

# Stabilization, Followed (Hopefully) By Growth

## Teal Group 20th Annual Business Aircraft Market Forecast And Industry Overview

**Presentation To EBACE Educational Session**

Geneva, Switzerland

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Teal Group Corporation

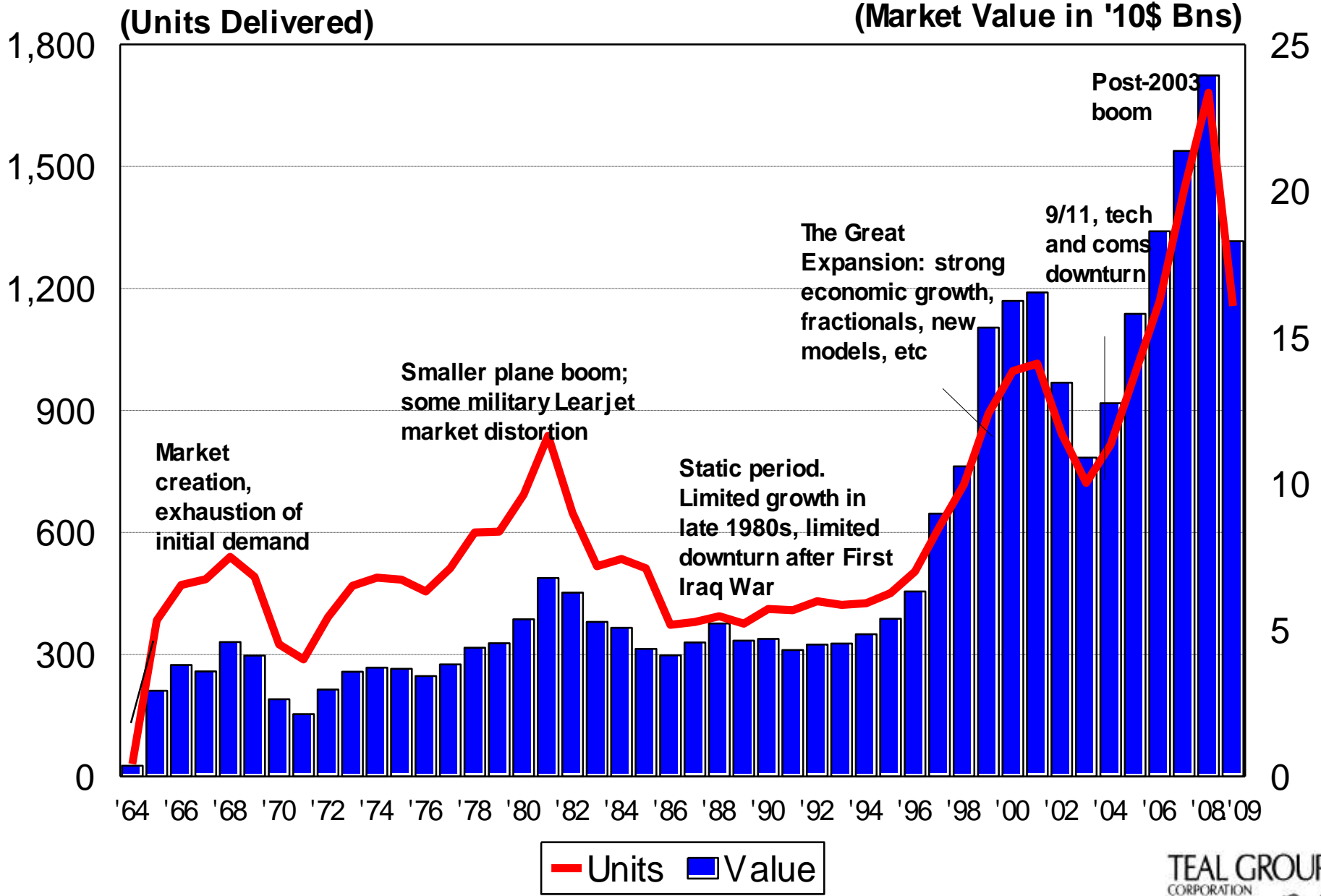
[www.tealgroup.com](http://www.tealgroup.com)

April 2010

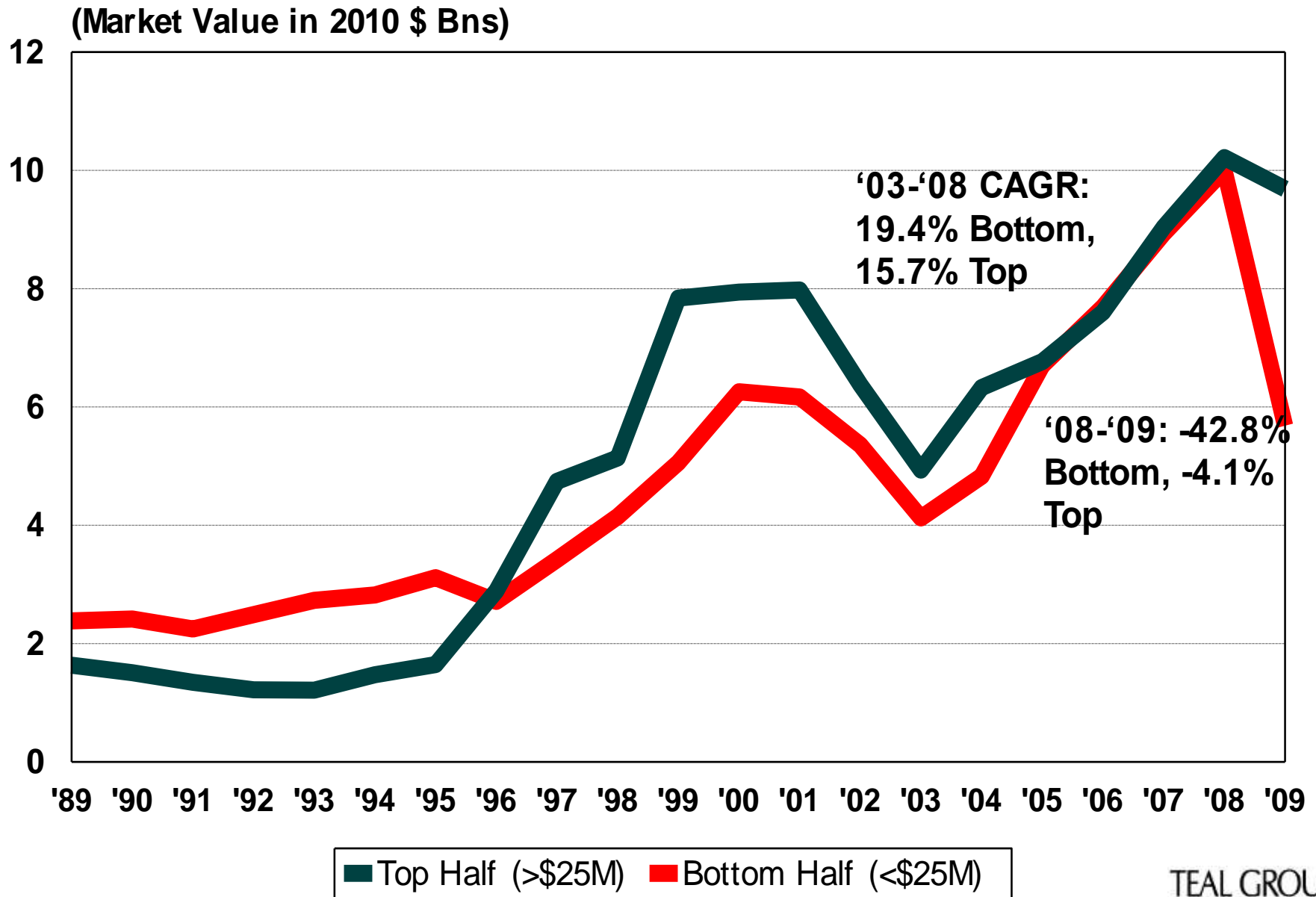
# The Great Boom, And A Curious Grace Period (But Not For Business Aircraft)

<u>Market</u>	<u>CAGR '03-'08</u>	<u>CAGR '03-'09</u>	<u>'08-'09</u>
<b>Large Jetliners</b>	7.0%	8.0%	13.5%
<b>Business Aircraft</b>	17.2%	9.0%	-24.3%
<b>Regionals</b>	1.4%	0.2%	-5.7%
<b>Civil Rotorcraft</b>	16.5%	13.5%	-12.5%
<b>Military Rotorcraft</b>	8.5%	12.3%	32.0%
<b>Fighters</b>	2.9%	5.7%	20.5%
<b>Military Transports</b>	3.1%	5.0%	15.5%
<b>Total</b>	<b>7.5%</b>	<b>7.5%</b>	<b>7.0%</b>

# Business Aircraft History (W/Jetliners+RJs+Turboprops)



# Bottom Half Market Segments V. Top Half



# Market Bifurcation: Reasons Why

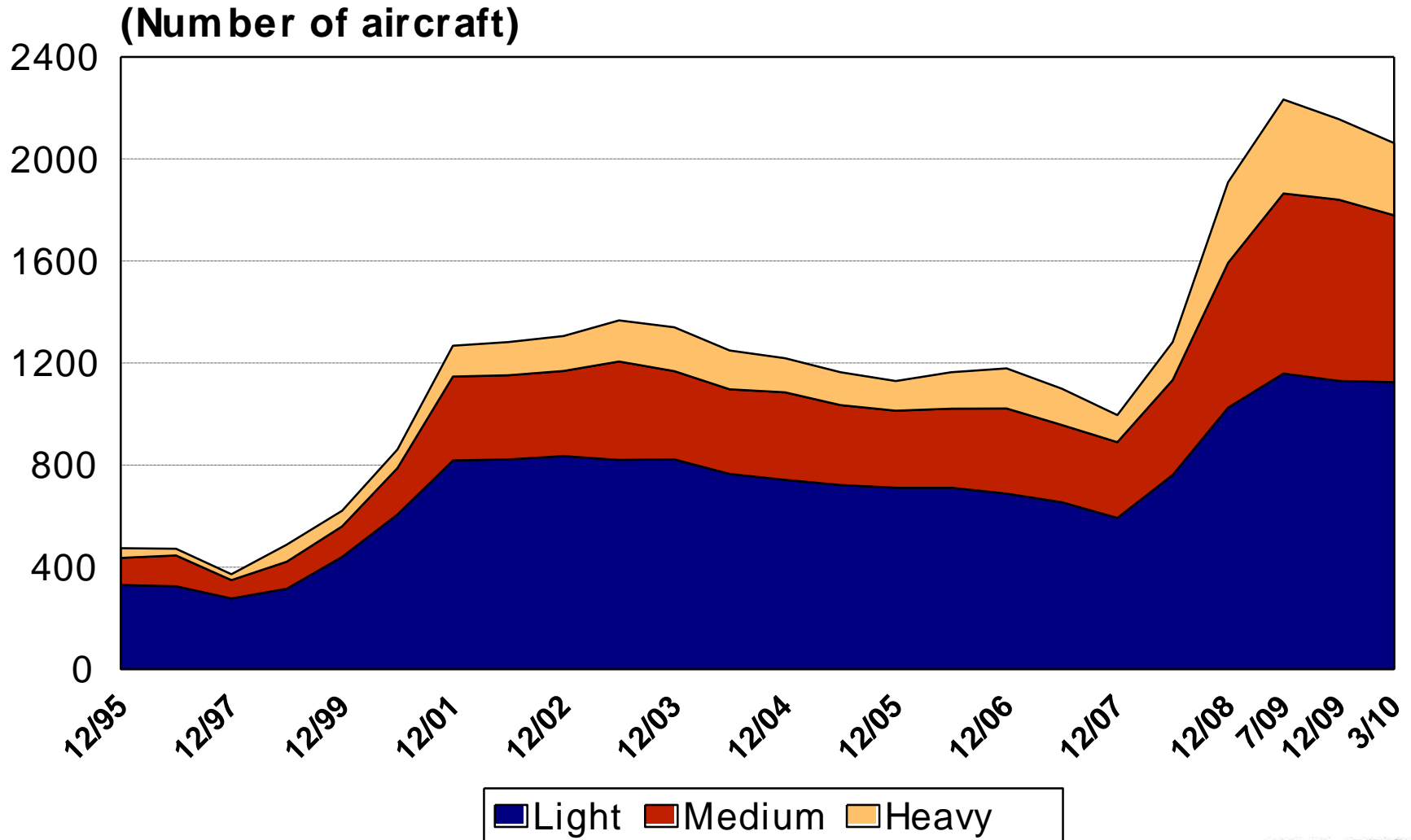
- **Bottom half defined: business jets costing <\$24 mn (VLJs through Class 3).**
- **A sharp cut-off point, with little variation within the top and bottom halves.**
- **This bifurcation could be due to:**
  - **Greater bottom half customer sensitivity to economic cycles.**
  - **More discretionary users in bottom half.**
  - **Bottom half greater 3rd party finance reliance.**
  - **Bottom half greater fractional exposure.**
  - **Top half greater exposure to emerging markets that have stayed intact (Mideast, Asia); bottom half greater exposure to North America.**

# Bifurcation: Reasons Why (2)

- Top half greater exposure to government demand, particularly head-of-state aircraft.
- A matter of timing (lead times, finance, etc)?
- **Less bifurcation in utilization.**
  - 2009: short range -19%, medium range -20%, long range -15%.
- **One large question: Do both halves recover at the same pace?**

# Used Jet Availability

## Aftershocks Of An Economic Heart Attack

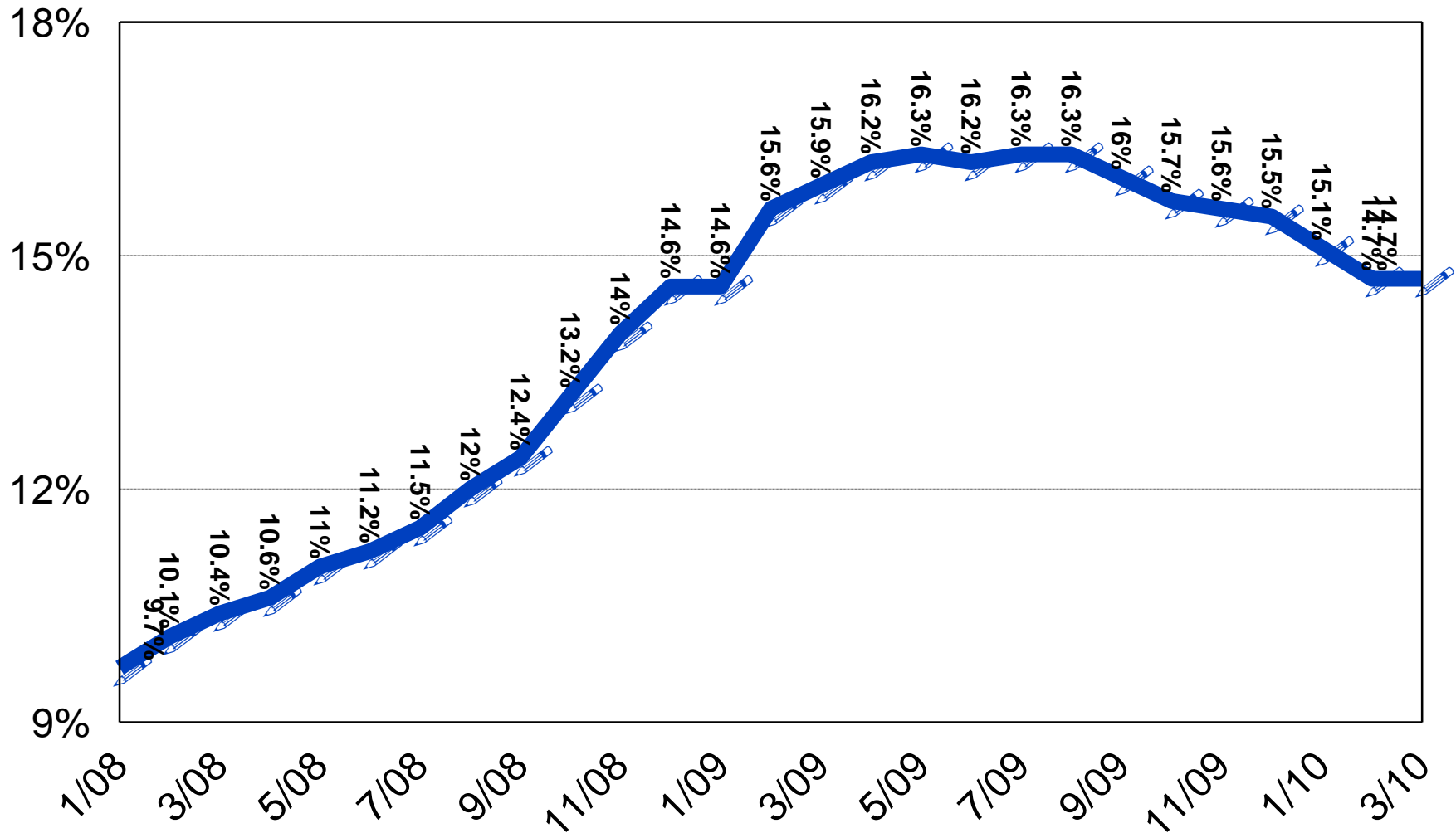


Source: AMSTAT

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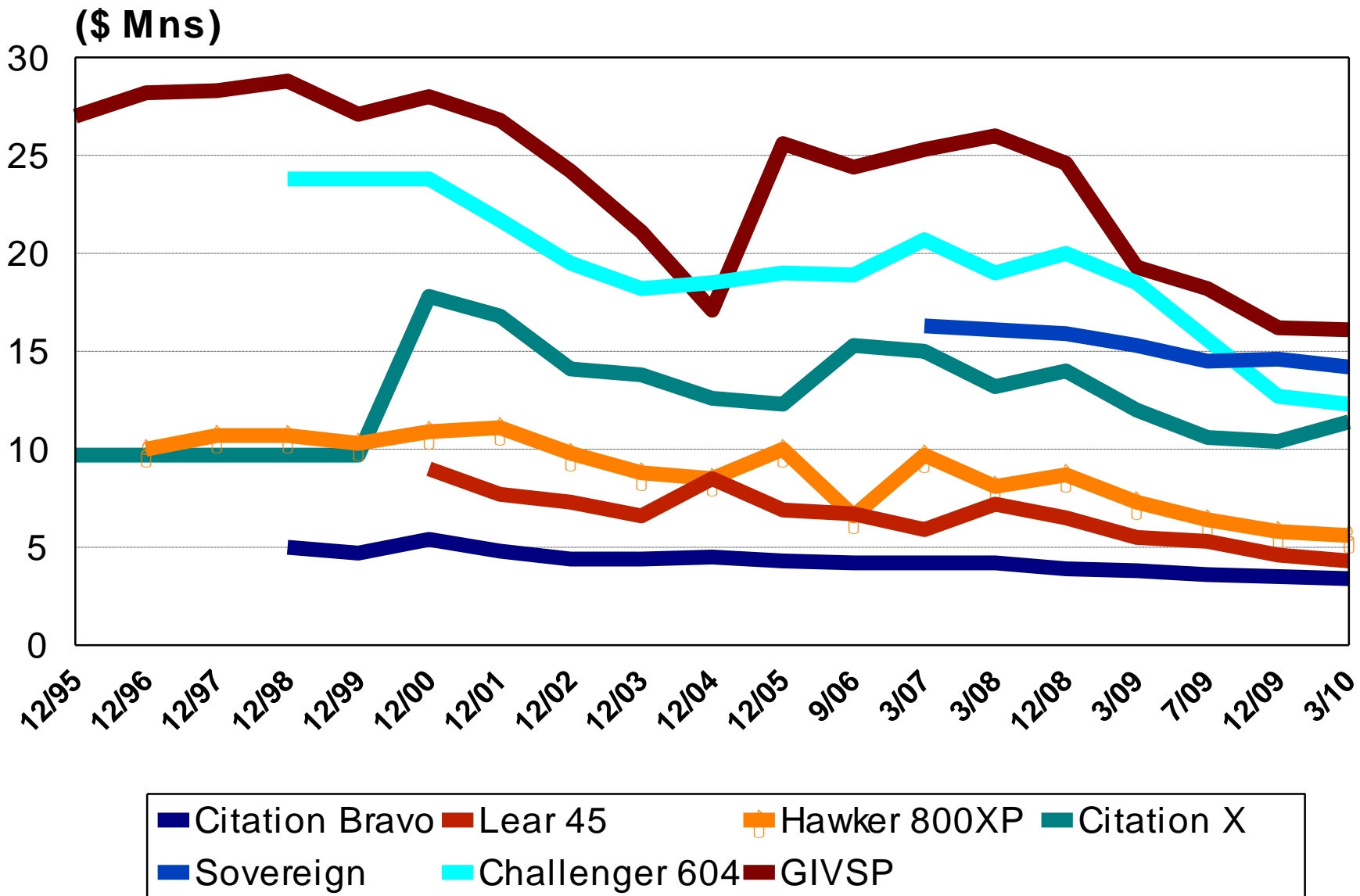


# Business Jets For Sale As % Of Total Fleet



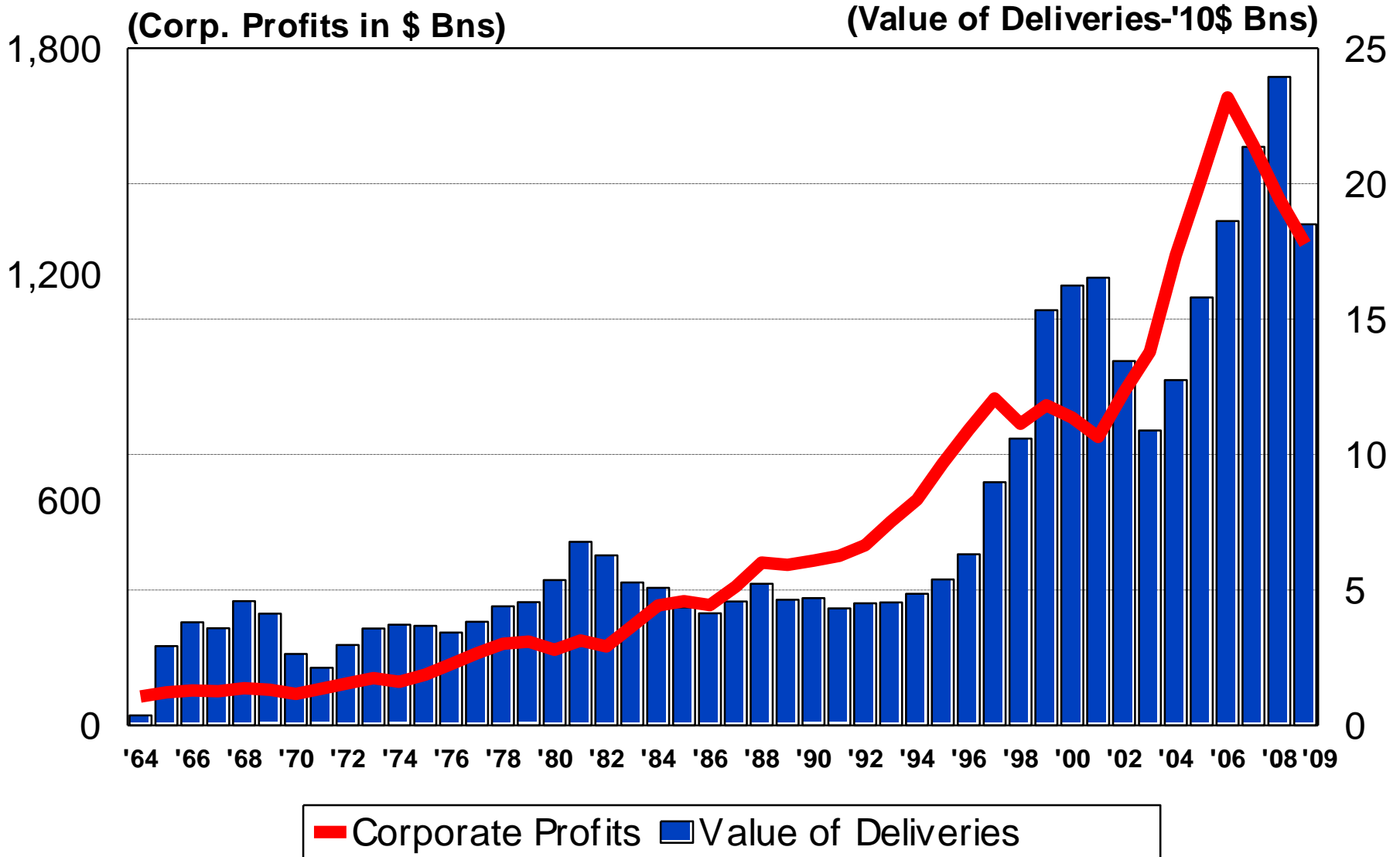
Source: AMSTAT

# Used Jet Average Selling Prices



Source: AMSTAT

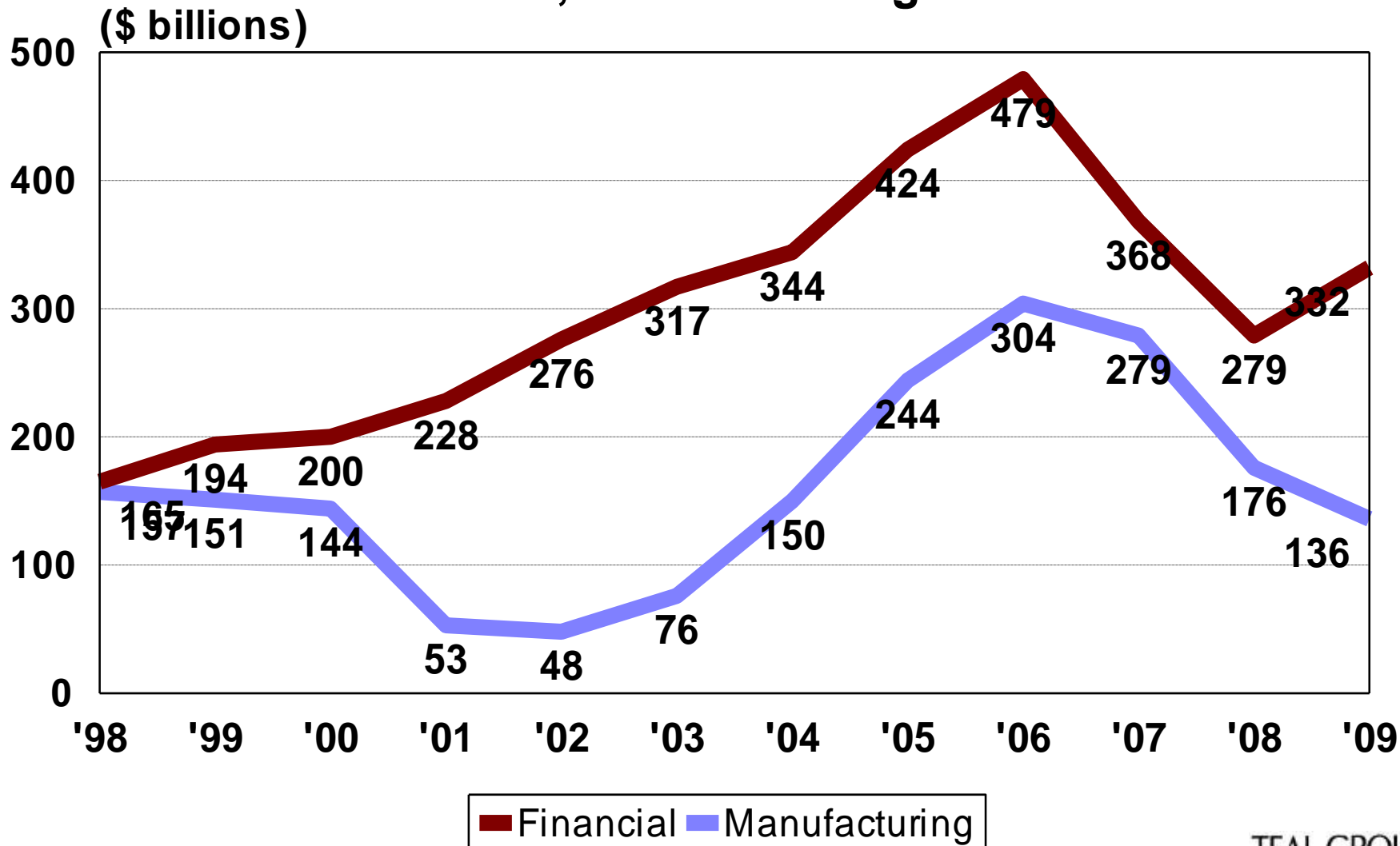
# Business Aircraft Deliveries And Corporate Profits



Source: US BEA, Teal Group Research

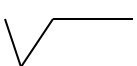
# Corporate Profits Breakdown

Business Jet Market Growth Closely Linked To, And A Key Enabler Of, Manufacturing Profits



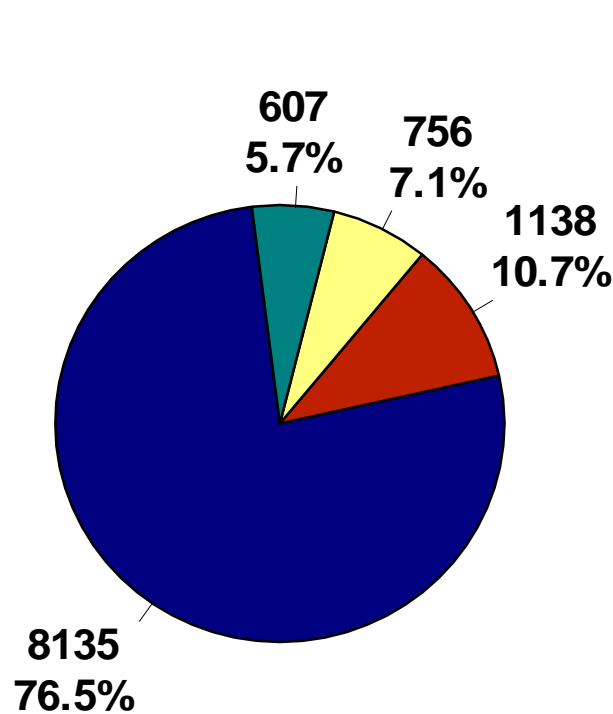
Source: US Gov. BEA

# Business Jet Leading Indicators Stabilizing, But No Growth Yet

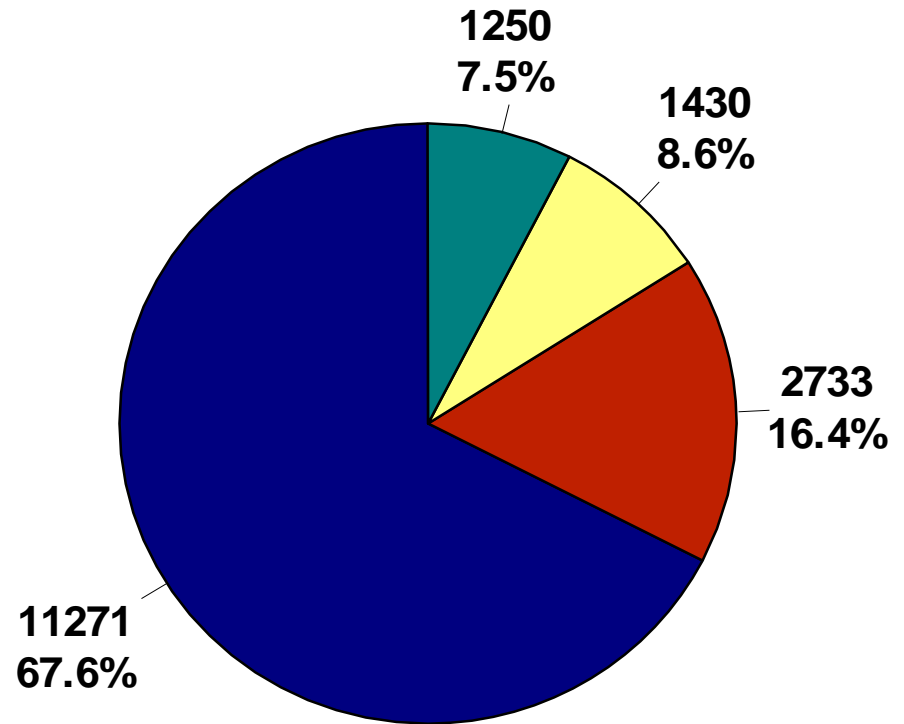
- Financial sector “green shoots”, but a very tentative “main street” recovery.
- Impact when stimulus spending ends?
- Economy moving sideways? W, V, L or  ?
- When growth begins, still 18+ months before new build deliveries growth.
- Good news: utilization/availability free-fall is over.
  - But prices uncertain.

US Profits (\$bns)	2004	2005	2006	2007	2008-1Q	08-2Q	08-3Q	08-4Q	2009-1Q	09-2Q	09-3Q	09-4Q
Total Corporate	1,247	1,456	1,608	1,542	1,460	1,404	1,455	1,124	1,183	1,227	1,359	1,468
Manufacturing	154.1	247.2	304.5	278.6	187.6	160.1	205.7	148.6	121.6	132.3	129.7	160.5
Financial	362.3	443.6	448	367.8	357.0	330.8	297.5	130.3	253.9	280.7	362.4	427.9
Source: US BEA												

# Jet Distribution By Region



**2001**



**2009**

- US/Canada (4.2% CAGR)
- Europe (11.6% CAGR)
- S/C America (8.3% CAGR)
- Rest of World (9.4% CAGR)

Source: ACAS

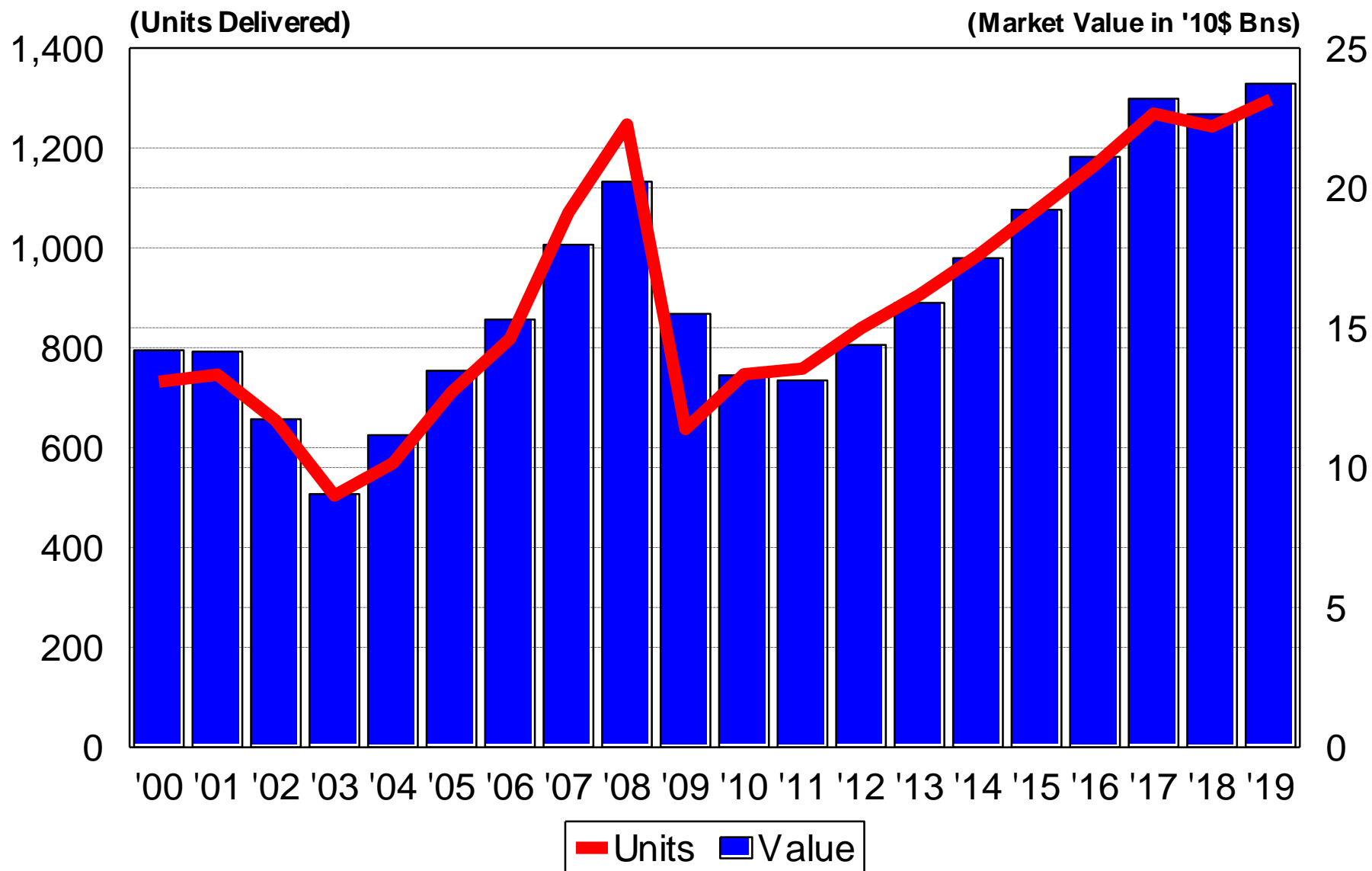
# Forecast Assumptions

- **This is a three year downturn:**
  - **Recession/corporate profits: 2008 through a rather disappointing 2010.**
  - **Availability/pricing: 8-2008 through 3Q 2010.**
  - **Deliveries: 2009-2011.**
- **Trough: 2011, 35% (value) off 2008 peak.**
  - **Compare with two year -34% drop in 2001-03.**
- **Recovery: six years at 10% CAGR**
  - **This is conservative – 2003-2008 was @17.2%.**
  - **No help from fractionals and other concepts.**
  - **The broader economy: less leverage, less aggressive finance, but more durability.**

# Teal's 20<sup>th</sup> Business Jet Forecast

- **Deliveries of 10,285 bizjets worth \$184.1 billion ('10\$) in 2010-2019.**
  - **Plus 649 business jetliners/RJs worth \$36.4 billion.**
  - **Plus 3,041 turboprops worth \$13.2 billion.**
  - **Comparison: 7,889 bizjets worth \$143.4 in 2000-2009 ('10\$).**
- **We don't think the bottom half will recover or grow faster than the top half.**
  - **That's a major structural shift in market, with significant market share implications.**

# Business Jet Forecast: This Will Take Time



Excludes jetliners, RJ, turboprops

# Business Aircraft Market By Class

