



The Boeing Company (NYSE: BA) - \$316.60

Initiating Coverage - January 28, 2020

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Turbulent Times Ahead

- We are initiating coverage with a **SELL** Rating on Boeing (“BA” or “the Company”) with a 12-month target price of **\$270**.
- The numerous and pervasive issues at the Company that has been brought forward by the 737 MAX crisis will continue to affect the Company’s performance and financial results for the foreseeable future. These issues will result in continued delays to recertify the 737 MAX with a risk of non-certification, medium to long-term brand destruction, a decline in new orders, cancellation of existing orders, production delays beyond mid-year 2020, severe strain on customer and supplier relationships, as well as extensive litigation costs and legal risks.
- These effects will result in lost market share, declining revenues and cash flows, significant customer, supplier compensation and legal liabilities, and increasing debt and debt service costs due to an increase in credit risk.
- While we are bearish on the short-to-medium term, we do recognize Boeing has long-term tailwinds. Tailwinds include, but are not limited to, the U.S. government’s newly minted Space Force, increasing defense spending, and potential low-cost government funding and subsidies to support activities that are critical to protecting US national security interests.

The Clear Skies Ahead Consensus

- Current analyst consensus¹ predicts a quick return to previous profit levels in FY 2021. We believe this will be next to impossible given our read of the situation.
- Analysts over-estimate the speed at which the 737 MAX will be recertified and regain acceptance in the marketplace and under-estimate current and future liabilities associated with its failures.
- The rather optimistic analyst consensus for 2020 and beyond has set the Company up to disappoint.

Current Analyst Estimates and Key Data Points

Multiples				Nominal Consensus Estimates (In Millions USD)				
Metric	Current	FY2019 Est.	FY2020 Est.	Metric	FY 2018 Act	FY 2019 Est	FY 2020 Est	FY 2021 Est
PE	78.48	1,914.40	24.40	Revenue	\$101,127.00	\$79,659.54	\$102,494.75	\$120,215.71
Price/Sales	2.08	2.25	1.74	EBIT	\$12,062.00	-\$14.10	\$11,523.08	\$14,853.60
EV/Sales	2.23	2.44	1.89	EBITDA	\$14,176.00	\$3,109.90	\$13,179.59	\$17,117.36
EV/EBITDA	28.49	62.42	14.73	Net Income, GAAP	\$10,460.00	-\$128.40	\$9,220.46	\$12,353.10
EV/EBIT	44.87	129.82	16.77	EPS, GAAP	17.84	1.04	15.86	21.00

Projected Effects on the Financial Statements

- **We believe that EPS is going to be lower than the current consensus estimate for FY 2019 when earnings are released on January 29th, 2020. We also believe the Q4 charge expected could exceed \$10 B.**
- We also believe that it will be more of a struggle for Boeing to resume stable operations than the market is currently anticipating. Therefore, our analysis shows a slower resumption of historical growth patterns/margins, and a further increasing debt amount for FY 2020 and FY 2021.
- Our price target of \$270 is based on a 25 times multiple of our 2020 earnings estimate and 15 times of our 2021 estimate.

Year (Millions USD)	FY 2018A	FY 2019E	FY 2020E	FY 2021E
Revenue	\$101,127.00	\$78,900.00	\$92,100.00	\$108,100.00
Gross Margin %	19.49%	18.00%	18.50%	19.00%
EBIT	\$12,062.00	\$789.00	\$7,137.75	\$10,810.00
EBIT Margin %	11.93%	1.00%	7.75%	10.00%
EBITDA	\$14,176.00	\$1,972.50	\$8,519.25	\$12,701.75
EBITDA Margin %	14.02%	2.50%	9.25%	11.75%
Net Income	\$10,460.00	(\$394.50)	\$6,216.75	\$9,285.79
Profit Margin	10.34%	-0.50%	6.75%	8.59%
EPS	\$17.87	(\$0.69)	\$10.91	\$16.30
Shares Outstanding	585.50	569.8	569.8	569.8
PE Multiple			25.0x	17.0x
EV/EBITDA	14.2x	104.0x	24.6x	19.0x
Debt to EBITDA	1.0x	11.2x	4.0x	3.2x

The 737 MAX Plane Design is Fundamentally Flawed

■ What is MCAS?

■ The Maneuvering Characteristics Augmentation System (MCAS) is computer software developed for the 737 MAX which automatically controls the tilt of the aircraft in rare high-speed conditions. MCAS was first introduced on the 737 MAX 8 and is reliant on outside sensors that track pitch and speed to automatically adjust horizontal stabilizers to adjust course to avoid stalling.¹ Errors caused by this system were determined to be primarily responsible for the two crashes in Indonesia and Ethiopia which killed 346 people in 2019.

■ Why is MCAS needed in the first place²?

■ The Boeing MAX series was produced with cost savings and economics in mind. When the 737 Max Series was first being designed, to allow the lowest cost of manufacturing, Boeing kept the specifications of certain components the same throughout the series. Most importantly, the size of the wings and the engines as seen below:

Specs	737 Max 7	737 Max 8	737 Max 9	737 Max 10
Seats (2-Class)	139-153	162-178	178-193	188-204
Maximum Seats	172	210	220	230
Range (km)	7130	6570	6570	6110
Length	116 ft 8 in	129 ft 8 in	138 ft 4 in	143 ft 8 in
Wingspan	117 ft 10 in			
Engine	LEAP-1B	LEAP-1B*	LEAP-1B**	LEAP-1B**

¹<https://www.engineering.com/Hardware/ArticleID/19269/Boeing-737-MAX-Pilots-Had-No-Idea-What-They-Were-Up-Against.aspx>

²<http://www.modernairliners.com/boeing-737/boeing-737-max/>

*Current Generation

**To be commercialized, MCAS introduced

The 737 MAX Plane Design is Fundamentally Flawed

■ Why was MCAS needed in the first place? (Cont.)

- According to the specifications seen in the previous table, we can see that while there are drastic variations in the lengths and seating among the four models, there is no change in the wing length or engine. This leads to the rational assumption that both the engines and wings were developed to provide enough thrust and lift for the largest model to fly safely. This led Boeing to see an opportunity to reduce costs and use the same components for the other planes under the 737 MAX platform.
- This means that the smaller models (737 MAX 7 & 8) have more lift and more thrust which is necessary. The engines are so heavy and large for the 737 MAX 7 & 8, that in order for the smaller models to gain ground clearance approval, the engines had to be moved up and even partially above the wing. Unique and fundamentally flawed placement of the engines, alongside the excess lift from the wingspan, is what causes the 737 MAX to increase pitch faster than necessary at times. This is what required corrective software to protect the plane from stalling.

■ Thesis Argument 1 Summary :

- Rigid cost controls and surmounting pressures to compete with Airbus's A320neo (new engine option) aircraft drove Boeing to produce a fundamentally flawed, unbalanced airplane which only works with corrective software.
- The FAA admitted to Boeing partly self-regulating the software during development.² We believe that now that these problems have come to light, the FAA may attempt to overcorrect for their previous mistake of letting these planes fly and put much more scrutiny on not only the MCAS software but the design and construction of the planes themselves.
- **We believe that the worst-case scenario is that the entire 737 MAX design is scrapped due to inherent engineering and design flaws leading to catastrophic financial losses and a loss of its competitive position in the marketplace.**

¹<https://www.engineering.com/Hardware/ArticleID/19269/Boeing-737-MAX-Pilots-Had-No-Idea-What-They-Were-Up-Against.aspx>

²<https://www.businessinsider.com/faa-let-boeing-self-regulate-software-believed-737-max-crashes-2019-3>

Expected Future Legal Problems for Boeing

- **Lack of communication with regulators concerning the development of the MCAS system.**
 - The MCAS Software was initially treated as benign software that did not require much attention. It was first designed for rare high-speed situations that came up in the early development of 737 MAX. However, flight tests showed the 737 MAX not handling low-speed stall conditions well partially due to its increased engine size. Boeing engineers then internally repurposed the MCAS software to handle these low-speed situations.
 - These changes allowed the MCAS to be more powerful and severe to automatically correct pitch under stalling conditions. This was attained by two components also being removed from the system, a) safeguards which prevented the system from taking control at low speeds, and b) input from multiple sensors to detect a stall¹.
 - Another change was that while the original MCAS had relied on two angle-of-attack (AOA) sensors, the new version, which was on both aircraft that crashed during 2019, only had one. It is unknown as to why they removed one of the AOA sensors from the MCAS system. This vastly increased the risk of the system malfunctioning due to so much riding on a single sensor which is externally mounted and at risk of physical damage. Boeing VP Mike Sinnett insisted that the single sensor was not a single point of failure because the pilot acts as a back-up.
 - **Not only did Boeing neglect to inform the FAA of the revised MCAS system which operated more aggressively in conditions it wasn't created for, but it also sought to keep it a secret from airline pilots.** Boeing's Chief Technical Pilot, Mark Forkner, requested in a March 30, 2016 email to senior FAA officials, that mention of the MCAS be stripped from the pilot manual (NYT).
 - **When the 737 MAX went to market, the FAA nor the pilots were informed about the modified MCAS system. Litigation and legal ramifications from Boeing's lack of transparency and disclosure about these modifications will continue to create significant hard and soft costs going forward.**

¹<https://www.engineering.com/Hardware/ArticleID/19269/Boeing-737-MAX-Pilots-Had-No-Idea-What-They-Were-Up-Against.aspx>

Expected Future Legal Problems for Boeing¹

■ **Squeezing margins to the last drop.**

- When the 737 MAX was heading to market, Boeing told both the FAA and pilots that the 737 MAX was essentially the same plane as the previous versions, which has been in production for approx. 50 years, despite it being a significant improvement with more powerful engines. This was said to decrease training times which would have increased costs for Boeing. Additionally, this was likely done to reduce the timeline and costs associated to recertify the plane.
- The 737 MAX also has a warning indicator on the instrument panel which allows the pilots to know if there is an AOA sensor malfunction. Not only is this an add-on cost an additional \$80,000, but by November 2017 Boeing knew that sometimes the alert would not work as intended. Boeing did not alert airlines until a year later. When questioned by lawmakers in 2019, the Company stated it was not planning to fix the error until 2020.

■ **Thesis Argument 2 Summary:**

- Would have knowing that the MCAS software was altered have changed the course of events that took down the two flights in 2019? Evidence points to **YES**. In the cockpit are two switches that are available to both the pilot and co-pilot which cut all electricity to the stabilizer, effectively neutralizing MCAS.
- The lack of knowledge the pilots had surrounding the MCAS system is likely what caused both crashes in 2019. When the system malfunctioned, neither pilot knew what was causing the nose of the plane to be forced down which ended in their unfortunate demise.
- **There are several investigations still underway² regarding Boeing's actions with respect to the MCAS system. We believe that either Boeing or individual employees within Boeing could be held responsible for the misconduct.**
- **These legal issues could continue to haunt Boeing as they may both further hurt the image of the company, as well as internally divert financial and management resources into dealing with these burdensome issues.**

¹<https://www.engineering.com/Hardware/ArticleID/19269/Boeing-737-MAX-Pilots-Had-No-Idea-What-They-Were-Up-Against.aspx>

²<https://www.businessinsider.com/boeing-737-max-investigation-finds-new-concerns-with-wiring-engines-2020-1>

Expected Liability and Expense Increases

- **A rise in accrued liabilities in connection to 737 MAX grounding.**
 - In Q2 2019, Boeing took a \$5.6B net charge against its revenues¹ in connection with the grounding of the 737 MAX fleet. This charge represents the potential concessions and other considerations for customers to compensate them for disruptions and associated delivery delays.
 - Boeing did not further increase this liability in Q3 2019 due to a belief of the FAA approving the 737 MAX for flight sometime in Q4 2019; however, we expect Boeing to take a \$10-\$15 billion charge with the vast majority in Q4 2019.
- **Thesis Argument 3 Summary:**
 - Boeing and the FAA are now expecting the 737 MAX to be approved for flight sometime during mid-2020. This will be reflected in an additional one-time charge to account for further disruptions and liabilities to customers. However, with new leadership and market expectations already in place for a sizable liability charge; **We believe there is a high probability of “big-bath accounting” to take place which could result in a higher than expected liability charge in the FY 2019 results. This could serve as a method to improve earnings going forward. It is also near impossible to accurately assess the future potential liabilities due to the complexity of this entire situation.**

Airbus is Eating Boeing's Lunch

- **Boeing has lost customer loyalty and orders to Airbus due to the 737 MAX situation.**
 - Saudi Flyadeal scrapped their entire order of thirty 737 MAX's in substitute for thirty Airbus A320neo aircrafts.¹
 - Xiamen Airlines, a previously loyal customer of Boeing, announced that it was adding 10 Airbus A321neos to its fleet.²
 - Boeing lost an order to Airbus for General Electric's aircraft leasing subsidiary GECAS. This is a huge loss as GECAS has historically not purchased planes which have their competitor, Rolls Royce's, engines.³
 - Garuda Indonesia canceled its remaining 49 orders for the Boeing MAX jet in March 2019.⁴
 - The damage to Boeing's operations can be seen in the net new yearly orders seen below (as of November 2019):

Net New Orders Per Year. Periods Ending in November.											
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Airbus	281	574	1419	833	1503	1456	1080	731	1109	747	718
Boeing	142	530	805	1203	1355	1432	768	668	912	893	-84

- Not only has Boeing had net negative new orders for the first time decades, but Airbus also surpassed them for the first time in October 2019 for total orders of their A320 vs Boeing's 737. The A320 had 15,193 total orders versus 15,136 for the 737.⁵ We believe this spread will only get wider due to the variety of negative factors brought forward by the 737 MAX narrative.

¹<https://simpleflying.com/flyadeal-boeing-airbus-order/>

²<https://simpleflying.com/xiamen-airbus-a321neo-intention/>

³<https://www.reuters.com/article/us-airbus-gecas/ge-unit-orders-25-airbus-jets-including-12-rolls-powered-a330neo-sources-idUSKBN1XI0U1>

⁴https://www.barrons.com/articles/boeing-cancel-garuda-737-max-51553260298?mod=article_inline

⁵<https://simpleflying.com/airbus-a320-now-has-more-total-orders-than-the-boeing-737/>

Airbus is Eating Boeing's Lunch

- **While Boeing has loyal customers, the 737 MAX has imposed significant financial and reputational damages. These damages have strained their relationships and will force customers to consider switching their fleets to Airbus in the future.**
- Southwest Airlines, WestJet, United Airlines, and American Airlines have all been adversely affected by the grounding of the 737 MAX. Southwest and WestJet are solely reliant on the Boeing 737 series.¹ While Boeing is currently accounting for the projected losses due to the groundings, there is a strong chance that it has altered their view of The Company and may be more poised to consider Airbus as some of the other airlines already have.
 - This is likely putting further pressure on global regulators and especially the FAA.
- **Airbus is currently increasing investment while Boeing is decreasing it.**
 - Airbus announced on January 9, 2020, a further expansion of its aircraft manufacturing within the US with an expansion of its Alabama operations to increase the production of the A320.²
 - In contrast, Boeing is currently thinking of partially deferring CAPEX, freezing acquisitions, and cutting spending on R&D to preserve its dwindling cash reserves and weakened cash flows.³
- **Thesis Argument 4 Summary:**
 - Significant financial damage has been done to the carrier customers of Boeing due to Boeing's issues and performance. **We believe as this narrative plays out there could be more airlines opting out of Boeing's products and switching swiftly to Airbus'.**
 - **Boeing's current cash woes are putting pressure on their ability to spend to ensure future growth. Airbus is, rightly so, capitalizing on this by stepping up their (North American) manufacturing operations to further take market share from Boeing.**
 - **Currently Airbus can't keep up with demand due the 737 MAX production halt and grounding. We believe this demand may only get larger as this situation continues to unfold.**

¹<https://simpleflying.com/boeing-737-max-us-airline-cost/>

²<https://www.travelindustrywire.com/article108716.htm>

³<https://www.theglobeandmail.com/business/international-business/article-boeing-considers-raising-more-debt-as-max-crisis-weighs-report/>

Steep Descent in Retail Customer and Pilot Trust

- **Retail consumers are going to be highly apprehensive to re-fly on the 737 MAX**
 - Boeing is currently trying everything they can to regain consumer trust in the model. In fall 2019, Boeing began to release 30-second clips on YouTube¹ in an attempt to persuade consumers about the safety of the 737 MAX.
 - Atmosphere Research surveyed 2,000 US airline passengers and found the following²:
 - More than 7 in 10 passengers know the 737 MAX has been grounded.
 - **19%** of business passengers and **14%** of leisure passengers would fly the plane in the first six months after it is allowed to return to service.
 - Nearly half of leisure passengers would consider taking a flight using a plane other than the 737 MAX, even it costs them **\$80** more per round trip.
 - Boeing was extremely slow to give information to the public after the disasters in 2019. This lack of transparency was a misstep and further deteriorated consumer trust at a time in which it was most needed
- **Pilots have lost trust in the brand after the MCAS was hidden from them.**³
 - Pilots' unions say their members' trust in the safety culture at Boeing is at rock bottom.
 - The Southwest Airlines Pilots Association is currently suing Boeing for a lack of information surrounding the MCAS system.
- **Thesis Argument 5 Summary:**
 - **The reputational damage to Boeing's public image has been significant. It is going to take both time and money to repair it back to its former level if it is even attainable at all.**

¹<https://www.youtube.com/channel/UC9lEkpr46ScglWU79HF5qQ>

²<https://atmosphereresearch.com/>

³<https://www.ft.com/content/2c0419cc-3983-11ea-a6d3-9a26f8c3c4a4>

Boeing's Dividend is Going to Be Under Pressure

- **Boeing CEO Dave Calhoun has recently stated he plans to maintain the dividend but at what cost?**¹
 - The Company is currently in talks with the large US banks to secure a loan of \$10B or more to sustain operations due to the rising costs of the 737 MAX grounding.²
 - Boeing has already been significantly increasing debt levels to deal with the negative Free cash flow brought forward by the 737 grounding³. Also, expenditures will be reduced that are important to operational health.

Year/Quarter (Millions USD)	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3
Cash From Operations	\$2,904.00	\$3,136.00	\$4,680.00	\$4,559.00	\$2,947.00	\$2,788.00	\$2,198.00	(\$5,212.00)
Net CAPEX	\$373.00	\$367.00	\$362.00	\$381.00	\$492.00	\$391.00	\$200.00	\$462.00
Free Cash Flow	\$2,531.00	\$2,769.00	\$4,318.00	\$4,178.00	\$2,455.00	\$2,397.00	\$1,998.00	(\$5,674.00)
Dividend Payment	\$842.00	\$1,006.00	\$991.00	\$979.00	\$970.00	\$1,161.00	\$1,156.00	\$1,156.00
FCF After Dividend	\$1,689.00	\$1,763.00	\$3,327.00	\$3,199.00	\$1,485.00	\$1,236.00	\$842.00	(\$6,830.00)
<i>Dividend Payout Ratio</i>	33.27%	36.33%	22.95%	23.43%	39.51%	48.44%	57.86%	nm
Interest Expense/(Gain)	\$95.00	\$102.00	\$109.00	\$311.00	(\$47.00)	\$123.00	\$154.00	\$203.00
Current and Long-term Debt on Date	\$11,117.00	\$12,452.00	\$12,118.00	\$11,876.00	\$13,847.00	\$14,744.00	\$19,216.00	\$24,652.00
Change in Nominal Amount of Debt QoQ		12.01%	-2.68%	-2.00%	16.60%	6.48%	30.33%	28.29%

■ **Thesis Argument 6 Summary:**

- **We believe that there is a fair chance for the dividend to be cut in 2020 to help mitigate the cash flow challenges of The Company. The Company has just secured loans for \$12 B.**
- **This cash crunch will be also further exacerbated by the increasing interest payment amounts required by the total increase in debt and possible credit rating downgrade.**

¹<https://capital.com/boeing-will-pay-dividends-despite-heavy-costs>

²<https://www.cnbc.com/2020/01/20/737-max-crisis-boeing-seeks-to-borrow-10-billion-or-more.html>

³Company Filings

Regulatory Approval May Take Longer Than Anticipated

- **Both the FAA and Boeing have pressure to downplay the severity of the situation and ensure a quick return to the market.**
 - The FAA has had a history of questionable decision-making regarding the 737 MAX. First, as mentioned previously, the FAA allowed Boeing to partially self-regulate which led to the FAA approving the plane without a thorough investigation. Secondly, the FAA's model showed that the plane would experience fatal crashes and then failed to ground the aircraft.¹
 - The FAA recently mentioned that it might approve the 737 MAX before the expected mid-2020 timeline although there was no clear substance or evidence of this being the case.²
 - Due to Boeing's importance to the US economy, there may also be political pressure in the mix
- **The FAA is not the only regulatory body needed to approve the 737 MAX for liftoff.**
 - While the FAA is the regulatory body concerning the American airline industry, there are many different international regulatory bodies that also need to approve the airplane for a full ungrounding.
 - After the missteps of the FAA, it has already been mentioned that international regulatory bodies are far less likely to follow in the steps of the FAA's decision this time around and instead conduct their own analysis of the aircraft.³
- **Thesis Argument 7 Summary:**
 - The FAA and Boeing are both incentivized to play down the severity of the situation as well as keep the headlines positive with respect to the date of ungrounding.
 - **Even if the FAA approves the 737 MAX to return to the sky, international regulators will still need to inspect and approve the plane. This may lead to a staggered worldwide ungrounding of the plane.**

¹<https://www.theguardian.com/us-news/2019/dec/11/boeing-737-max-plane-faa-regulators-crash-risk>

²<https://www.cnn.com/boeing-737-max-to-be-approved-is-the-faa-repeating-its-fatal-mistakes/>

³<https://www.theglobeandmail.com/business/international-business/article-iata-chief-worried-about-global-regulators-discrepancy-over-boeing/>

Corporate Culture Needs to be Drastically Improved

- **Many negative cultural problems have come to light after the MCAS scandal broke.**
 - Engineers, who were employed by Boeing to be the FAA's eyes and ears, faced heavy pressure from Boeing managers to limit safety analysis and testing so the company could meet its schedule and keep costs down¹.
 - A former employee claims that Boeing hid crucial safety data from the Union Aviation Safety agency after they found a fault in the 737 auto-throttle system. He also mentioned that many of his Boeing colleagues were afraid to flag safety concerns due to potentially losing their job².
 - A spokesman for one of the unions that represent the workers of Boeing claims that the shift to a "cost-cutting" corporation has isolated employees, alienated suppliers, and customers, and ultimately underlies the problems it's having with its current airplanes³.
 - At a plant in North Carolina, speed was often more important than quality as many times planes were sent with excess debris and items left inside them. Not only that, there are records of defective parts being installed on planes⁴.
- **David Calhoun has mentioned his eagerness to correct Boeing's corporate culture.**
 - However, David Calhoun has been on the board of Boeing since 2009, meaning that he is not new to the problem and has involved in the decision making that has brought Boeing to this point. Granted he is now in a hands-on leadership position.
- **Thesis Argument 8 Summary:**
 - **While it will be part of David Calhoun's mission to reformat the corporate culture at Boeing, it may lead to growing pains in the short-run due to turnover in staff and apprehension to change which will take time. Financial pressure will likely mount concurrently.**
 - **This is another short-to-medium term headwind for Boeing and a tailwind for Airbus.**

¹<https://www.seattletimes.com/business/boeing-aerospace/engineers-say-boeing-pushed-to-limit-safety-testing-in-race-to-certify-planes-including-737-max/>

²<https://www.forbes.com/sites/brettonputter/2019/12/18/what-boeing-has-taught-us-about-not-neglecting-company-culture-culturegene/#4471e49a496a>

³<https://www.avweb.com/aviation-news/boeing-engineer-says-corporate-culture-change-behind-max-issues/>

⁴<https://www.nytimes.com/2019/06/28/business/boeing-787-dreamliner-investigation.html?auth=login-google>

Potential for Government Involvement Due to Revenue Mix

- **There is the potential for a bailout for Boeing due to its strong ties to the American government**
 - The US Government has been one of Boeing's largest clients in recent history and while they have had problems with Boeing at times¹, It is in their interest to support Boeing. This can be seen as a double-edged sword; however, as it partially "guarantees" revenue to Boeing, as seen below, it also enables the government to put much more scrutiny on their operations.

Segment	Segmented Revenue (In Millions USD)						
	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2018
<i>BCA*</i>							
Commercial	\$13,652.00	\$14,481.00	\$15,276.00	\$17,306.00	\$11,822.00	\$4,722.00	\$8,242.00
<i>BDS**</i>							
Government	\$5,012.94	\$4,754.05	\$4,869.65	\$5,311.06	\$5,817.68	\$5,884.68	\$6,337.80
Commercial	\$749.06	\$838.95	\$859.35	\$799.94	\$793.32	\$727.32	\$704.20
<i>BGS***</i>							
Government	\$1,458.91	\$1,063.40	\$1,309.12	\$2,295.05	\$1,524.27	\$1,453.76	\$1,630.30
Commercial	\$2,484.09	\$3,026.60	\$2,781.88	\$2,598.95	\$3,094.73	\$3,089.24	\$3,027.70
<i>Total</i>	<i>\$23,357.00</i>	<i>\$24,164.00</i>	<i>\$25,096.00</i>	<i>\$28,311.00</i>	<i>\$23,052.00</i>	<i>\$15,877.00</i>	<i>\$19,942.00</i>
% Commercial	64.70%	64.33%	66.09%	69.23%	57.90%	38.90%	49.51%
% US Government	32.10%	32.20%	24.62%	26.87%	31.85%	46.22%	39.96%

- **Thesis Argument 9 Summary:**
 - **The codependency between Boeing and the US government increases the chance of a government-led bailout in a very pessimistic scenario.**

¹<https://www.cnbc.com/2019/10/29/boeing-has-more-problems-than-the-737-max-rep-john-garamendi-warns.html>

*BCA develops, produces, and markets commercial jet aircraft to the global market.

**BDS engages in R&D and production of products and related services such as drones, surveillance and engagement, satellite systems, and space exploration.

***BGS provides parts, maintenance, modifications, logistics support, training, data analytics and information-based services to commercial and government customers worldwide.