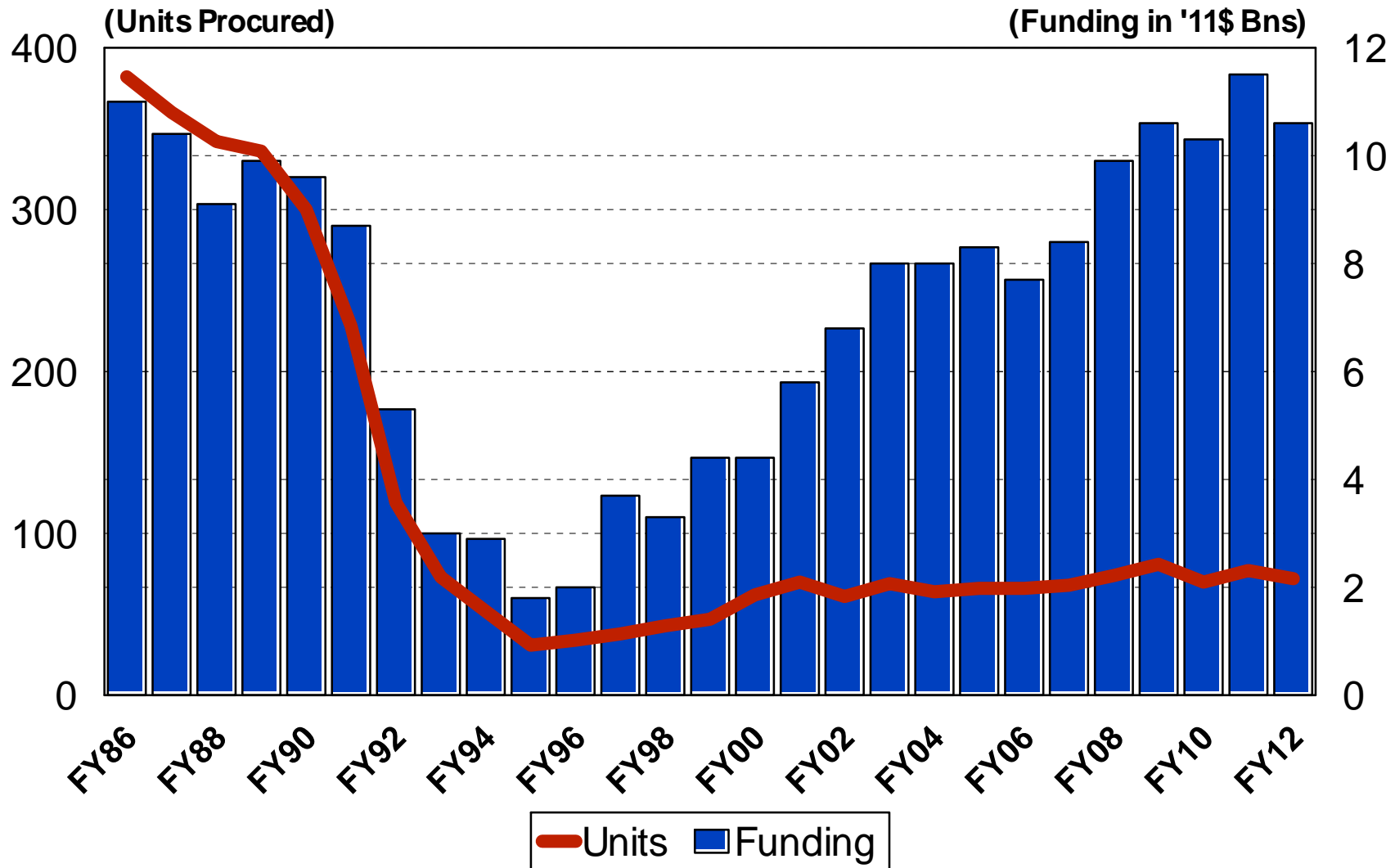
UAVs

O&M

FY03-12 FY12-16

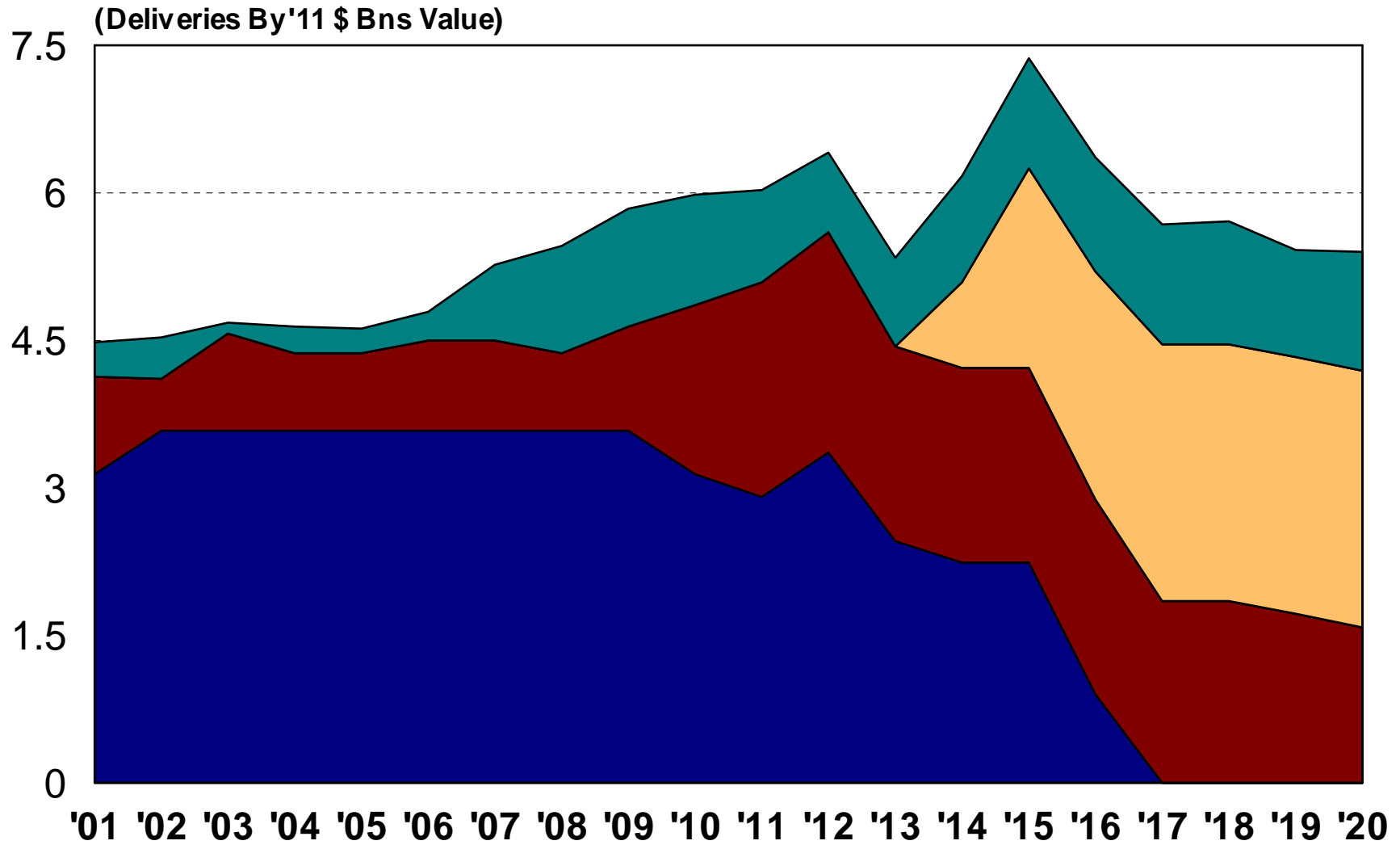
# DoD Tactical Aircraft Procurement

FY1986-FY2011



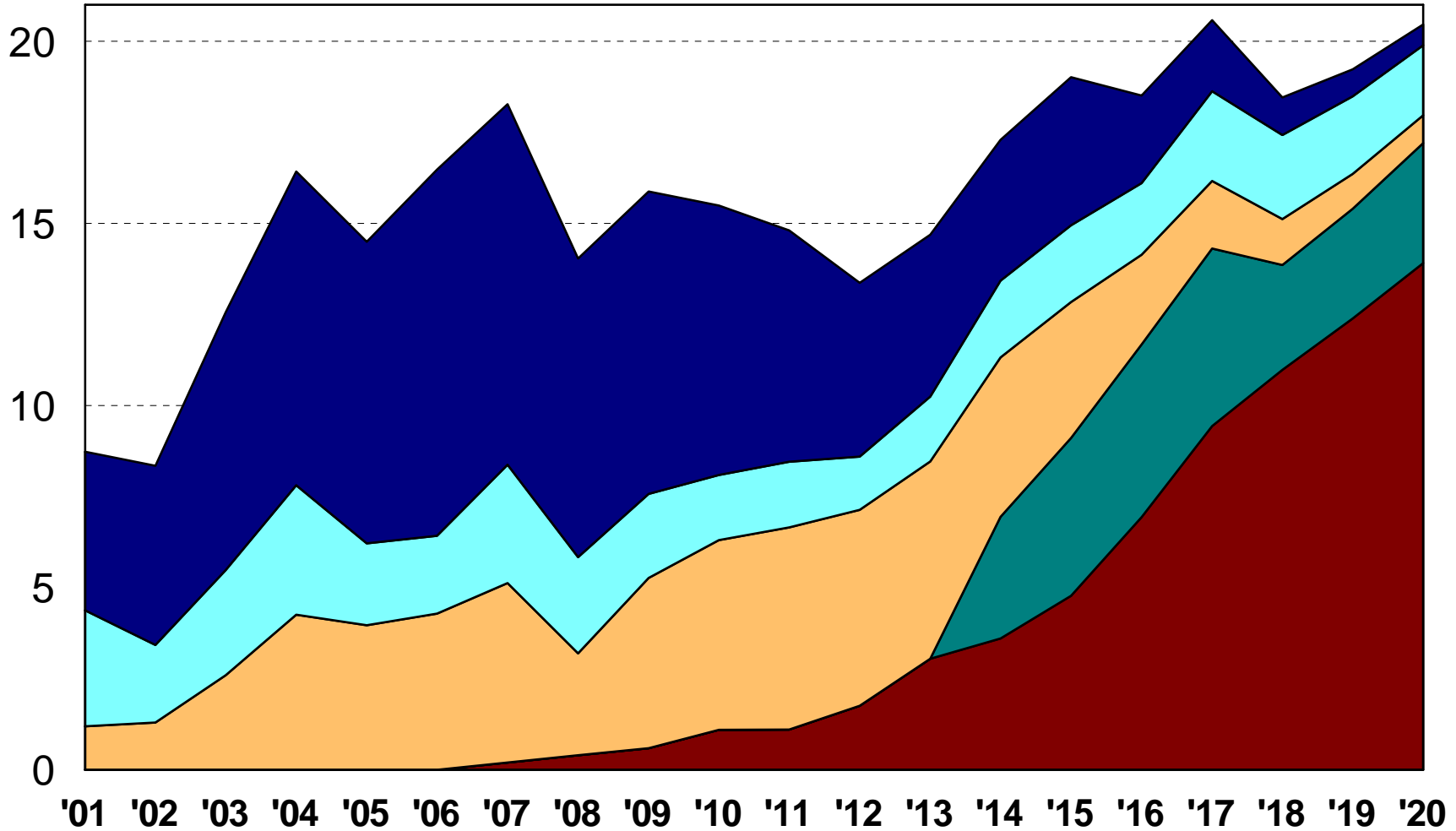
With FY2011 OCO Supplement.

# Military Transport Market Shares



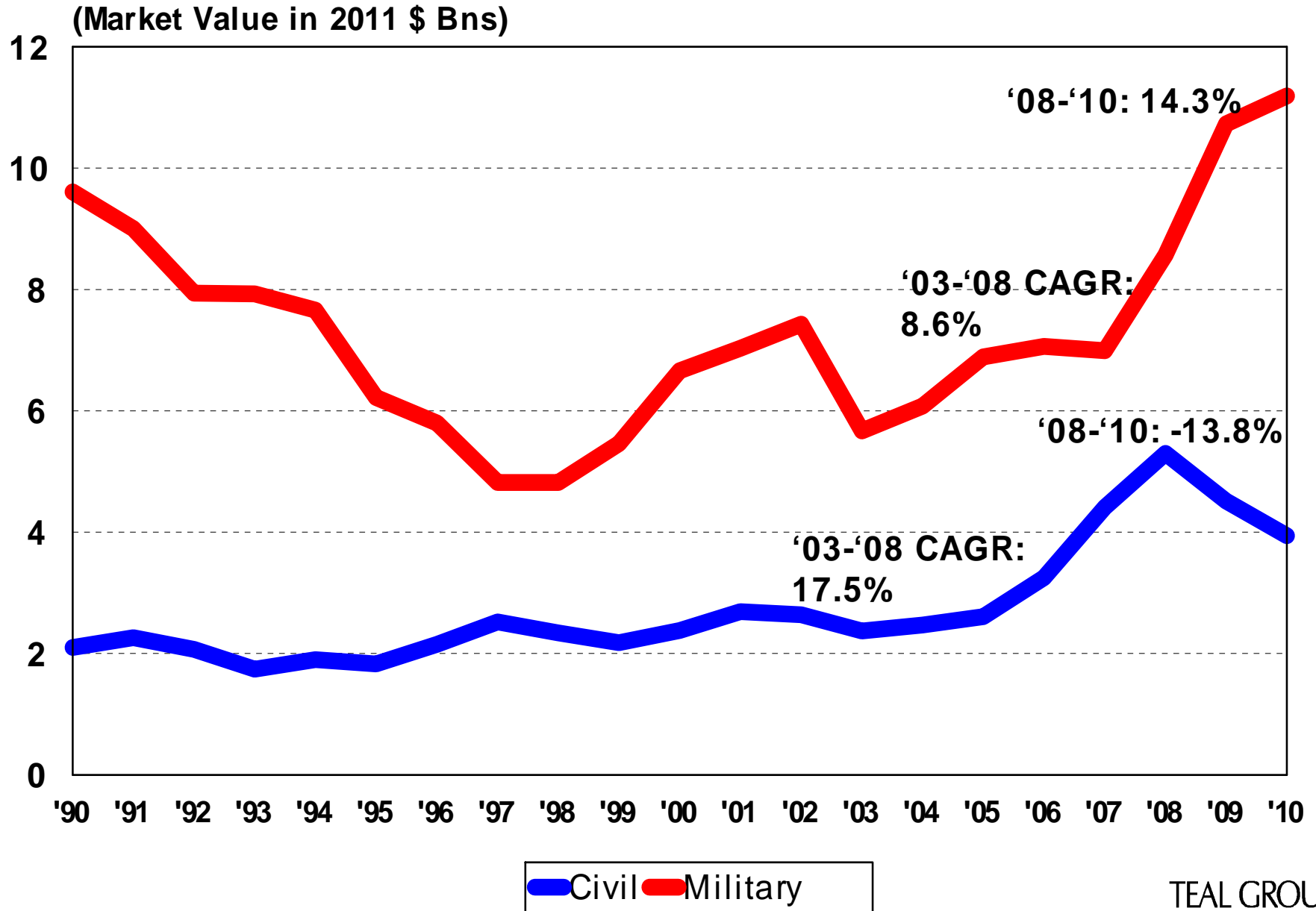
# World Fighter Production Shares

(Share By '11 \$ bns Value)



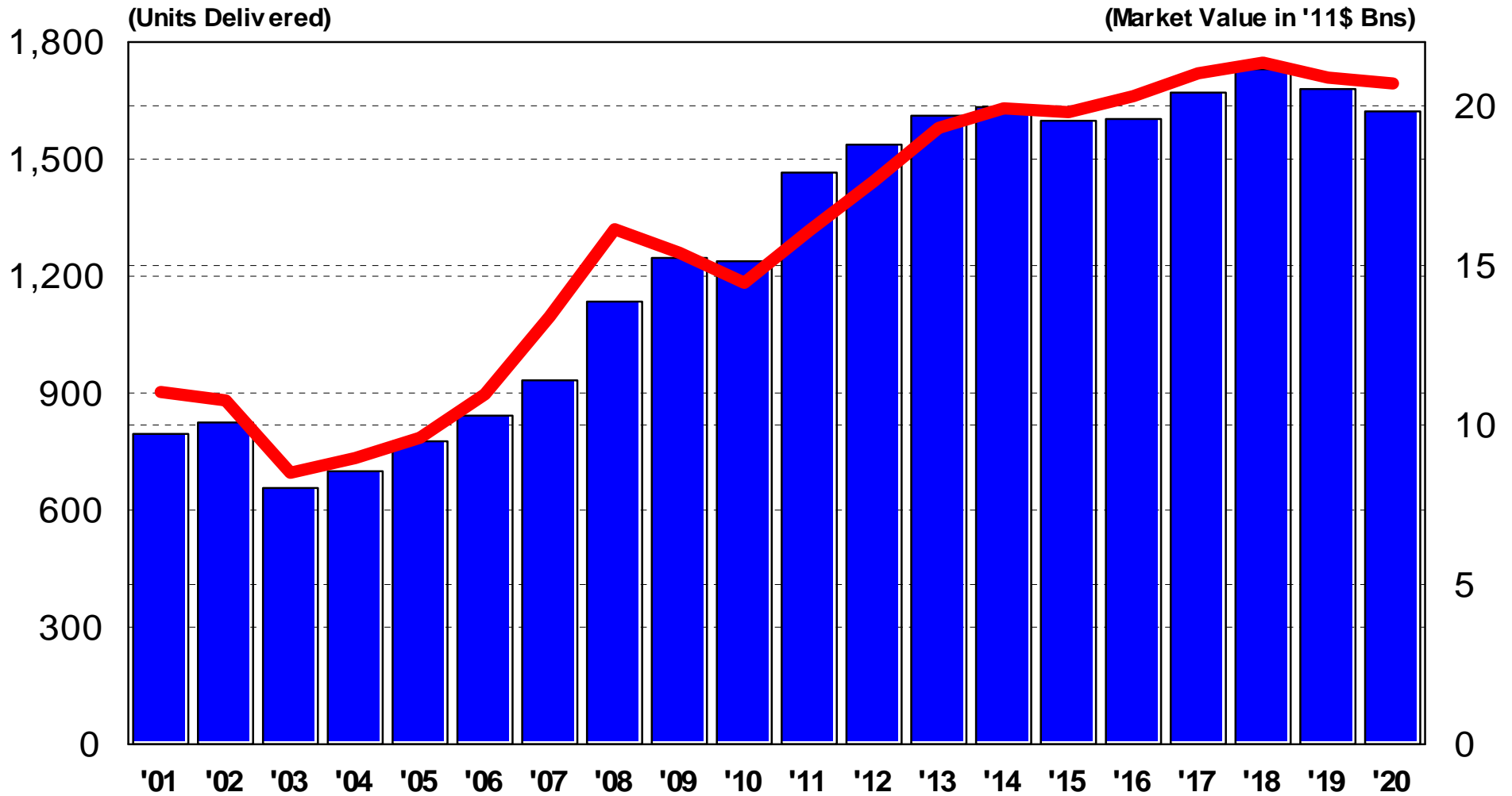
F-35 Undetermined Europe RoW Non-F-35 US

# Civil And Military Rotorcraft Deliveries By Value



# The World Rotorcraft Market

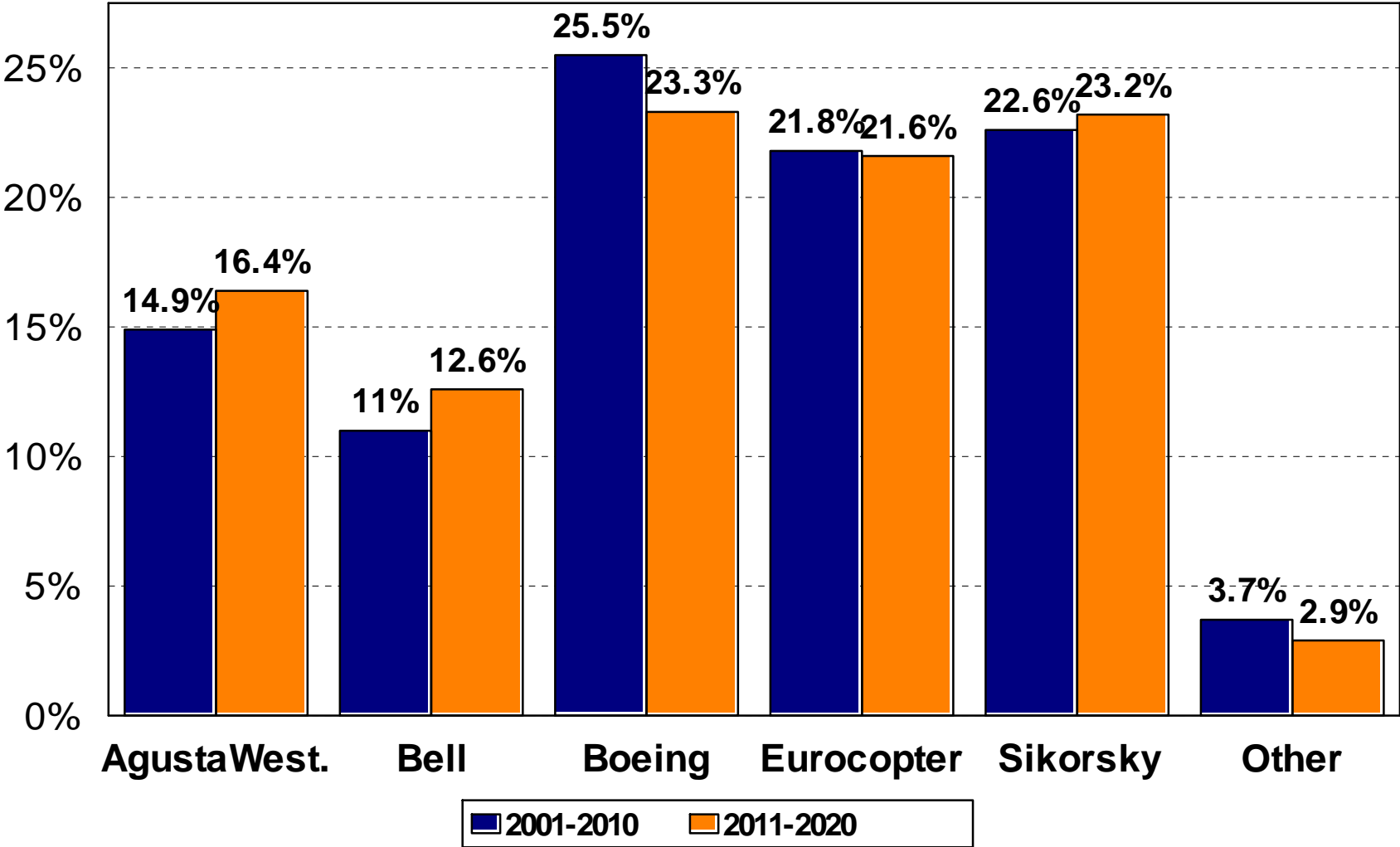
## Firing On A Single Turbine, But It's A Big One



— Units — Value

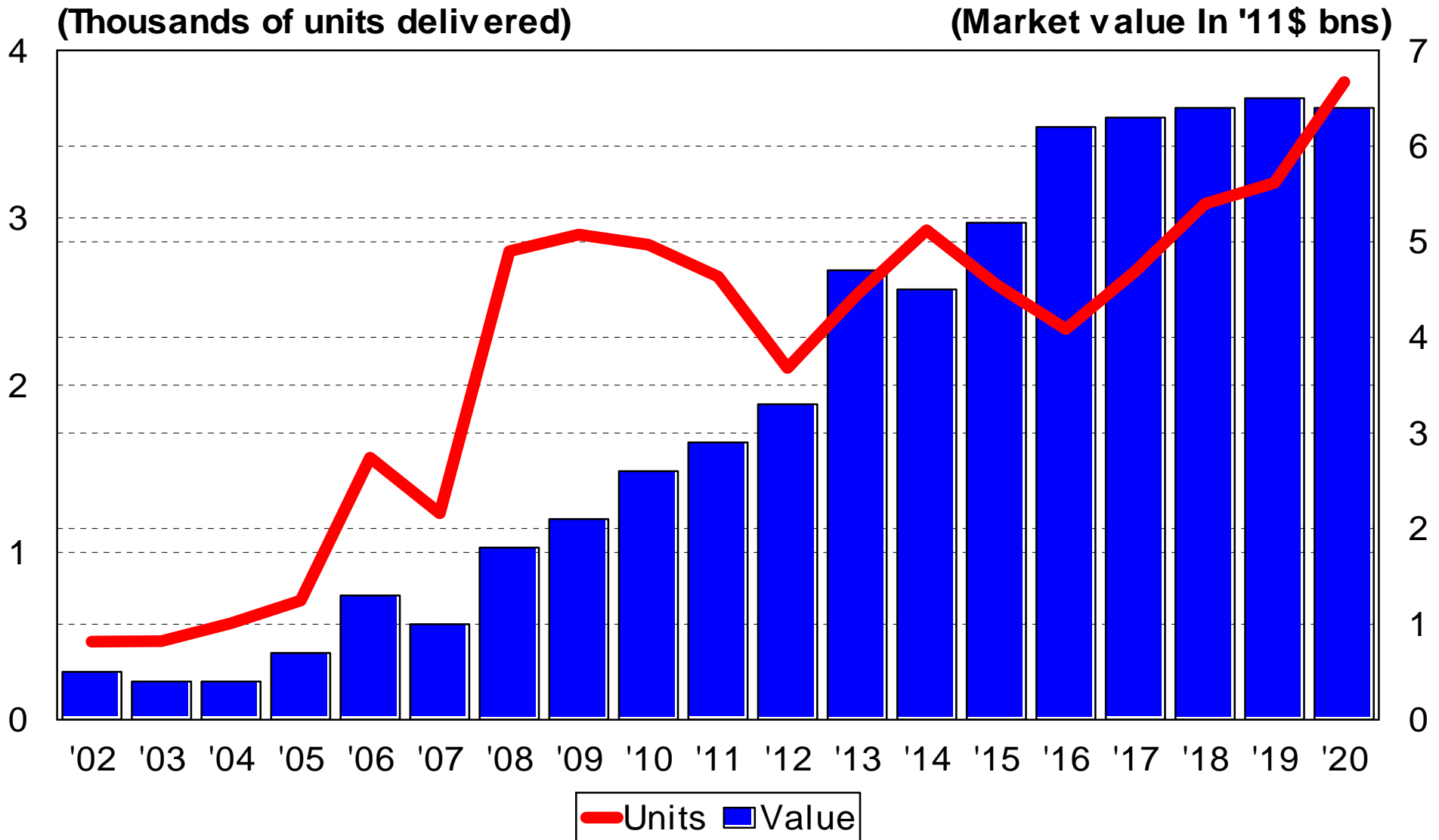
# Rotorcraft Manufacturer Market Share

## 2011-2020 Vs 2001-2010



Excludes AAS, CVLSP, CSAR, VXX, India MRH/RSH

# World UAV Market 2002-2020

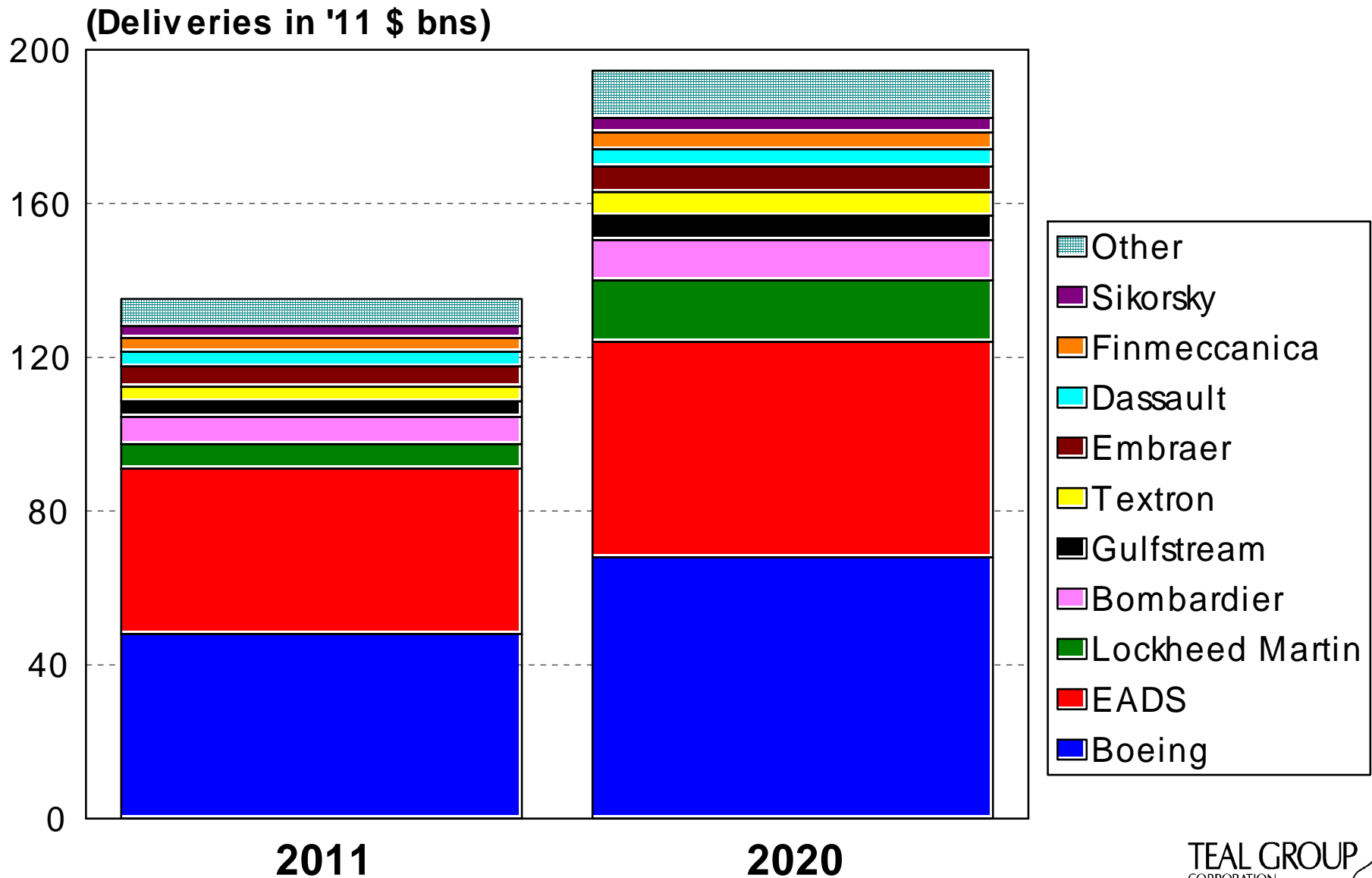


Includes UCAVs; excludes R&D.

# A Few Business Development Thoughts For The Alliance

- **Volume matters.**
- **Go with who you know.**
- **For government assistance, training schemes, coordination are best.**
- **A regional approach is essential.**
- **Strong attractions to emphasize.**
  - **Great combination of skilled workers, business-friendly labor regulations.**
  - **Dollar zone production.**
- **Vertical integration: false friend and bad idea for companies, regions, countries.**
  - **Think globally.**

# The Big Aircraft Builders



# Aircraft Production 2001-2020

Largely Sheltered From The Storm; Long-Term Growth, Too

