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Global Aerospace & Defense

Boeing Co

Rating

Outperform

Price Target

BA **207.00 USD**

Boeing: Six steps for Kelly Ortberg as CEO - But, do not rush in

Last week, Kelly Ortberg became CEO of Boeing, succeeding Dave Calhoun. In this Research Call, we highlight challenges he will face and six steps to address them.

There were many reports about the choice of Boeing's next CEO. The board's decision was announced July 31 with Q2 earnings. We heard many calls for an outsider to drive cultural change. While cultural change is important, being an outsider (Ortberg is far from the first) has its own challenges at Boeing. It has been, and will be difficult for a new CEO to gain visibility deep into the organization, which is where the challenges lie. There is a need for cultural change. But, having seen the organization evolve over the last 25 years, I can say one wants neither the culture of the early 2000s, nor the one of the late 2010s.

We see six areas of focus for the new CEO: Build networks to strengthen visibility and communications through the company. Focus efforts on operations, as sales and product development are not the key issues. Reinforce relationships with customers and regulators that will continue to require attention. Better assess the extent of performance issues at BDS to end the train of charges. Balance inventory and supply chain risk to avoid shocks to the supplier base. Manage cash around equity raise concerns, with large moving parts. The common theme here is, however, gaining visibility into each business. Beyond near-term tactical actions, we expect Ortberg to take his time before laying out a strategy, as we have seen elsewhere (e.g., Rolls-Royce). Solutions will not be obvious without getting down to the floor. There is plenty that can go wrong in Boeing and one may never know why.

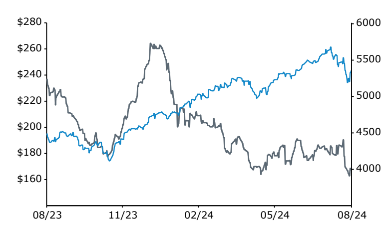
"It ain't what you don't know that gets you in trouble. It's what you know for sure that just ain't so" - Mark Twain

Close Date	9 Aug 2024
BA Close Price (USD)	167.91
Price Target (USD)	207.00
Upside/(Downside)	23%
52-Week Range	267.54/159.70
SPX	5,344.16
FYE	Dec
Div Yield	NA
Market Cap (USD) (M)	103,461
EV (USD) (M)	148,761

Performance	YTD	1M	6M	12M
Absolute (%)	(35.6)	(8.4)	(19.7)	(29.4)
SPX (%)	12.0	(4.2)	6.3	19.6
Relative (%)	(47.6)	(4.2)	(26.1)	(49.0)

Source: Bloomberg, Bernstein estimates and analysis.

Price Performance, 1YR



Investment Implications

We rate BA Outperform, with a price target of $207.

Adjusted EPS	F23A	F24E	F25E
BA (USD)	(5.81)	(4.42)	5.50

Financials	F23A	F24E	F25E	CAGR
EBIT (M)	(773.00)	(421.25)	6,747	
Net Earnings (M)	(2,242)	(1,696)	4,158	
FCF (M)	4,461	(6,573)	7,370	28.5%
Operating Margin (%)	(1.0)	(0.5)	7.0	--
CapEx/Sales (%)	1.9	1.9	1.9	--
Dividend Payout Ratio (%)	0.0	0.0	0.0	--

Valuation Metrics	F23A	F24E	F25E
Adjusted P/E (x)	(28.9)	(38.0)	30.5
PEG Adjusted (x)	0.5	1.5	(0.1)
EV/EBIT (x)	(192.4)	(353.1)	22.0
EV/FCF (x)	33.3	(22.6)	20.2
Div Yield (%)	0.0	0.0	0.0
FCF Yield (%)	4.38	(6.36)	7.09
P/FCF (x)	22.8	(15.7)	14.1

Source: Bloomberg, Bernstein estimates and analysis.

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DETAILS

KELLY ORTBERG AS THE NEW CEO

Kelly Ortberg has stepped into one of the most difficult jobs possible, as Boeing's new CEO. Ortberg was the CEO of Rockwell Collins from 2013 to 2018, when Rockwell Collins was acquired by United Technologies. In February 2020, Ortberg retired from his role leading Collins Aerospace within Raytheon Technologies, although remained an advisor and has served on the RTX board. It had to clearly be a major decision for Ortberg to step into this new role at Boeing. At Rockwell Collins, prior to becoming CEO, he led the Government Systems business and before that the Commercial Systems business. The diversity of background is important, as Ortberg faces challenges in both Boeing Commercial Airplanes (BCA) amd Boeing Defense, Space & Security (BDS). At Rockwell Collins, Ortberg did have to navigate through the beginnings of the Global Financial Crisis at Commercial Systems and a decline in US defense budgets when at Government Systems. Most of his tenure as CEO and at RTX (leaving just before COVID) was during a strong growth period for the industry, when there were few losers.

While at Rockwell Collins, we saw Ortberg as a successful CEO after Clay Jones. Collins share performance, prior to the United Technologies acquisition announcement, was up 46% over the five years of his tenure since taking the CEO role on July 31, 2013. That 46% increase was identical to that of the S&P500 over that period, although well below performance of Boeing and Airbus shares. From just prior to the announcement of the United Technologies acquisition until the deal closure, Collins shares gained another 32% in a deal by United Technologies that we did not support.

The move from CEO of Rockwell Collins with roughly $8bn in revenues to Boeing with nearly $80bn is a big one. But, we see the bigger jump as tied to the scale of challenges at Boeing. The challenges that Boeing faces in BCA (the 737MAX quality and ramp, supply chain issues, certification of three models, Spirit integration) are not only large, but also extend back over ten years. At BDS, the issues are also broad-based and have also been developing for more than a decade. When Dave Calhoun became CEO at the beginning of 2020, we saw him as making the right choices and reversing many of the approaches of his predecessor. But, change proved to be very challenging. We believe it is still challenging.

WHERE BOEING IS COMING FROM - WHY THIS WILL BE HARD

The need for an outsider? Been there, done that

There has been much in the press about how to fix Boeing, with comments from academics or various industry or financial pundits about the need for "cultural change", which requires an outsider. The people who make these statements have never worked at senior levels inside Boeing. We have seen outsiders. Dave Calhoun was an outsider. Kevin McAllister who ran BCA under Dennis Muilenburg was an outsider. Before that, Jim McNerney was an outsider. They were all ex-GE, but we did not see that as a negative. In fact, if one talks with people who worked under Dave Calhoun at GE Aviation, you find few people who do not give him high praise.

Cultural change - Yes, but not as easy as it sounds

There is a need for cultural change. If one goes back to the period when Phil Condit was CEO (1996-2003) and before, the culture was still the old Boeing. You hear many people today reminisce about the great Boeing of the past. There were many great things about Boeing. But, that culture needed change as well. As one executive described to me more than 20 years ago, the culture was one of "configuration control". On one hand, the highest engineering and quality standards were enforced. But, at the same time costs often ran far out of control in highly bureaucratic processes that pervaded every aspect of the company. Boeing was the antithesis of the management systems admired at that time in, say, Japanese automakers. Checkers were checking checkers who were checking checkers. This kind of behavior was not just in engineering and manufacturing, but in material management, finance, contracts, etc.

There was a realization over time that this type of bureaucratic management would not ultimately be successful, particularly as a challenging competitor in Airbus emerged on the scene. After the acquisition of McDonnell Douglas, there became more complexity. Some describe that deal as a catalyst that ruined Boeing. Having worked with senior management at Boeing and McDonnell Douglas separately before that deal and with Boeing afterwards, I do not believe that is the case. The culture at Boeing had always been insular. Nearly every senior person there had been with the company for thirty years. And that was true for the McDonnell Douglas people as well. This led to the dramatic move to bring Jim McNerney in as an outsider CEO (formerly 3M CEO, ex-GE, and on Boeing's board). And here begin the challenges that Kelly Ortberg will face.

As Boeing sought to move away from its bureaucratic burdens, there was substantial work to look at things like Toyota's quality management system. At the same time, there was a new focus on cash returns and efforts to build a much larger services business. This emphasis accelerated under Dennis Muilenburg in 2015. This was not long before the 737MAX would make its first flight in 2016. In our view, which is consistent with much of the critical media coverage, these goals became a distraction from much of the historic engineering and manufacturing quality emphasis of the past. Basically, the pendulum had swung too far away from the "configuration control" culture of the past. Ultimately, what is needed at Boeing is an approach midway between the bureaucracy of the past and the free-wheeling cash focus of the late 2010s. When Dave Calhoun took over at the beginning of 2020, he pushed hard to bring the company back. But, as an outsider, this was not easy. Many of the right ideas were put forward and processes put into place. It was implementation that proved to be the problem.

The need for networks

When Alan Mulally was CEO of BCA, he seemed to know everyone in the company. Mulally had worked there for 37 years before leaving for Ford in 2006 after he did not get the Boeing CEO position. But, having worked with Mulally first hand at Boeing, I could see the difference between him and his outsider successors. Mulally knew everything that was going on in the company. Until his last years there (when it became clear he was being passed over), program meetings were tough and typically went into great detail. It is my view that had the Alaska Airlines door plug incident happened when Mulally ran BCA, he would have known the name of the person responsible in fifteen minutes and quickly been down on the factory floor in Renton to fire him. For an outsider, this would be impossible. The problem that we have seen outsiders have is that no information travels up. Unless you are plugged into the networks of employees deep inside the company, you will never know what is happening until it becomes a serious problem. We saw this when McNerney was CEO and 787 supplier problems (e.g., fasteners) never made it up the chain. We have seen the issues under Dave Calhoun and Brian West. During the FAA audit process, the FAA credited corporate leadership with putting the right initiatives in place. Those initiatives just did not get implemented fully on the factory floor. It is this visibility deep into the organization that is so difficult for an outsider.

PARALLELS? CEOS AS CHANGE AGENTS

We have seen two important cases in Aerospace & Defense in which new CEOs from the outside have had dramatic success at transforming a company (unfortunately, there are also examples that have not gone so well). The two examples are Tufan Erginbilgic at Rolls-Royce and Bill Brown at Harris (now L3Harris). The hope for investors with Kelly Ortberg is that he can deliver in the same way as these two CEOs have done. At Rolls-Royce, Erginbilgic was able to dramatically improve performance in the commercial business through pricing in Total Care Contracts and cost reduction. He was able to energize the performance improvement by bringing in executives from his prior company, BP. At Harris, Bill Brown was able to optimize a portfolio that had been problematic for years, as well as bring costs down in key areas. Each of these companies was much smaller than Boeing and had issues that were not nearly as complex as those at Boeing today.

Neither Erginbilgic or Brown acted immediately when they moved into the CEO position. In each case there was a need to gain an understanding of the company, while at the same time address near-term opportunities as they emerged. For Ortberg at Boeing, we would expect the same approach, with the need to complete a strategic review. At the same time, there are some near-term steps that should be taken. For example, Boeing needs to be on track to reach its 38/month production rate on the 737MAX, progress must continue toward certification (MAX-7, MAX-10, 777X). But, as near-term tactical steps are taken, Ortberg will need to take more time if he hopes to truly change the company.

Ortberg's first step has been to announce that he is moving the headquarters to Seattle. It never made sense to have the headquarters in Chicago. That decision was made just over twenty years ago as part of an effort to exert leverage over the state of Washington during the dot-com bubble era. During that period, there was a view that the future was not in owning physical assets. This led to steps like the sale of Wichita and Tulsa operations to Onex (this became Spirit) and a high level of outsourcing for the 787. This philosophy also meant that one did not need to have the headquarters near operations. A horse race between cities took place, with the best offer from Chicago, where 600 people moved. Over time, this location became irrelevant to Boeing as a whole. Under normal conditions, it is not entirely clear that Seattle is the best location, as it is far from almost everything else that matters for the company (e.g., Washington DC area government customers, regulators and defense operations, New York financial community, Charleston operations, Southern California and Saint Louis defense operations). But, given the importance of the 737MAX and ramp of the 777X, we agree that the focus on Puget Sound is the right one, particularly for a new CEO from outside.

SIX STEPS FOR KELLY ORTBERG

1. ***Build networks and leadership positions***. It will be critical for Ortberg to spend time understanding the networks of people in each of the businesses and staff functions. He needs to have visibility into operations at all levels. Without being proactive and understanding how best to get information quickly as he needs it, he will not be successful, in our view. Ortberg needs to ensure that not only does he have the ability to reach down in the organization, but that people will communicate upward with transparency. While there have been many initiatives to do this over the last several years, the culture runs very deep. He should not assume that by putting a policy in place it will truly be adopted. Making networks succeed also means ensuring that he has the right senior team in place. While this may seem obvious, the same visibility issues exist at the next level down. As in the section above, Alan Mulally could always break through the organization to understand what was happening. Kelly Ortberg needs to become the new Alan Mulally, even though he does not have anything close to that starting point. The problems we see right now are not sales, marketing, new product design, or finance. The problems are operational. He will need the expertise in BCA and BDS to understand operations and be able to drive operational improvement. None of this can be done immediately. But, it will be critical to get it right over the next six months.

2. ***Focus efforts on operations.*** *We believe* there is no need for a new airplane at this time. We have seen BCA run by executives with services, sales, and finance backgrounds, with mixed results over time. There have been periods in which sales was the key need. But, operations are critical at this point, and even more important than in the past. Boeing is now working to meet the goals laid out by the FAA after the audit and completion of Boeing's plan. Quality is clearly essential to ensure that we do not see a next round of issues that disrupt production. Meeting the FAA metrics will be necessary to gain approval to raise the MAX rate to 42/month. There has always been tension between mechanics on the line and quality assurance personnel. That is normal, but it can also result in inspectors not being physically on the airplanes as much as they should (as the FAA found) Pre-COVID, one could get by with a less than ideal QA relationship on the floor. But, after losing a large number of senior people who did not come back after COVID, the institutional knowledge on the floor is not the same as it was before. As Ortberg builds his relationships within operations (particularly in Renton), he will need to ensure that shop floor issues are effectively being addressed (they should be as part of the MAX recovery plan). Adding complexity, will be the integration of Spirit in order to ensure that there are no disruptions before close and that there is retention of key people at Spirit. Charleston is not without its challenges, as the company works to drive an aggressive 787 production ramp. But, Renton remains the high priority issue.

3. ***Reinforce relationships with customers and regulators***. There is no shortage of challenges here. One of the issues on the 737MAX after the LionAir and Ethiopian accidents was the failure of management to engage at the CEO level with the FAA or the key customers. When Calhoun took over as CEO, this was immediately addressed through meetings with the FAA administrator and the Ethiopian Airlines leadership. Despite the ongoing problems associated with resolving MAX issues, the heavy engagement was absolutely necessary. The need for this engagement is far from over, after the Alaska Airlines incident in January. The good news here is that on the customer side, relationships appear to have recovered, with the 737MAX in high demand. Still, certification needs to be pushed through for the 737MAX-7, 737MAX-10, and 777X, as delays and multiple timeline shifts have led to strained relationships with many customers. In addition, BCA deliveries to China continue to have an overhang of politics, involving Chinese customers, the Chinese government, and US government officials. Boeing must continue to work closely with the FAA, NTSB, and Congress. This has become a highly politicized situation in both Congress and the media. Every incident on a Boeing airplane becomes a media headline, even if it is a tire on a 30 year old 767. Although there is no evidence of more incidents per flight on Boeing versus Airbus aircraft (including 737MAX versus A320neo), the scrutiny of Boeing will continue. Ortberg should expect this to be a demand on his time - and a demand that he cannot ignore. See also, ".*Commercial Aircraft: How safe is air travel? 737MAX, GTF - How meaningful are the headlines?*".

4. ***Enhance visibility and performance in BDS.*** Defense has been a problem for several years. Ortberg needs to push on operational capabilities, while conducting a thorough assessment, so we do not see a continuing series of charges. Boeing entered into fixed-price development contracts before 2020 that continue to weigh on the company. These include the KC-46 tanker, MQ-25 unmanned aircraft, T-7A trainer, and Air Force One. Starliner has had problems for several years, although it is now much more visible. With new charges announced in Q2, this is a story we have heard too many times. Some charges are attributed to inflation. But, at this stage, we would hope that BDS would have a better handle on predicting inflation, so there would not be continued new resets to programs. The leadership under Calhoun and West have made it clear that the company should not have signed up for the fixed-price development contract structures. But, they have these contracts now, so operational performance must improve. And operational performance is also not what it

should be even on mature programs, which should be able to compensate for some losses. In addition, Boeing has not done well in some major competitions over the last several years, although its backlog has held up to be relatively flat over the last four years, benefiting in part from international sales. Boeing did not make it to the final round on FLRAA, FARA, NGI, or CCA. The fixed-price contracts are expected to largely come to an end over the next 18 months. But, the charges have continued, despite statements over the last two years that the charges were behind the company. There needs to be an assessment that sets the outlook so that there is not a next charge. Defense once was a dependable cash contributor for Boeing (greater than $2bn per year), which has been the goal for next year. Right now, the unit is far away from that goal.

5. ***Recover and reduce supply chain risk.*** Supply chain continues to be a major issue across the industry. Most recently, shortages on heat exchangers and interiors have slowed the 787 program. In early 2023, LEAP engine deliveries were a challenge for the 737MAX. But, with other issues holding back the MAX, that is no longer the case. Assuming that Boeing is successful at ramping up 737 production over the next year, the supply chain could again become a problem. An issue today is that many suppliers are delivering at rates well above production (38/month). Understanding how to manage inventory, so that it can ensure that suppliers can keep deliveries coming smoothly, will be critical. It will lead to a whole new problem if Boeing is forced to sharply cut what it receives from suppliers. This could occur if inventories become too overstocked and Boeing sees the need to cut deliveries from suppliers. The uncertainty around 737MAX production makes managing inventory more difficult.

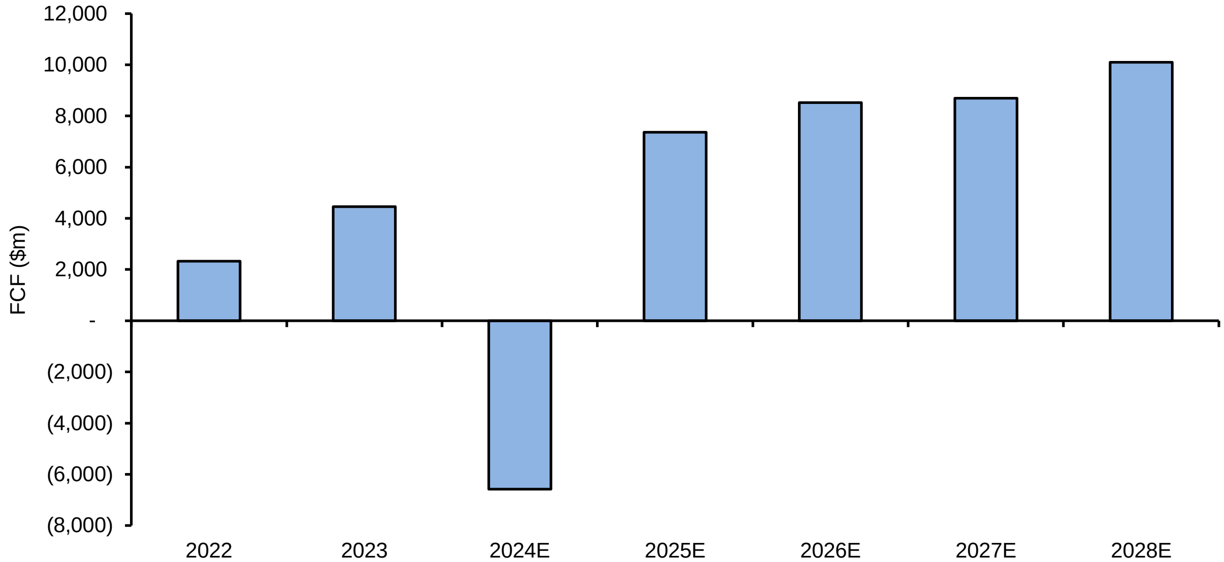
6. ***Manage cash around equity raise concerns.*** There have been substantial investor concerns about a possible equity raise. If Boeing can ramp 737MAX and 787 deliveries over the next five months, we do not see a need for this. We expect to still see roughly $9bn in cash plus short-term investments at the end of Q3 and that should be a low point. There is no need to make major investments, as there should be no new commercial airplane launches until the next decade. Still, one cannot take their eyes off of the cash balance because the moving parts are large, including deliveries out of inventory to China, slowdowns in advances, and risks of further production issues. If Boeing can bring deliveries up, free cash flow should be solid going forward. But, we should see limited increases in cash on hand, as cash will be heavily used for paying down debt.

EXHIBIT 1: **Boeing deliveries**

Boeing delivery forecast	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E
737 NG	70	16	18	13	9	7	8	8	8	8
737 MAX	57	27	245	369	387	344	510	562	586	662
Narrowbodies	127	43	263	382	396	351	518	570	594	670
747	7	5	7	5	1	0	0	0	0	0
767	43	15	19	18	14	14	24	19	19	10
767 tanker	0	15	13	15	18	11	23	17	17	17
777	46	26	24	24	26	22	26	24	24	15
777X	0	0	0	0	0	0	12	24	28	28
787	158	53	14	31	73	77	112	113	123	123
Widebodies	254	114	77	93	132	124	197	197	211	193
Total	**381**	**157**	**340**	**475**	**528**	**475**	**715**	**767**	**805**	**863**

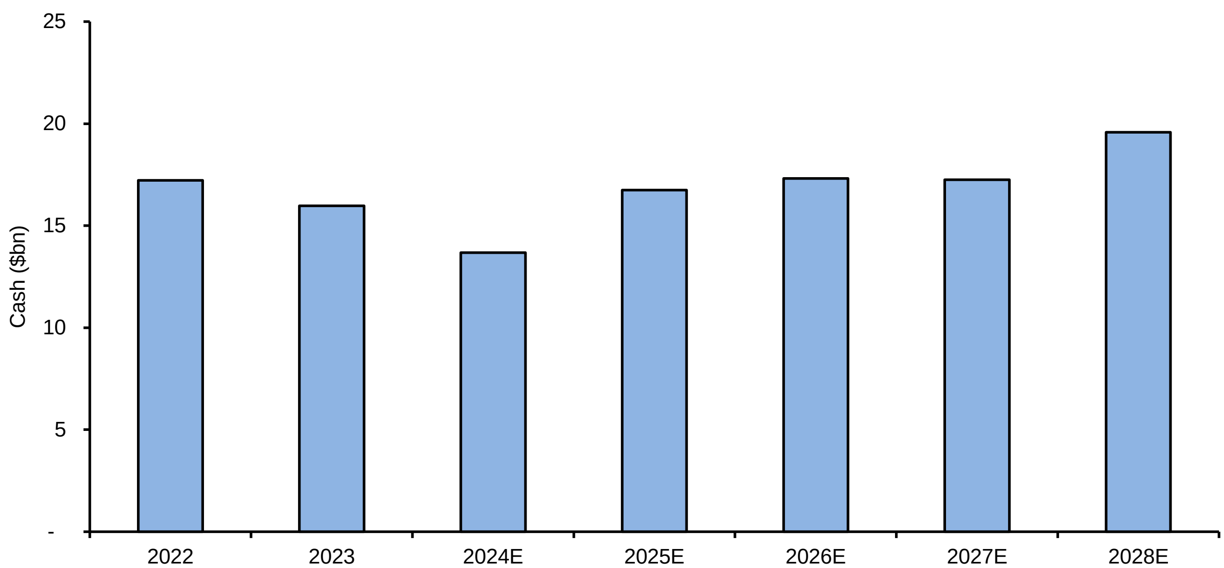
Source: Company reports, Bernstein estimates and analysis

EXHIBIT 2: **FCF projections ($m)**



Source: Company reports, Bernstein estimates and analysis

EXHIBIT 3: **Cash projections ($bn)**



Cash includes cash and short-term investments

Source: Company reports, Bernstein estimates and analysis

APPENDIX - FINANCIAL FORECASTS

EXHIBIT 4: **BA income statement ($m)**

Fiscal Year Ending December 31,	2022	2023	2024E	2025E	2026E	2027E	2028E
Commercial Airplanes	$ 25,867	$ 33,901	$ 33,696	$ 48,965	$ 53,107	$ 57,839	$ 60,927
Defense, Space & Security	23,162	24,933	25,090	25,969	26,878	27,549	28,238
Global Services	17,611	19,127	20,136	21,143	22,200	23,088	24,011
Boeing Capital Corp	199						
Elims/Accounting differences	(231)	(167)	(169)	(92)	(96)	(98)	(101)
Total Revenues	**$ 66,608**	**$ 77,794**	**$ 78,753**	**$ 95,984**	**$ 102,088**	**$ 108,378**	**$ 113,076**
Operating Income/<Loss>							
Commercial Airplanes	(2,370)	(1,635)	(2,180)	3,430	4,652	5,846	6,531
Defense, Space & Security	(3,544)	(1,764)	(905)	1,346	1,718	2,106	2,383
Global Services	2,727	3,329	3,444	3,383	3,574	3,740	3,890
Boeing Capital Corp	29						
Segment operating profit	**$ (3,158)**	**$ (70)**	**$ 358**	**$ 8,158**	**$ 9,944**	**$ 11,693**	**$ 12,804**
Unallocated & other	(1,532)	(1,759)	(1,972)	(2,499)	(2,495)	(2,600)	(2,638)
FAS/CAS service cost adj.	1,143	1,056	1,192	1,088	988	988	1,026
Total Operating Income	**$ (3,547)**	**$ (773)**	**$ (421)**	**$ 6,747**	**$ 8,438**	**$ 10,081**	**$ 11,192**
Interest (expense), net	(2,533)	(2,459)	(2,582)	(2,563)	(2,195)	(1,976)	(1,841)
Non-operating pension/postret.	939	587	(386)	(135)	(183)	(310)	(698)
Other, net	119	640	1,242	1,215	1,335	1,408	1,464
Income fm cont ops before inc tax & cum acctg change	(5,022)	(2,005)	(2,147)	5,264	7,396	9,203	10,117
Taxes	(31)	(237)	451	(1,105)	(1,553)	(1,933)	(2,124)
Net income, as reported	**$ (5,053)**	**$ (2,242)**	**$ (1,696)**	**$ 4,158**	**$ 5,843**	**$ 7,270**	**$ 7,992**
Fully Diluted Shares Outstanding	595.2	606.1	615.6	619.2	621.6	619.7	612.0
GAAP EPS, Cont Ops, Diluted	$ (8.30)	$ (3.67)	$ (2.74)	$ 6.72	$ 9.40	$ 11.73	$ 13.06
GAAP EPS	$ (8.30)	$ (3.67)	$ (2.74)	$ 6.72	$ 9.40	$ 11.73	$ 13.06
Core EPS	$ (11.06)	$ (5.81)	$ (4.42)	$ 5.50	$ 8.38	$ 10.87	$ 12.64
Core Operating Income	$ (4,690)	$ (1,829)	$ (1,613)	$ 5,659	$ 7,450	$ 9,093	$ 10,166
Core Net Income	$ (6,698)	$ (3,540)	$ (2,333)	$ 3,405	$ 5,206	$ 6,735	$ 7,733
EBITDAP adj for unusual items	$ (1,867)	$ 1,362	$ 1,773	$ 9,514	$ 11,544	$ 13,346	$ 14,566
Segment margins							
Commercial Airplanes	-9.2%	-4.8%	-6.5%	7.0%	8.8%	10.1%	10.7%
Defense, Space & Security	-15.3%	-7.1%	-3.6%	5.2%	6.4%	7.6%	8.4%
Global Services	15.5%	17.4%	17.1%	16.0%	16.1%	16.2%	16.2%
Operating Margin	-5.3%	-1.0%	-0.5%	7.0%	8.3%	9.3%	9.9%
Overall Margins:							
EBIT	-3.7%	0.6%	0.6%	8.2%	9.4%	10.3%	10.6%
EBITDAP	-2.8%	1.8%	2.3%	9.9%	11.3%	12.3%	12.9%

Source: Company reports, Bernstein estimates and analysis

EXHIBIT 5: **BA quarterly income statement ($m)**

Fiscal Year Ending December 31,	2022					2023					2024E
	12 mos	Q1	Q2	Q3	Q4	12 mos	Q1	Q2E	Q3E	Q4E	12 mos
Revenues											
Commercial Airplanes	$ 25,867	$ 6,704	$ 8,840	$ 7,876	$ 10,481	$ 33,901	$ 4,653	$ 6,003	$ 10,109	$ 12,931	$ 33,696
Defense, Space & Security	23,162	6,539	6,167	5,481	6,746	24,933	6,950	6,021	5,508	6,611	25,090
Global Services	17,611	4,720	4,746	4,812	4,849	19,127	5,045	4,889	5,081	5,121	20,136
Boeing Capital Corp	199	-	-	-	-	-	-	-	-	-	-
Corp. & Acct. Diff.	(231)	(42)	(2)	(65)	(58)	(167)	(79)	(47)	(20)	(24)	(169)
Total Revenues	**$ 66,608**	**$ 17,921**	**$ 19,751**	**$ 18,104**	**$ 22,018**	**$ 77,794**	**$ 16,569**	**$ 16,866**	**$ 20,680**	**$ 24,639**	**$ 78,753**
Operating Income/<Loss>											
Commercial Airplanes	(2,370)	(615)	(383)	(678)	41	(1,635)	(1,143)	(715)	(353)	31	(2,180)
Defense, Space & Security	(3,544)	(212)	(527)	(924)	(101)	(1,764)	151	(913)	(275)	132	(905)
Global Services	2,727	847	856	784	842	3,329	916	870	838	819	3,444
Boeing Capital Corp	29	-	-	-	-	-	-	-	-	-	-
Segment operating profit	**$ (3,158)**	**$ 20**	**$ (54)**	**$ (818)**	**$ 782**	**$ (70)**	**$ (76)**	**$ (758)**	**$ 210**	**$ 982**	**$ 358**
Unallocated& other	(1,532)	(460)	(336)	(271)	(692)	(1,759)	(312)	(634)	(463)	(563)	(1,972)
FAS/CAS service cost adj.	1,143	291	291	281	193	1,056	302	302	294	294	1,192
Total Operating Income	**$ (3,547)**	**$ (149)**	**$ (99)**	**$ (808)**	**$ 283**	**$ (773)**	**$ (86)**	**$ (1,090)**	**$ 41**	**$ 713**	**$ (421)**
Interest expense, net	(2,533)	(649)	(621)	(589)	(600)	(2,459)	(569)	(673)	(672)	(668)	(2,582)
Non-operating pension/postret.	939	149	148	148	142	587	(141)	(82)	(82)	(82)	(386)
Other, net	119	153	172	149	166	640	418	330	217	278	1,242
Income. cont. ops. before taxes	**(5,022)**	**(496)**	**(400)**	**(1,100)**	**(9)**	**(2,005)**	**(378)**	**(1,515)**	**(495)**	**241**	**(2,147)**
Taxes	(31)	71	251	(538)	(21)	(237)	23	76	253	99	451
Net income, as reported	**$ (5,053)**	**$ (425)**	**$ (149)**	**$ (1,638)**	**$ (30)**	**$ (2,242)**	**$ (355)**	**$ (1,439)**	**$ (242)**	**$ 340**	**$ (1,696)**
Fully Diluted Shares Outstanding	595.2	602.5	605.5	607.2	609.5	606.1	613.2	616.6	616.9	617.5	615.6
GAAP EPS, Continuing Operations, Diluted	$ (8.30)	$ (0.69)	$ (0.25)	$ (2.70)	$ (0.04)	$ (3.67)	$ (0.56)	$ (2.33)	$ (0.39)	$ 0.55	$ (2.74)
GAAP EPS, As Reported, Fully Diluted	$ (8.30)	$ (0.69)	$ (0.25)	$ (2.70)	$ (0.04)	$ (3.67)	$ (0.56)	$ (2.33)	$ (0.39)	$ 0.55	$ (2.74)
Core EPS	$ (11.06)	$ (1.27)	$ (0.82)	$ (3.26)	$ (0.47)	$ (5.81)	$ (1.13)	$ (2.90)	$ (0.66)	$ 0.28	$ (4.42)
Core Operating Income	(4,690)	(440)	(390)	(1,089)	90	(1,829)	(388)	(1,392)	(253)	419	(1,613)
Core Net Income	(6,698)	(773)	(496)	(1,977)	(295)	(3,540)	(482)	(1,613)	(410)	172	(2,333)
EBITDAP	$ (1,867)	$ 392	$ 397	$ (306)	$ 879	$ 1,362	$ 591	$ (532)	$ 488	$ 1,227	$ 1,773
Margins											
Commercial Airplanes	-9.2%	-9.2%	-4.3%	-8.6%	0.4%	-4.8%	-24.6%	-11.9%	-3.5%	0.2%	-6.5%
BDS	-15.3%	-3.2%	-8.5%	-16.9%	-1.5%	-7.1%	2.2%	-15.2%	-5.0%	2.0%	-3.6%
Global Services	15.5%	17.9%	18.0%	16.3%	17.4%	17.4%	18.2%	17.8%	16.5%	16.0%	17.1%
Boeing Capital Corp	14.6%										
Segments	-4.7%	0.1%	-0.3%	-4.5%	3.6%	-0.1%	-0.5%	-4.5%	1.0%	4.0%	0.5%
Operating	-5.3%	-0.8%	-0.5%	-4.5%	1.3%	-1.0%	-0.5%	-6.5%	0.2%	2.9%	-0.5%

Source: Company reports, Bernstein estimates and analysis

EXHIBIT 6: **Boeing balance sheet ($m)**

Fiscal Year Ending December 31,	**2022**	**2023**	**2024 E**	**2025 E**	**2026 E**	**2027 E**	**2028 E**
Cash and cash equivalents	14,614	12,691	11,947	15,017	15,589	15,529	17,855
Investments	2,606	3,274	1,727	1,727	1,727	1,727	1,727
Accounts receivable	2,517	2,649	3,150	2,880	2,756	2,818	2,827
Unbilled receivables	8,634	8,317	8,269	8,159	8,473	8,562	8,481
Current portion of customer and commercial financing	154	99	74	61	54	50	50
Inventories, net of adv., progress billings and reserves							
Inventories	78,151	79,741	83,698	79,439	77,868	76,780	75,699
Other current assets	2,847	2,504	3,150	3,167	2,858	2,709	2,488
Total Current Assets	109,523	109,275	112,015	110,449	109,325	108,175	109,125
Customer and commercial financing, net	1,450	860	771	628	556	515	515
Property, plant and equipment, net	10,550	10,661	11,191	11,788	12,360	13,038	13,780
Goodwill	8,057	8,093	8,108	8,108	8,108	8,108	8,108
Other acquired intangibles, net	2,311	2,094	2,045	1,905	1,753	1,593	1,424
Deferred income taxes	63	59	-	-	-	-	-
Investments	983	1,035	1,026	1,026	1,026	1,026	1,026
Other Assets	4,163	4,935	5,319	5,319	5,319	5,319	5,319
Total Non- Current Assets	27,577	27,737	28,460	28,774	29,123	29,599	30,172
Total Assets	**$ 137,100**	**$ 137,012**	**$ 140,475**	**$ 139,223**	**$ 138,448**	**$ 137,774**	**$ 139,297**
Accounts payable and other liabilities	10,200	11,964	12,619	12,773	12,608	12,343	12,338
Other accrued liabilities	21,581	22,331	20,655	19,514	19,064	18,636	18,315
Advances in excess of related costs							
Advances and progress billings	53,081	56,328	56,225	55,681	56,677	57,132	57,381
Short-term debt and current portion of long-term debt	5,190	5,204	4,470	4,043	3,433	3,105	2,968
Total Current Liabilities	90,052	95,827	93,969	92,011	91,782	91,217	91,003
Deferred income taxes	230	229	223	223	223	223	223
Accrued pension and retiree health care liability	8,644	8,749	8,176	7,693	7,223	6,720	6,240
Deferred lease income	2,211	2,332	2,611	2,448	2,702	2,898	3,064
Long-term debt (included corp and BCC)	51,811	47,103	52,857	48,984	41,645	37,672	36,009
Total Non-Current Liabilities	62,896	58,413	63,867	59,349	51,793	47,513	45,536
Total Liabilities	**$ 152,948**	**$ 154,240**	**$ 157,837**	**$ 151,360**	**$ 143,574**	**$ 138,729**	**$ 136,538**
Shareholders' equity:							
Common shares, par value $5.00	5,061	5,061	5,061	5,061	5,061	5,061	5,061
Additional paid-in capital	9,947	10,309	10,727	10,727	10,727	10,727	10,727
Treasury shares, at cost	(50,814)	(49,549)	(48,841)	(48,841)	(48,841)	(50,841)	(54,041)
Retained earnings	29,473	27,251	25,567	29,726	35,568	40,385	45,603
Accumulated other comprehensive income	(9,550)	(10,305)	(9,870)	(8,804)	(7,635)	(6,281)	(4,584)
Noncontrolling Interest	35	5	(6)	(6)	(6)	(6)	(6)
Total Shareholders' Equity	**(15,848)**	**(17,228)**	**(17,362)**	**(12,137)**	**(5,126)**	**(955)**	**2,759**
Total Liabilities and Shareholders' Equity	**$ 137,100**	**$ 137,012**	**$ 140,475**	**$ 139,223**	**$ 138,448**	**$ 137,774**	**$ 139,297**

Source: Company reports, Bernstein estimates and analysis

EXHIBIT 7: **BA cash flow statement ($m)**

Fiscal Year Ending December 31,	2022	2023	2024 E	2025 E	2026 E	2027 E	2028 E
Cash Flows from Operating Activities:							
Net Income	$ (5,053)	$ (2,242)	$ (1,696)	$ 4,158	$ 5,843	$ 7,270	$ 7,992
Adjustments to reconcile with operating cash							
Share-based plans expense	725	690	595	929	1,002	1,058	1,110
Depreciation	1,979	1,861	1,549	1,712	1,757	1,787	1,826
Non-cash investment/asset impairment charges	112	46	34	-	-	-	-
Customer and commercial financing valuation provision	37	-	-	-	-	-	-
Gain on dispositions, net	(6)	(2)	(5)	-	-	-	-
Other charges and credits, net		3	(34)	-	-	-	-
Changes in assets and liabilities:							
Accounts receivable	142	(128)	(517)	271	123	(61)	(9)
Unbilled receivables	6	321	46	110	(315)	(89)	81
Advances and progress billings	108	3,365	(40)	(544)	996	456	249
Inventories, net advances, progress billings, reserves	-	-	-	-	-	-	-
Inventories	420	(1,681)	(3,974)	4,259	1,571	1,088	1,081
Other current assets	(591)	389	(188)	(17)	309	149	222
Accounts payable	838	1,672	533	154	(165)	(265)	(5)
Other Accrued Liabilities	2,956	779	(1,638)	(1,141)	(450)	(428)	(321)
Advances in excess of related costs	-	-	-	-	-	-	-
Income taxes payable (net, incl rec) and def reserves	1,347	44	(292)	(36)	(44)	(79)	(156)
Other long-term liabilities	(158)	(313)	251	(163)	254	196	166
Pension and other postretirement plans	(1,378)	(1,049)	(551)	(309)	(259)	(129)	262
Customer financing, net	142	571	149	157	78	45	-
Other	1,522	1,634	1,004	-	-	-	-
Net Cash Provided (Used) by Operating Activities:	**3,512**	**5,961**	**(4,773)**	**9,539**	**10,699**	**10,998**	**12,499**
Cash Flows Provided (Used) by Investing Activities:							
Property, plant and equipment, net additions	(1,187)	(1,500)	(1,800)	(2,168)	(2,178)	(2,305)	(2,399)
Acquisitions, net of cash acquired	-	(70)	(50)	-	-	-	-
Contributions for investments	(5,051)	(16,448)	(1,617)	-	-	-	-
Proceeds from investments	10,619	15,739	3,173	-	-	-	-
Other	(11)	(158)	(591)	-	-	-	-
Net Cash Provided (Used) by Investing Activities:	**4,370**	**(2,437)**	**(885)**	**(2,168)**	**(2,178)**	**(2,305)**	**(2,399)**
Cash Flows Provided (Used) by Financing Activities:							
Net change in debt	$ (1,276)	$ (5,141)	$ 5,008	$ (4,300)	$ (7,950)	$ (4,300)	$ (1,800)
Common shares issued (purchased)	-	-	-	-	-	(2,000)	(3,200)
Stock options exercised, other	50	45	-	-	-	-	-
Excess tax effects on share-based payments	(40)	(408)	(67)	-	-	-	-
Dividends paid	-	-	-	-	-	(2,453)	(2,775)
Other	-	17	(3)	-	-	-	-
Net Financing Cash Flows:	**$ (1,266)**	**$ (5,487)**	**$ 4,938**	**$ (4,300)**	**$ (7,950)**	**$ (8,753)**	**$ (7,775)**
Effect of exchange rate changes	(73)	30	(25)	-	-	-	-
Net Increase (Decrease) in Cash and Cash Equivalents	**6,543**	**(1,933)**	**(745)**	**3,070**	**572**	**(59)**	**2,325**
Cash and Cash Equivalents, beg. of period	**8,052**	**14,614**	**12,692**	**11,948**	**15,018**	**15,590**	**15,530**
Cash and Cash Equivalents, end of period	**$ 14,614**	**$ 12,692**	**$ 11,948**	**$ 15,018**	**$ 15,590**	**$ 15,530**	**$ 17,856**
Change in Working Capital	$ 5,774	$ 3,923	$ (9,190)	$ 6,999	$ 3,668	$ 1,971	$ 2,652
Operating FCF (Operating Cash Flow minus Capex)	**$ 2,325**	**$ 4,461**	**$ (6,573)**	**$ 7,370**	**$ 8,522**	**$ 8,694**	**$ 10,100**
Free cash flow per share	**$ 3.91**	**$ 7.36**	**$ (10.68)**	**$ 11.90**	**$ 13.71**	**$ 14.03**	**$ 16.50**

Source: Company reports, Bernstein estimates and analysis

BERNSTEIN TICKER TABLE

Ticker	Rating		9 Aug 2024 Closing Price	Price Target	TTM Rel. Perf.		Adjusted EPS 2023A	Adjusted EPS 2024E	Adjusted EPS 2025E	Adjusted P/E (x) 2023A	Adjusted P/E (x) 2024E	Adjusted P/E (x) 2025E
BA	O	USD	167.91	207.00	(49.0)%	USD	(5.81)	(4.42)	5.50	(28.9)	(38.0)	30.5
SPX			5,344.16									

O - Outperform, M - Market-Perform, U - Underperform, NR - Not Rated, CS - Coverage Suspended

Source: Bloomberg, Bernstein estimates and analysis.

I. REQUIRED DISCLOSURES

References to "Bernstein" or the "Firm" in these disclosures relate to the following entities: Bernstein Institutional Services LLC (April 1, 2024 onwards), Sanford C. Bernstein & Co., LLC (pre April 1, 2024), Bernstein Autonomous LLP, BSG France S.A. (April 1, 2024 onwards), Sanford C. Bernstein (Hong Kong) Limited 盛博香港有限公司 , Sanford C. Bernstein (Canada) Limited, Sanford C. Bernstein (India) Private Limited (SEBI registration no. INH000006378), Sanford C. Bernstein (Singapore) Private Limited and Sanford C. Bernstein Japan KK (サンフォード・C・バーンスタイン株式会社).

On April 1, 2024, Société Générale (SG) and AllianceBernstein, L.P. (AB) completed a transaction that created a new joint venture in which their respective cash equities and research businesses operate in a new business combination. Although their respective ownership percentages in the joint venture differ between North America and the rest of the world, the creation, production and publication of research is handled collaboratively on a global basis across the two research brands, "Bernstein" and "Autonomous". Unless specifically noted otherwise, for purposes of these disclosures, references to Bernstein's "affiliates" relate to both SG and AB and their respective affiliates.

VALUATION METHODOLOGY

Boeing Co

We value our Aerospace companies by using a terminal value four years four based on an EV/EBITDA multiple. We adjust for net debt to arrive at an equity value, discount that to our valuation date and add the discounted value of cash distributions to shareholders between now and the terminal mal date to reach our 12-month target of $207. For Boeing, our terminal relative EV/EBITDA multiple is 12.0x, derived from a blend of commercial aircraft and defense multiples adjusted for the stage in their respective cycles. We adjust our terminal EBITDA estimate for differences in the unit and program earnings for the 787 program.

RISKS

Boeing Co

For Boeing, a risk would be an economically driven downturn in demand. In the near-term, the production and delivery profile for the 737MAX, which has been constrained by the supply chain and execution issues, will be key to earnings and cash flow, with downside scenarios possible. Execution on the 787 ramp is also important, as are challenges on bringing the 777X into service, as well as funding and execution risks related to defense programs.

RATINGS DEFINITIONS, BENCHMARKS AND DISTRIBUTION

Bernstein brand

The Bernstein brand rates stocks based on forecasts of relative performance for the next 6-12 months versus the S&P 500 for stocks listed on the U.S. and Canadian exchanges, versus the Bloomberg Europe Developed Markets Large and Mid Cap Price Return Index (EDM) for stocks listed on the European exchanges and emerging markets exchanges outside of the Asia Pacific region, versus the Bloomberg Japan Large and Mid Cap Price Return Index USD (JP) for stocks listed on the Japanese exchanges, and versus the Bloomberg Asia ex-Japan Large and Mid Cap Price Return Index (ASIAX) for stocks listed on the Asian (ex-Japan) exchanges -unless otherwise specified.

The Bernstein brand has three categories of ratings:

- Outperform: Stock will outpace the market index by more than 15 pp
- Market-Perform: Stock will perform in line with the market index to within +/-15 pp
- Underperform: Stock will trail the performance of the market index by more than 15 pp

Coverage Suspended: Coverage of a company under the Bernstein research brand has been suspended. Ratings and price targets are suspended temporarily, are no longer current, and should therefore not be relied upon.

Not Rated: A rating assigned when the stock cannot be accurately valued, or the performance of the company accurately predicted, at the present time. The covering analyst may continue to publish research reports on the company to update investors on events and developments.

Autonomous brand

The Autonomous brand rates stocks as indicated below. As our benchmarks we use the Bloomberg Europe 500 Banks And Financial Services Index (BEBANKS) and Bloomberg Europe Dev Mkt Financials Large and Mid Cap Price Ret Index EUR (EDMFI) index for developed European banks and Payments, the Bloomberg Europe 500 Insurance Index (BEINSUR) for European insurers, the S&P 500 and S&P Financials for US banks and Payments coverage, S5LIFE for US Insurance, the S&P Insurance Select Industry (SPSIINS) for US Non-Life Insurers coverage, and the Bloomberg Emerging Markets Financials Large, Mid and Small Cap Price Return Index (EMLSF) for emerging market banks and insurers and Payments. Ratings are stated relative to the sector (not the market).
The Autonomous brand has three categories of ratings:

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- Neutral (N): Stock will perform in line with the market index to within +/-10 pp
- Underperform (UP): Stock will trail the performance of the relevant index by more than 10 pp

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Not Rated: A rating assigned when the stock cannot be accurately valued, or the performance of the company accurately predicted, at the present time. The covering analyst may continue to publish research reports on the company to update investors on events and developments.
Those denoted as 'Feature' (e.g., Feature Outperform FOP, Feature Under Outperform FUP) are our core ideas. Not Rated (NR) is applied to companies that are not under formal coverage.

Horizon and classification

For both brands, recommendations are based on a 12-month time horizon.

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Rating	Market Abuse Regulation (MAR) and FINRA Rule 2241 classification	Count	Percent	Count*	Percent*
Outperform	BUY	525	52.40%	1	0.19%
Market-Perform (Bernstein Brand) Neutral (Autonomous Brand)	HOLD	347	34.63%	3	0.86%
Underperform	SELL	130	12.97%	0	0.00%

* These figures represent the number and percentage of companies in each category to whom Bernstein and Autonomous provided investment banking services.
As of Aug 12 2024. All figures are updated quarterly and represent the cumulative ratings over the previous 12 months.

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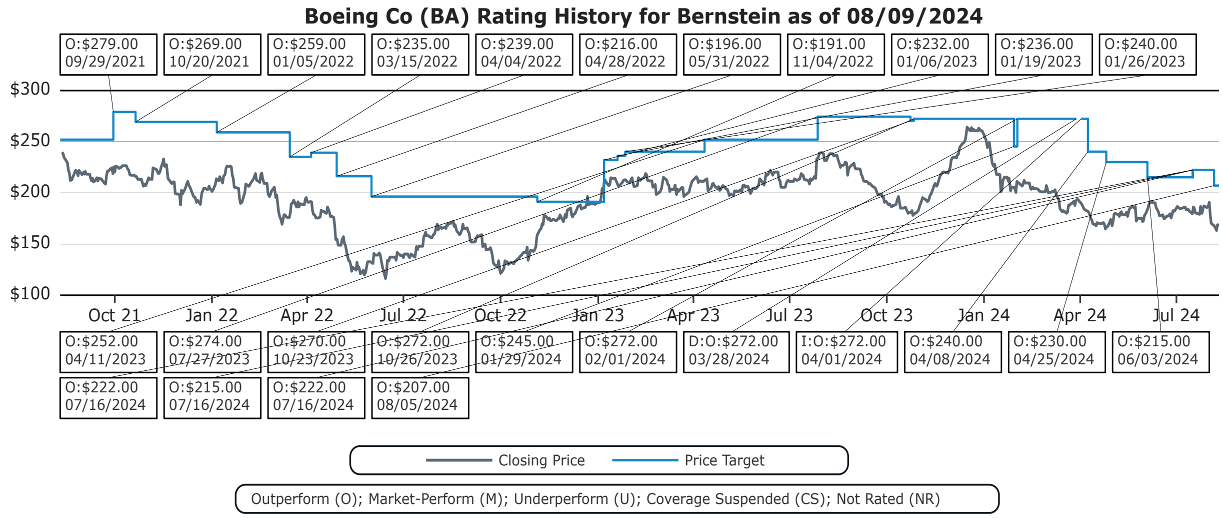

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