

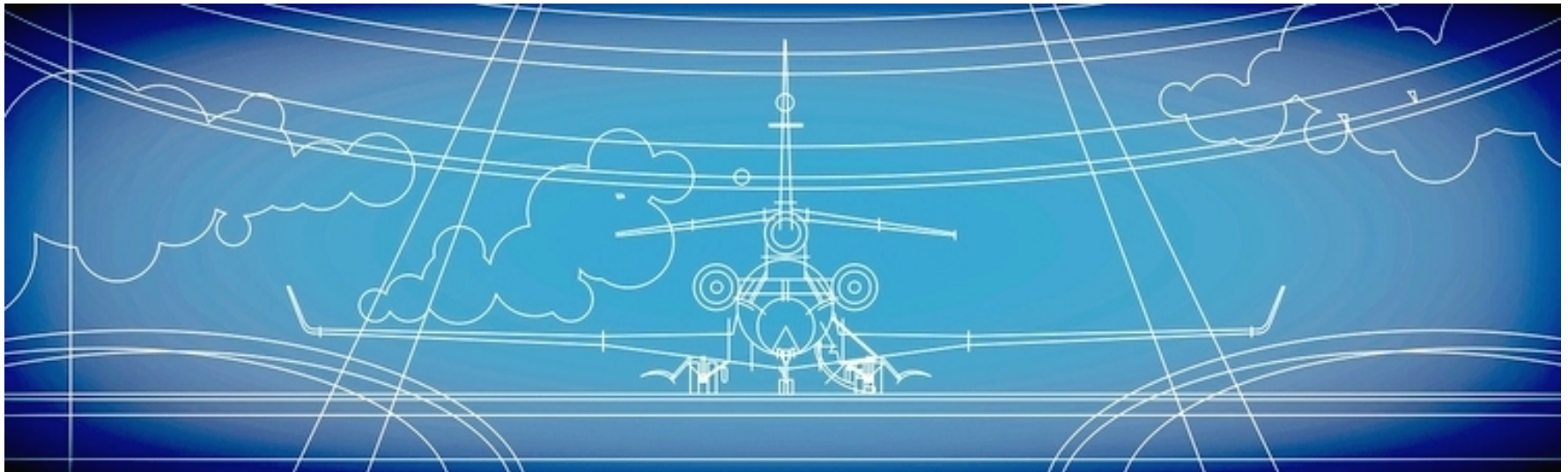
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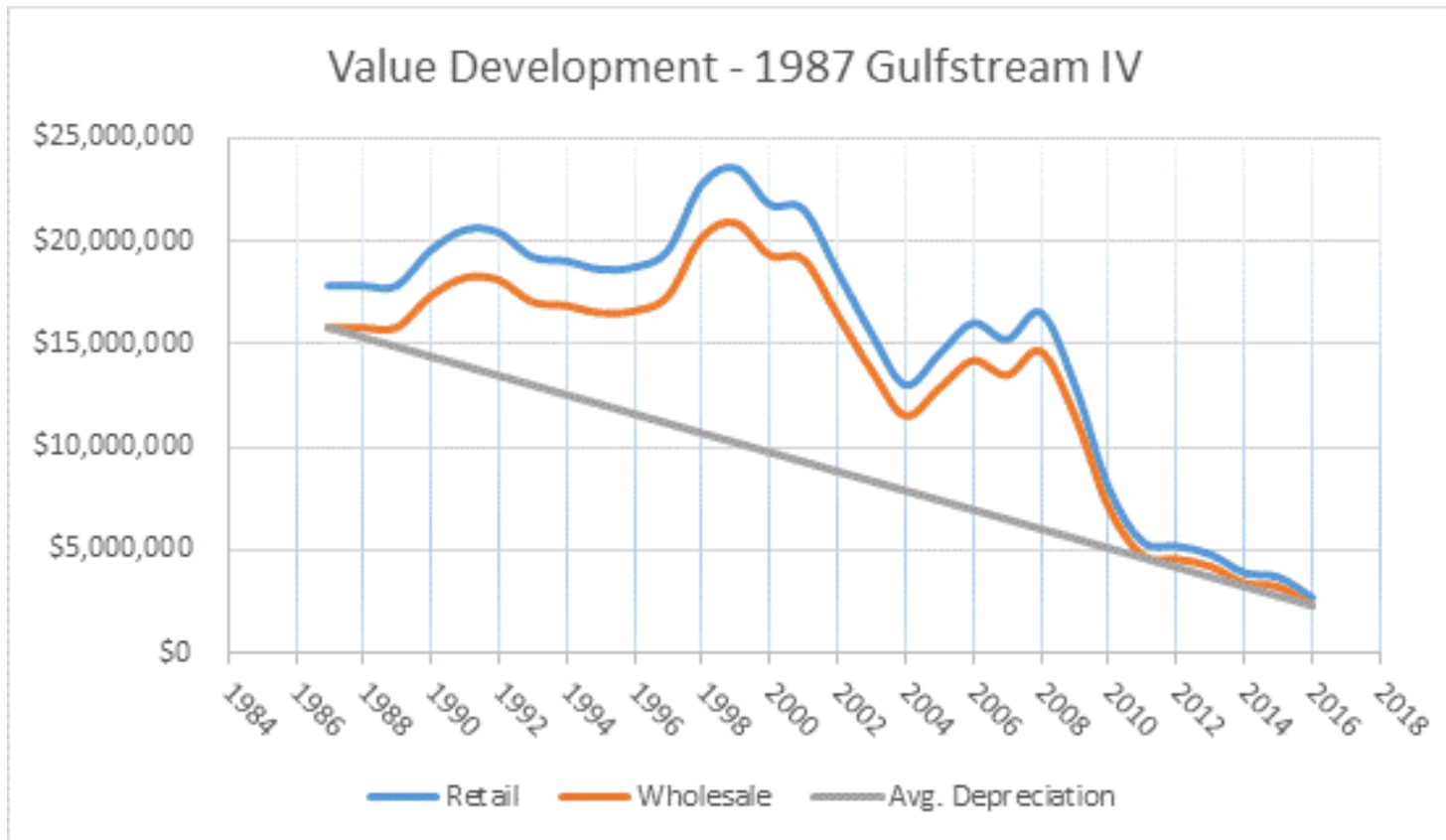
Shearwater Aero Capital

# Aircraft Valuation

Historical Aircraft Depreciation Analysis



# Value Development Gulfstream IV



# Business Aircraft Market

## Cyclical

- Business jet market correlates with corporate profits, the GDPs of the world's countries, wealth trends and stock markets
- Predictable recovery
- Resale market transactions and inventory levels are leading indicators for a broader market recovery
- Market recoveries are commonly driven by newer and larger aircrafts

## Inefficient

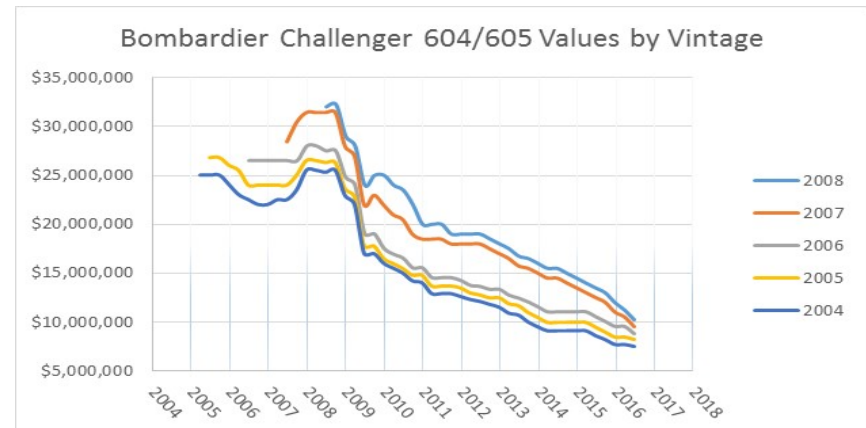
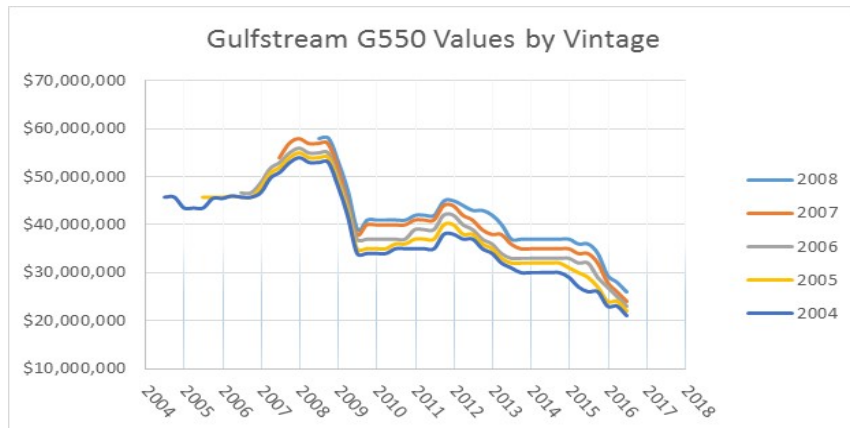
- No primary clearing house in the market
- Largest dealers account for 2-3% of all deals
- No wholesale market (buy/resell) currently
- Brokerages have become the norm where listing the account is key success factor
- Subjectivity on aircraft values
- Creation of arbitrage for under-valued "in demand" aircraft
- OEM pricing for new aircraft can vary by region or country

## Regulated

- Ownership transfer is highly regulated
- Strict documentation of aircraft history
- Aircraft operation and maintenance is highly regulated
- International Registry (Cape Town Convention) provides additional security / central registration control for financiers

# Historical Value Development

## Aircraft Value Correction of 2009



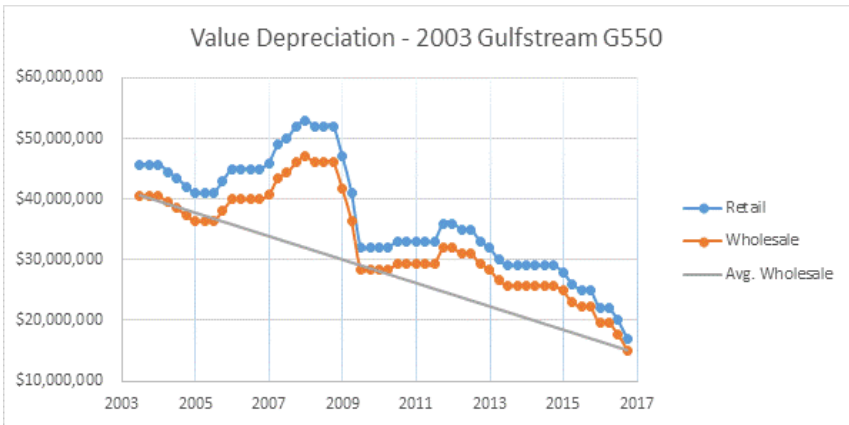
**Financial Crisis Depreciation:**

- During 3 quarters the G550, Challenger 604, Hawker 800 and Global Express depreciated between 30.8% and 38.7%.

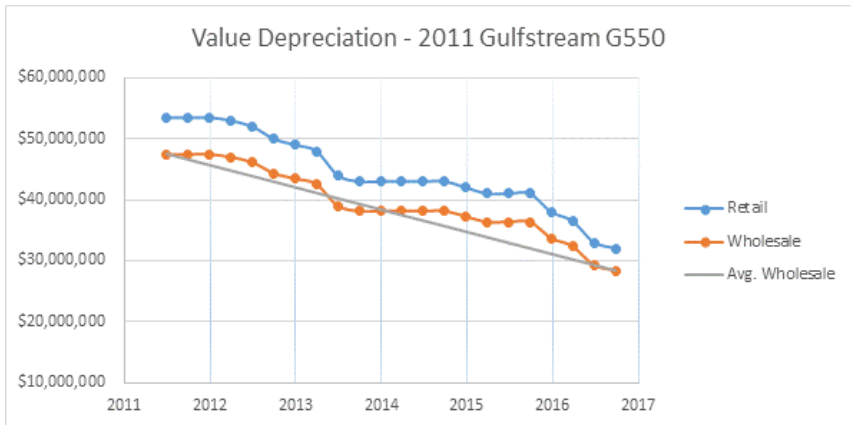
	G550	Challenger 604	Hawker 800	Global Express
<b>Q4 2008</b>	9.1%	10.2%	9.3%	10.9%
<b>Q1 2009</b>	12.4%	3.2%	2.6%	10.2%
<b>Q2 2009</b>	18.0%	20.3%	28.6%	23.3%
<b>Crisis Total</b>	34.7%	30.8%	36.9%	38.7%

# Depreciation Differences / Value Correction

1. **Value Correction** of overvalued aircrafts took place in **2009**.
2. **Post Financial Crisis**, aircrafts **depreciate reasonably**.



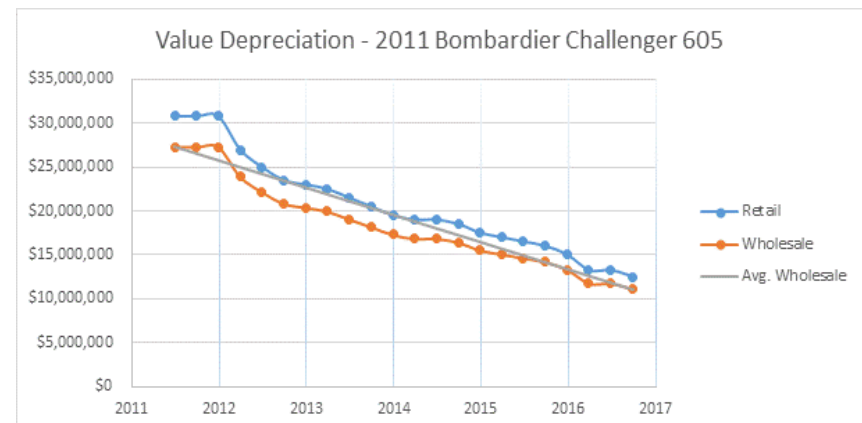
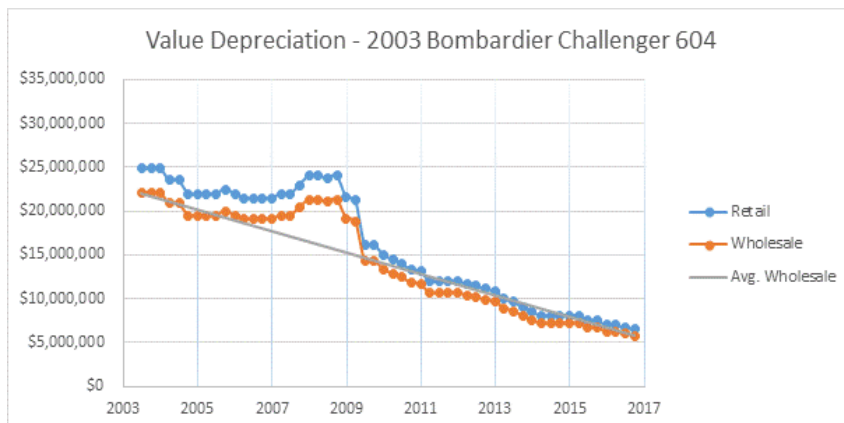
- **Prior** to the financial crisis **aircraft values appreciated** to values above the original purchase price.
- The 2003 G550 avg. annual depreciation from 2003 to 2016 is 7.20%.



- **Post** financial crisis aircraft depreciation rates are **more normalized**.
- The 2011 G550 avg. annual depreciation from 2011 to 2016 is 9.33%.

# Depreciation Differences / Value Correction

**1. Value Correction** of overvalued aircrafts took place in **2009**.



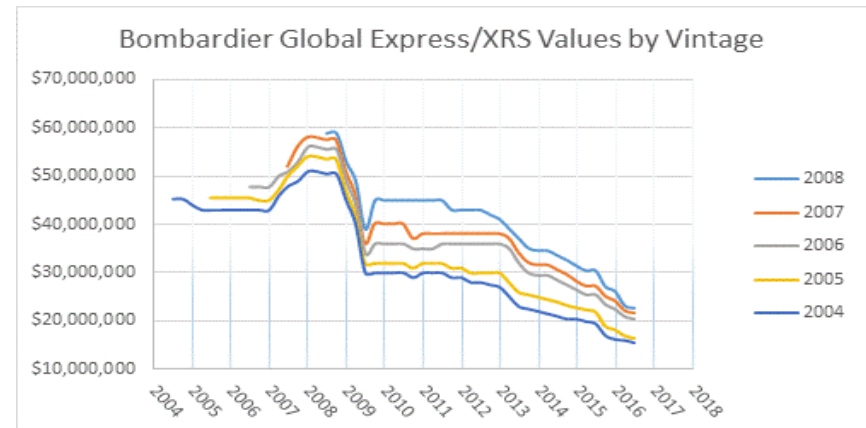
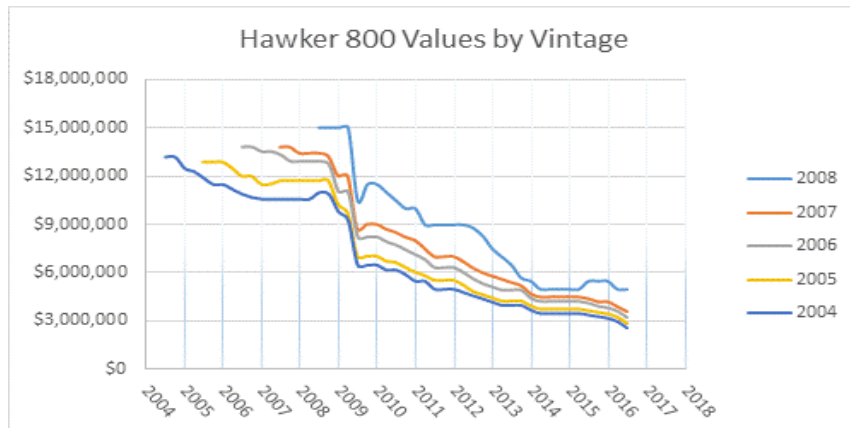
- **Prior** to the financial crisis **aircraft values appreciated** to values above the original purchase price.
- The 2003 Challenger 604 avg. annual depreciation from 2003 to 2016 is 9.63%.

- The 2011 Challenger avg. annual depreciation from 2011 to 2016 is 15.78%.

Aircraft	Average Annual Depreciation
1996 Falcon 900 EX	7.90%
1988 Falcon 900	5.70%
1997 CL 604	7.50%
1995 GV	6.00%

# Historical Value Development

## Aircraft Value Correction of 2009



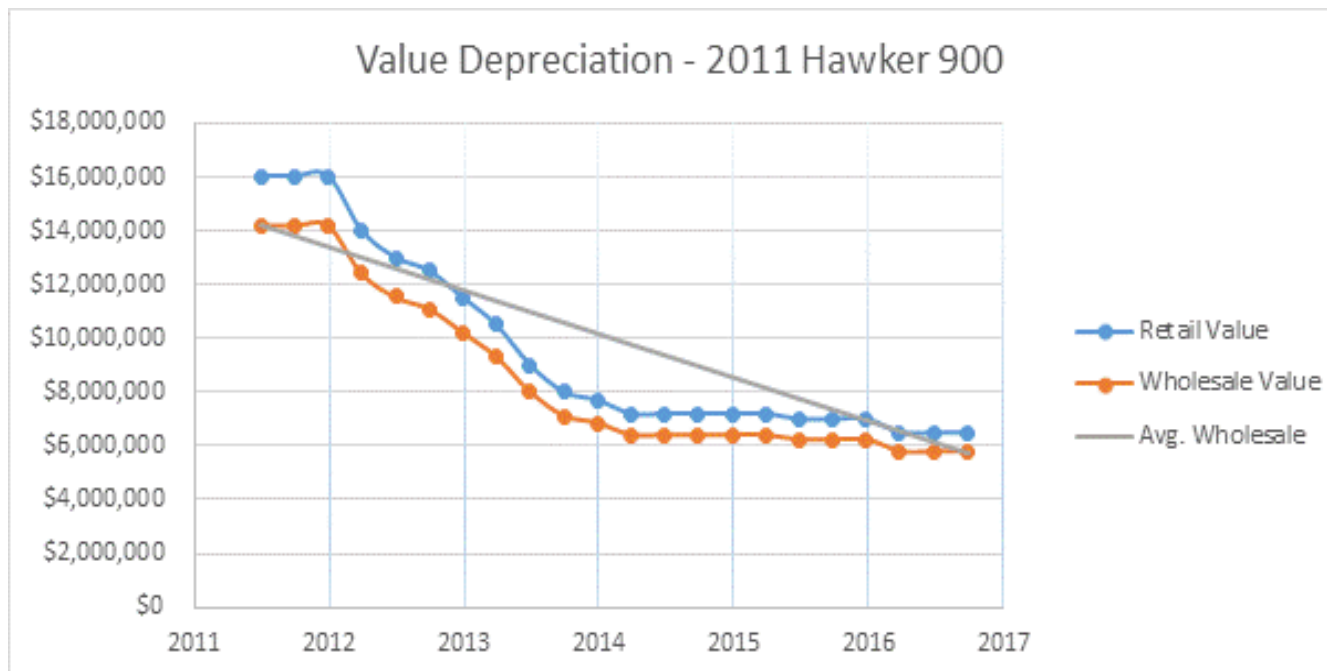
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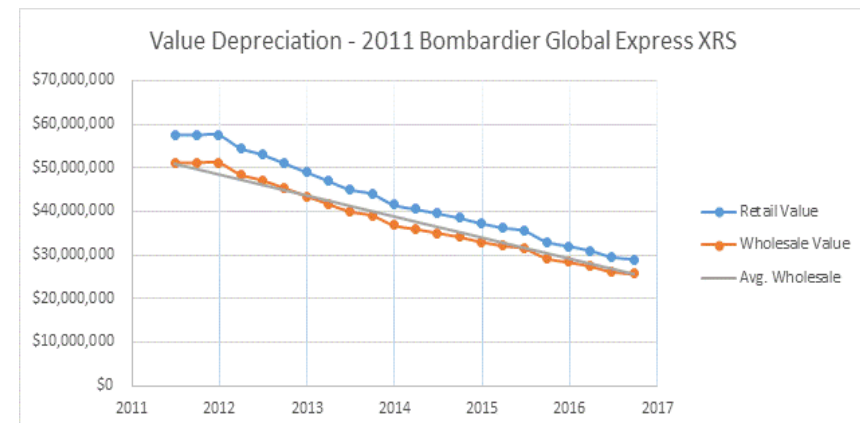
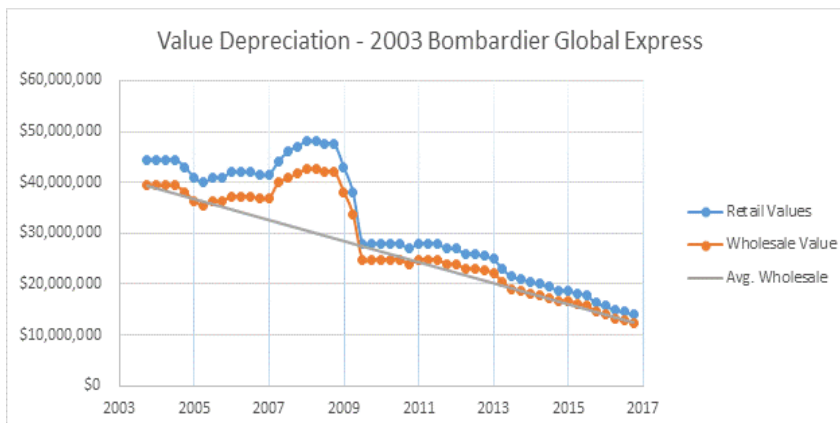


- The 2011 Hawker avg. annual depreciation from 2011 to 2016 is 15.79%.



# Depreciation Differences / Value Correction

## 1. Value Correction of overvalued aircrafts took place in 2009.



- **Prior** to the financial crisis **aircraft values appreciated** to values above the original purchase price.
- The 2003 Global Express avg. annual depreciation from 2003 to 2016 is 8.25%.

- The 2003 Global Express avg. annual depreciation from 2011 to 2016 is 12.22%.

# Analyzing Risks

## Probability of Default

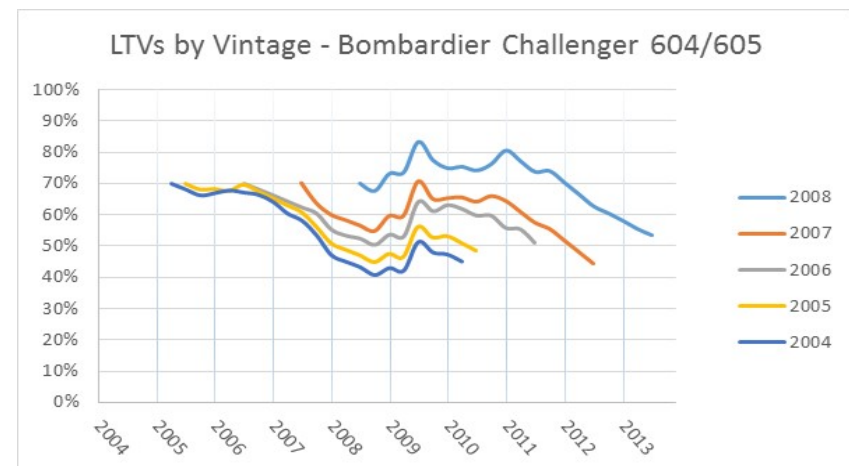
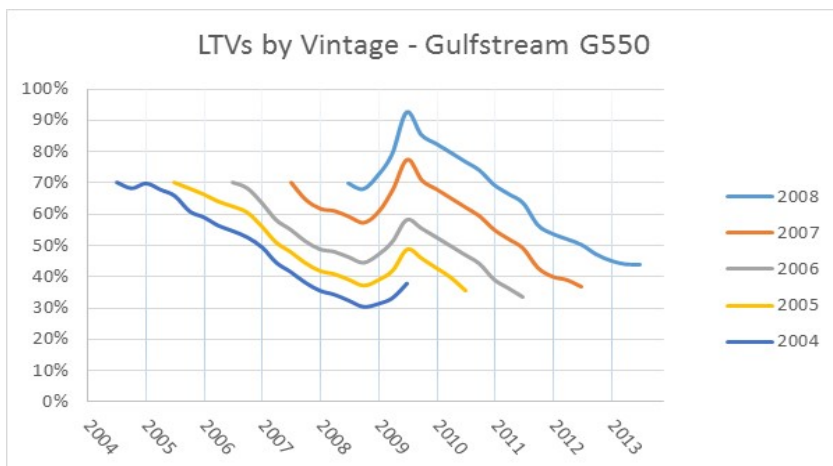
- **Credit Risk**
- **Can vary with business cycles**
- **Forecast of future performance**
- **KYC**

## Probability of Dollar Loss

- **Asset Valuation – Advance and Amortization**
- **Aircraft Management**
- **Jurisdictional Risk**
- **Insurance**
- **KYC**

# Simulated Historical Loans

**Loan-to-Value of 5 Year loans:** *retrospectively applied to historical aircraft values*



- The loan assumption for each curve is a 5 year loan with 70% advance and a 40% balloon payment.

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