

Boeing vs. Airbus

Grading Considerations

Overall

Boeing appears to have the overall better future prospects at the most recent balance sheet dates, taking into consideration expected future ROEs, risks, and growth. There are solid arguments on both sides and experts could reasonably disagree on their relative merits. While we are open to opposing claims, based on the information in the case and concepts covered thus far in the course, Boeing's future prospects dominate in all three factors.

Generally, responses to each of the three factors (ROE, risk, and growth) scored higher to the extent they started with a topic sentence that previewed an argument, explaining how an assertion about the future is supported by recent quantitative trends that resulted from business activities likely to persist in the future. The remainder of the response succinctly but comprehensively substantiated key issues raised in this preview: identifying the high-level quantitative trends and drilling down into the lower-level quantitative factors driving them; identifying business activities that explained these historical trends; and provided reasons why these business activities were likely to persist in the future.

Expected future Return-on-Equity (ROE)

Expected future ROEs: Boeing appears to have the overall better expected future ROEs.

Arguments

Boeing has the better expected future ROE because its historical ROEs have been significantly higher than Airbus due to superior profit margins and asset turnovers driven by management's strategic commitment to product innovation, efficient processes and extensive customer support¹ that is likely to persist, allowing Boeing to capitalize on the forecasted strong demand in the commercial airlines sector².

Drilling down into the DuPont Model, Boeing's dominate ROE is driven by better profit margins, asset turnover, and financial leverage. Boeing has a profit margin ratio hovering around 7%, whereas Airbus' is much lower between 2%-5%. As we drill down into the common sized income statements, Boeing's profit margin advantage is the cumulative effect of slightly better performance across the income statement line items. As we examine the actual income statements for each company, we gain additional insights into the differences behind the "other" items in the tabular data in the case. For example, Boeing's lower common-sized other operating income and expenses is partly explained by its lower research and development expenses (3% of revenue vs Airbus' 6%) for the most recent year. Similarly, Boeing's lower common-sized other income and (expenses) is partly due to its lower interest and debt expense versus Airbus' higher financing costs (synonyms for interest and debt expense). This difference is consistent with the common sized balance sheets where Airbus has more long-term debt (11% vs 6% for Boeing for the most recent year). Boeing is also using their assets slightly more efficiently, with asset turnover of around 0.75 versus Airbus around 0.6.

Boeing's superior profit margins and asset turnover is driven by business practices that are likely to persist. Boeing's "extensive customer support services network which spans the life cycle of the airplane [from aircraft acquisitions to the daily cycle of gate-to-gate operations] ... enables [Boeing] to provide a high level of customer satisfaction and productivity."³ This efficient management of assets and customer satisfaction are the keys behind the high profit margin and high asset turnover that has led to higher ROE for Boeing. Boeing's dedication to these things will continue to lead to higher ROEs in the future. The forecasted strong demand in the commercial airline sector (67% of Boeing's revenues) will grow revenues, which will increase profit margins by decreasing fixed costs per dollar of revenues and increase asset turnover (to the extent Boeing has excess capacity – assets in place to support additional demand).

¹ Boeing's Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

² Deloitte's 2015 Aerospace and Defense Industry Outlook, Page 3.

³ Boeing's 2014 10K.

Counterargument:

Airbus is expected to have higher future ROEs because its profit margins and asset turnovers have been steadily increasing and will likely surpass Boeing's ratios in the near future because of business practices that have yet to achieve their full potential. Profit margins increased from 2.7% to 5.3% since 2011, driven by an increase in gross-margin percent (13.8% to 14.7%) and a decrease in other expenses (10.7% to 8.2%). Also, Airbus has historically had better control of financial leverage than Boeing and seems to have better, more consistent capital structure management. In 2011 and 2012, Boeing had a financial leverage of 30.17 and 22.78 respectively, whereas Airbus had financial leverage of 9.64 in 2011 and 9.36 in 2012.

Airbus' improving ratios have been driven by business practices that are likely to persist and yield even stronger future performance. Regarding profit margin, Airbus may have a brighter future as management stated: "...in terms of margin performance for the last quarter, really some deliveries with very healthy margins came through. When we took a view in Q3 and also at the beginning of December, we couldn't be sure that actually they would be delivered and, believe it or not, they got delivered around December 24 and even the days thereafter."⁴ Additionally, the new A350 should significantly increase sales and management is optimistic about future sales to China.

Rebuttal:

Regarding future profit margin for Airbus, the question is whether the healthier margins in the last quarter can be sustained or whether they were pulled forward into the current year and not sustainable for the future. Also, the A350 was just launched so it's too early to tell how effectively it will compete with Boeing's Dreamliner.

Expected future risks

Expected future risks: Boeing appears to have the overall better expected future risks.

Arguments:

Boeing is expected to have better future risks than Airbus because it has historically had lower liquidity risk due to superior current ratios, and borrowing capacity, and free cash flows driven by superior profitability discussed in the ROE section, which is likely to persist. Boeing also has lower future asset risk because the Dreamliner has a jump start on the A350 and comparable financial leverage because of recent de-risking initiatives. As stated in the media article⁵, Boeing "with an early entry, the 787 definitely has a head start" over Airbus. Boeing's advantage has positive ripple effects throughout its expected future performance.

Regarding liquidity risks, Boeing has slightly better current ratios than Airbus, making them better equipped to handle unforeseen and sudden risks. Boeing has had a current ratio of over 1.1 for each of the last four years vs below 1 for Airbus. The fact that Airbus has a current ratio of less than 1, or negative working capital, is very risky. This means they do not have the current assets to cover their current liabilities.

According to Boeing's CFO, Boeing "ended the quarter with \$13.1 billion of cash and marketable securities and [their] cash position continues to provide solid liquidity and positions [them] well going forward."⁶ This gives them a lot of flexibility and current assets to help cover any unforeseen occurrences. Doug Harned, an analyst from Sanford Bernstein pointed out just how much freedom and flexibility Boeing has when he asked "you've got now cash in STI [short-term investments] of over \$13 billion and you're going to generate more than \$6 billion in free cash flow. How do you expect to deploy that? You should have declining risk here." Having all this free cash puts Boeing in an extremely good position to handle any future risks. Moreover, Boeing states: "We have substantial borrowing capacity" should it need more liquidity in the future.⁷

Boeing's future risk also seems lower because of its de-risking strategies. As stated in the conference call: "one of the strategies we had in place was to de-risk the decade and we've certainly done. The risk profile going forward is a very different than it was in the past. And so continuing to execute on delivering on the backlog, focusing on the core operating performance, again

⁴ Airbus Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

⁵ Media article "Boeing 787 and Airbus A350: A Tale of Two Planes"

⁶ Boeing's Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

⁷ Boeing's 2014 10K

improving the 787 cash profile, and of course capturing those final C-17, that's the biggest driver from '14 to '15".⁸ Once again, innovation around new products (planes) is the key to the future.

Boeing also faces less asset risk for its PPE at 9% of total assets vs 17% for Airbus. More than likely, this asset risk is highly correlated with the companies' product innovation life cycle. Indeed, the common-size cash flow statement shows Boeing's payments for PPE are close to 2.5% of revenues for the four years vs 4-5% for Airbus, which could mean that Boeing is further down the product development life cycle and collecting more cash than it spends investing in new PPE. As indicated earlier, Boeing has a head start on the 787 and Airbus may be spending more on PPE to catch up to build the A350.

Boeing also has less risk due to currency exchange than Airbus. While both companies operate internationally, "a significant portion of [Airbus'] revenue is denominated in US dollars, while a major part of its costs is incurred in Euro."⁹ This puts Airbus in a much riskier position than Boeing.

The consequences of these risks are also lower for Boeing. Boeing's financial leverage is approximately the same as Airbus' for the most recent year based on book values (93% for both companies) but much lower based on market values (57% vs 73% for Airbus).

Counterargument:

Regarding liquidity risks, there are several mitigating factors. Airbus' management is pretty upbeat about future liquidity: "Let's have a look on 2015 with regard to cash. We begin 2015 with a very solid cash position of EUR 9.1b [cash plus other short-term investments]. We have three things in mind when we think about the utilization of that cash. Number one is to fund our operations. Second, it is to hold enough cash for our business needs and the profile of risk that are facing now and in the future. And number three is to return capital to our shareholders."¹⁰ Indeed, Airbus has distributed over €1.4 billion in dividends over the past three years a sign management is confident they can meet the company's future cash needs.

In addition, by examining the balance sheet tabular data, we see nearly half of Airbus' current liabilities are customer advances and billings or deferred income. These liabilities will not be settled with cash.

Regarding currency risks, Airbus, like most major companies, "uses financial instruments (mainly currency forwards) to mitigate the exposure to changes in market rates."¹¹ Regarding future currency risks, Airbus states: "Turning to 2015, so far we have seen further US dollar strengthening. ... that will mainly benefit 2018 and beyond. We have now a hedge book which allows us to progress at a more steady pace and to be ready to capture potential upside"¹²

In addition, the "Revenues by Region" tabular data indicates that only 16% of Airbus' current revenues are in North America, and in general, Airbus has diversified geographic sources of revenue that counter balance the fact that most of Airbus' costs are in Europe.

While the media article states Boeing has a head start, it also states that Airbus' "A350 is a strong offering that could makeup that time gap".¹³ Thus, Airbus' future risks may not be as great as they appear on the surface.

Rebuttal:

While it is true Boeing had extremely high financial leverage in 2011 and 2012, they have reduced that number greatly in the last two years. Also, moving forward Boeing "currently [has] \$5.0 billion of unused borrowing capacity on revolving credit line agreements"¹⁴. This leaves them with a lot of flexibility when it comes to capital structure as well.

While, nearly 50% of Airbus' current liabilities are customer advances and billing or deferred income, as indicated in the balance-sheet tabular data, over 60% of Boeing's adjusted current liabilities are customer advances and billings. .

⁸ Boeing's Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

⁹ Airbus' Fiscal 2014 10K

¹⁰ Airbus Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

¹¹ Airbus' Fiscal 2014 10K

¹² Airbus Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

¹³ "Boeing 787 and Airbus A350: A Tale of Two Planes"

¹⁴ Boeing's 2014 10K

Similarly, from the common-sized cash flow statements, we see that while Airbus's dividends and share repurchases combined have average less than 1% of revenues during the most recent two years, Boeing's have averaged close to 7% of revenues. This is a sign Boeing's management is confident they can meet the company's future cash needs.

Expected future growth

Expected future growth: Boeing appears to have the overall better expected future growth.

Arguments:

Boeing has the better expected future growth because Boeing's revenue forecast exceeds the overall global aerospace and defense industry growth forecast for 2015, while Airbus forecasts it will not even repeat its 2014 revenue growth. Boeing's growth is likely to persist because of the operating practices discussed in the ROE section and increasing Dreamliner sales as the new plane gains traction.

Boeing states: "Revenue for 2015 is forecast to increase to be between \$94.5 billion and \$96.5 billion, representing growth of between 4% and 6%. Our 2015 Commercial Airplane revenue guidance is between \$64.5 billion and \$65.5 billion reflecting 8% to 9% growth as we execute on our record backlog. ... So in summary, Boeing's 2014 financial performance and the 2015 financial guidance reflects the strong demand for our products and services, the strength of our backlog, and our continued focus on driving productivity throughout the entire enterprise."¹⁵

Indeed, Boeing's overall growth forecast of 4 – 6%, including the commercial forecast of 8 – 9%, exceeds the overall global industry growth at 3%, driven by the global commercial aerospace sector.¹⁶ At the same time, Airbus is telling analysts "don't expect or extrapolate" their strong 2014 revenue growth of 5.46% (vs 4.78% for Boeing) to their performance for 2015.¹⁷

Even if you take a historical perspective for estimating future growth, over the last few years Boeing has been growing revenues better than Airbus. Average year to year revenue growth is nearly 10% for Boeing versus just over 7% for Airbus.

Boeing's revenue growth is a key factor in future cash flows as the company states: "recent achievements in the marketplace, in our operations and in our financial performance set the stage for expected significant cash generation, the flexibility to invest for growth in support of our customers and the increasing return of cash to shareholders."¹⁸ This flexibility is reflected in the estimate of Boeing's free cash flow of over \$6.6 billion versus €12 million for Airbus in the most recent year. (This free cash flow as a percentage of estimated customer collections is 7.15% for Boeing vs 0.02% for Airbus.) Boeing's cash strength is also illustrated in the Cash Flow Surplus (Shortfall) Analysis tabular data. Boeing has sufficient cash surplus after maintaining current capacity and pay for debt (principle and interest) and taxes.

Moreover, as discussed earlier, Boeing's management is so confident about the future cash inflows that it has distributed significant dividends and repurchases over the past three years. On the other hand, Airbus only paid dividends and did not buy back any shares over those same years. The fact that Airbus is paying so much less out to its shareholders could be a sign that they are not growing and do not have as much cash to return to shareholders.

Counterargument:

Although 2015 growth may not be as strong, the future looks bright. Airbus states "Commercial activity remains very strong with the commercial aircraft order book up 15% to more than 6,300 units now, representing nominally more than 10 years of deliveries [in the future]. ... that also pretty much explains why we've taken the decision to ramp up production for our single-aisle family to 50 a month from 2017 onwards..."¹⁹ Also, as reported in the tabular data, Airbus's Backlog at the end of 2014 is approximately 14 times 2014 revenues, while Boeing's backlog is approximately 5 times 2014 revenues.

As seen in the common-sized cash flow statements, perhaps due in part to the production ramp up, Airbus spent on average 4 – 5% of estimated customer collections for capital expenditures during the past four years, while Boeing spent on average 2%. Capital expenditures pertain to the cost of acquiring or constructing long-term assets. By devoting more money to longer term

¹⁵ Boeing's Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

¹⁶ "Deloitte's 2015 Global Aerospace and Defense Industry Outlook"

¹⁷ Airbus Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

¹⁸ Boeing's Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

¹⁹ Airbus Fiscal 2014 Earnings Release Conference Call with Executives and Analysts

assets, Airbus is setting itself up to have more growth in the future. So, in contrast to Boeing returning more to shareholders over the last few years, Airbus is focused on long term growth, which can be seen in the capital expenditures.

Also from the common-sized cash flow statements, Airbus issued more long-term debt in the past two years than Boeing (around 3% of estimated customer collections versus around 1%, respectively). Airbus' new debt helps it manage the cash shortfall where net cash from operations didn't fully cover its cash needs after maintaining its current capacity and paying debt and taxes, as well as expanding capacity and paying dividends.

Also, Boeing faces a lot of risk in the defense segment of their business because there are declining revenues expected for the global defense sector²⁰. In the most recent year, 34% of Boeing's revenues were from the defense and aerospace. With less predictable spending and reduced business in this industry, Boeing faces the risk of a major decline in revenues.

Both companies have healthy order backlog and their growth is benefiting from the "accelerated replacement cycle of obsolete aircraft with next generation fuel efficient aircraft, as well as the continued increases in passenger travel demand..."²¹ Perhaps Boeing has an early start with the 787, but Airbus A350 is a strong offering that could makeup that time gap.²²

Rebuttal:

Airbus may be spending more on capital expenditures, but Boeing is also taking steps to secure long term growth. In a conference call with analysts, Boeing CFO Greg Smith stated "we are going to have higher cash taxes because we are improving unit costs on 787. And we have again slightly higher R&D, all planned out, 777X and 10X."²³ By continuing to increase R&D, Boeing is showing a commitment to long term growth.

On top of spending on CAPX and operational costs, Boeing is making a good return to owners. Including capital gains, Boeing's total returns to owners is 113% vs 76% for Airbus during the past three years.

In examining the actual cash flow statements for both companies, we see that both companies are making small investments in acquisitions that may improve future growth, \$163 million for Boeing and €47 million for Airbus (0.2% of estimated customer collections vs 0.1%, respectively).

The cash flow statements also show that Airbus is divesting with over €1.2 billion of cash inflow from proceeds from disposals. Clearly these are transient effects on current cash flow and possibly lower future growth.

Like Boeing, Airbus also faces the risk of declining revenues due to its involvement in the defense segment as well.

²⁰ Deloitte's 2015 Global Aerospace and Defense Industry Outlook

²¹ "Deloitte's 2015 Global Aerospace and Defense Industry Outlook"

²² "Boeing 787 and Airbus A350: A Tale of Two Planes"

²³ Boeing's Fiscal 2014 Earnings Release Conference Call with Executives and Analysts