Balancing cash, risk and growth to maximise value

An equity analyst’s perspective
Agenda

• A framework for value
• Are the aircraft OEMs overproducing and why?
• Implications for Supply Chain
Wall Street uses a vernacular

• Price/Earnings, EV/EBITDA, Price/Cash flow,
• Sales growth, earnings growth, PEG ratio
• Discount rates, market multiple, sector premium
• Quality of earnings, cash conversion
Value boils down to three things

• Cash
• Growth of that Cash
• Riskiness of that Cash
Balancing Growth, Cash and Risk

- Emphasise growth too much... Cash declines... ...and risk increases

- Focus on Cash too much... Kills growth... ...although risk likely reduces too

- Too much Risk aversion... Kills growth... ...but Cash OK... ...at least in the short term
Quantification

Translating into vernacular:

Cash and cash growth
= Profit growth and cash conversion

Risk
= Discount rate

Value
= EV/EBITA multiple

Company growing profits at 6% per annum

Assuming a 9% WACC

Should trade on about 13.5x EV/EBITA

Source: Charles Armitage estimates
Boosting growth hits cash conversion

Comparing growth and cash conversion

Boosting growth from 6% to 10% pa

But hitting cash conversion from 90% to 70%

Reduces valuation from 13.5x to 12x

Source: Charles Armitage estimates
...and can increase risk

Recasting the chart using discount rate rather than cash conversion isolines

Boosting growth from 6% to 10%

But increasing discount rate from 9% to 11% (because moving into riskier areas)

Reduces valuation from 13.5x to 11x

Source: Charles Armitage estimates
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Building a long term production forecast should be easy

- Growth demand – how many more flights
  + Replacement demand – we know how old the fleet is
  = New aircraft demand

However, lots of uncertainty and also very sensitive to small changes
Lots of uncertainty

Even the fundamental bedrock of demand – passenger growth:

- Long term passenger growth has been ~5% for the last 50 years
- Forecasters assume this will continue
- But historical growth helped by deregulation and LCC, boosting demand through lower pricing
  - Ex-fuel, increasingly limited scope for further cost reductions
  - Suggesting lower passenger growth going forward
- However, emerging middle classes in Asia could offset this

Let’s call it 4-6%
Lots of uncertainty

Retirement demand sounds easy too

• We know when the planes were built, so can forecast when they will retire, but actually wide range – bulk retired at 20-30 years, but some younger and some older.

• However, when oil prices were high, retirements were in the 3% range, currently around 1%.

• Cross check – planes last circa 25 years, so should retire 4% per year, BUT fleet was much smaller 25 years ago (doubles every 15 years)

1-3% sounds about right
Forecasts very sensitive to small changes in drivers

- Growth demand is probably in 4-6% range
- Replacement demand is probably in 1-3% range
- Therefore new aircraft demand is probably 5-8% of the fleet
  - 18,000 aircraft in service
  - Each 1% change is 180 aircraft per year
    • 13-14% of annual aircraft production

3% range is 540 planes, or 40% of production
Airliner demand forecast vs production

Within (wide) range, but towards upper end of demand

Source: Charles Armitage estimates
Cross check with OEM data

- Airbus forecast 32,600 new aircraft over 2015-34, Boeing forecast 35,560
  - 1,630-1,780 airliners per annum = 2018/19 production, but no growth thereafter
- BUT 5% per annum demand growth, so need to start lower

Source: Charles Armitage estimates
Why are they overproducing?

Believe there are (at least) four reasons:

• Fast payback – under a year
• Long term market share – multi-year orders
• Boeing needs to follow, to maintain similar benefits of scale
• Maintaining duopoly – massive benefits of scale vs new entrants from Canada, Russia and China
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Thoughts for the supply chain

• Current focus is managing the ramp up
• Think about Growth, Cash and Risk balance
  – Currently seeing the growth, but
  – Downside risk would appear to be increasing
  – Maybe time to start thinking about conserving cash
    • What base capacity vs surge capacity/overtime
  – How will you cope with a downturn?