

# UConn Student Managed Fund

2017 Analyst Report



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## Activision Blizzard, Inc.

Sector: Technology  
Exchange: NASDAQ

Date: 04/18/2017

Ticker: ATVI

Current Price: \$49.09 (4/18/2017)

Target Price: \$58 (18% Margin of Safety)

Recommendation: BUY

Market Capitalization: \$37.3B

### Report Overview

Figure 1 – Share Price



Source: Bloomberg

We recommend a **Buy** rating for Activision Blizzard, Inc. based on a target price of \$58 per share. Our target price offers an 18% margin of safety from its closing price of \$49.09 on April 18, 2017. Our investment thesis is primarily driven by the following factors:

#### *Dominant Franchise Names and Brand Leadership*

Through its Activision and Blizzard segments, the company's assets provide a strong franchise legacy, which potentially lead to more stable sales and lower costs

#### *Strong Positioning in Growth Markets*

Activision Blizzard is making strategic investments in ESports, mobile video games, and film and television content, which will diversify its revenue base in the future.

#### *Shift to New Distribution Channels*

The video game industry is experiencing a distribution transformation as customers are demanding digital format games, which are less expensive to produce, allowing Activision to increase margins.

#### *Undervalued*

Using a discounted cash flow model we calculated Activision Blizzard's intrinsic value to be \$58 per share.

### Business Description

#### **Business Overview: Developing into an Interactive Entertainment Company**

Activision Blizzard, Inc., is a worldwide leader in the development and publishing of online, personal computer (PC), video game console, mobile, and tablet games. The company operates through three main segments: Activision Publishing, Blizzard Entertainment, and the recently acquired King Digital Entertainment as of 2015. The company has many prestigious game franchise (iterations of games and associated merchandise) between these business segments. Activision, known for franchises such as *Call of Duty*, develops and publishes interactive software products with a focus on the video game console. Blizzard Entertainment, publishes online subscription-based, multiplayer online role-playing games such as *World of Warcraft*, *Hearthstone*, and *Overwatch*. King Digital Entertainment products mobile games such as the *Candy Crush* series. The company sells their developed and published products through retail and digital channels with a greater emphasis on digital channels of late. In addition to these three main business segments, their Major League Gaming

Figure 2 – Company Breakdown



Source: Company Data

Figure 3 – Company Metrics

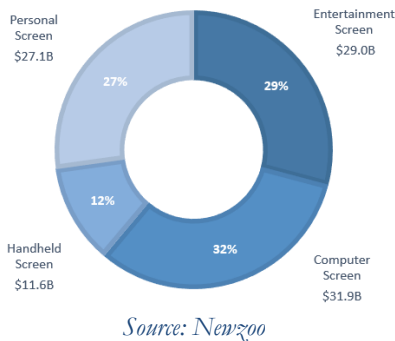
Business Segment	Sales	% of Total
Activision Publishing, Inc.	2.2B	34%
Blizzard Entertainment	2.4B	37%
King Digital Entertainment	1.6B	24%
Other*	.4B	6%

\*Other constitutes both Major League Gaming and Studios

Source: Company Data

segment and Activision Blizzard Studios are recently developed segments that allows the company to expand into the ESports and film industries.

Figure 4 – 2016 Sales by Technological Medium

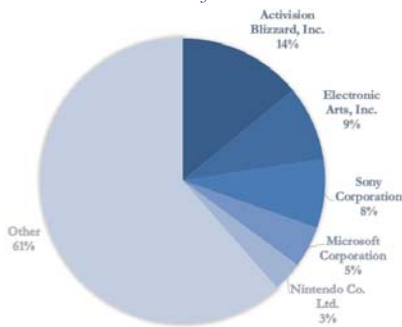


## Industry and Competitive Positioning

### Industry Overview: An industry that is constantly evolving

The video game software industry develops, publishes, manufactures, distributes and sells interactive entertainment for various consoles, handheld platforms and computers. Filled with constant innovation, technological progress and originality, the market is one of the fastest growing industries with annual sales over \$99.6 billion. In terms of where the sales are generated in this industry, **Figure 4** depicts the breakdown by technological medium. As you can see, about 32% of video game sales come from the PC market, the largest share in the industry. The entertainment screen, which constitutes console based games that are played on television is also very important to the industry with about 29% of sales. Finally, personal screens, such as smartphones and watches take about 27% of the market. Additionally, this segment is one of the fastest growing in the industry and is expected to reach \$52.6 billion in sales by 2020 according to a PWC research report.

Figure 5 – Market Share of Leading Video Game Software Publishers



### Competitive Landscape: A fragmented market based on brand recognition

The software publishing market has relatively high development cost, which act as barriers to entry. Since the cost of game development is one of the highest in the entertainment industry, initial investments by smaller companies have historically had negative returns, according to a report done by the Entertainment Software Association. This serves to ward off potential entrants in Activision Blizzard's market since these companies do not have the necessary financial backing to sustain in such a hit-or-miss industry. While there are a wide variety of content providers in the industry, only a limited amount maintains the largest portion of market share. As you can see in **Figure 5**, Activision Blizzard leads the market with a 14% share. Although Sony Corp. and Microsoft Corp. compete heavily with Activision Blizzard, its closest competitors are Electronic Arts, Inc. and Take Two Interactive Software, Inc.

An important aspect of this industry is the brand recognition of the publishing house and the portfolio of products it holds. If a game becomes successful, it often spurs sequels since the risk of failure becomes reduced due to a developed fan base. Additionally, as publishers become successful with a series system of video games, logistical economies of scale and production economies of scale generate less development costs for future games. Considering Activision Blizzard has a product portfolio filled with very reputable franchises across a diverse range of genres, we see them in a unique position to use their brand power for continued growth in the future.

Figure 6 – Best-Selling Games of 2016

Rank	Game Title	Publisher
1.	Call of Duty: Infinite Warfare	Activision Blizzard Inc.
2.	Battlefield 1	Electronic Arts Inc.
3.	The Division	Ubisoft
4.	NBA 2K17	2K Sports
5.	Madden NFL 17	Electronic Arts Inc.
6.	Grand Theft Auto V	Take-Two Interactive
7.	Overwatch	Activision Blizzard Inc.
8.	Call of Duty: Black Ops III	Activision Blizzard Inc.
9.	FIFA 17	Electronic Arts Inc.
10.	Final Fantasy XV	Square Enix Co.

Source: Forbes

Below is a chart showing the strengths and weaknesses of Activision Blizzard's closest competitors:

Figure 7 – Activision Franchise



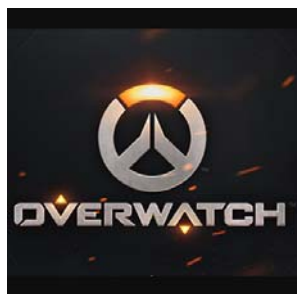
Source: Company Data

Figure 8 – Blizzard Franchise

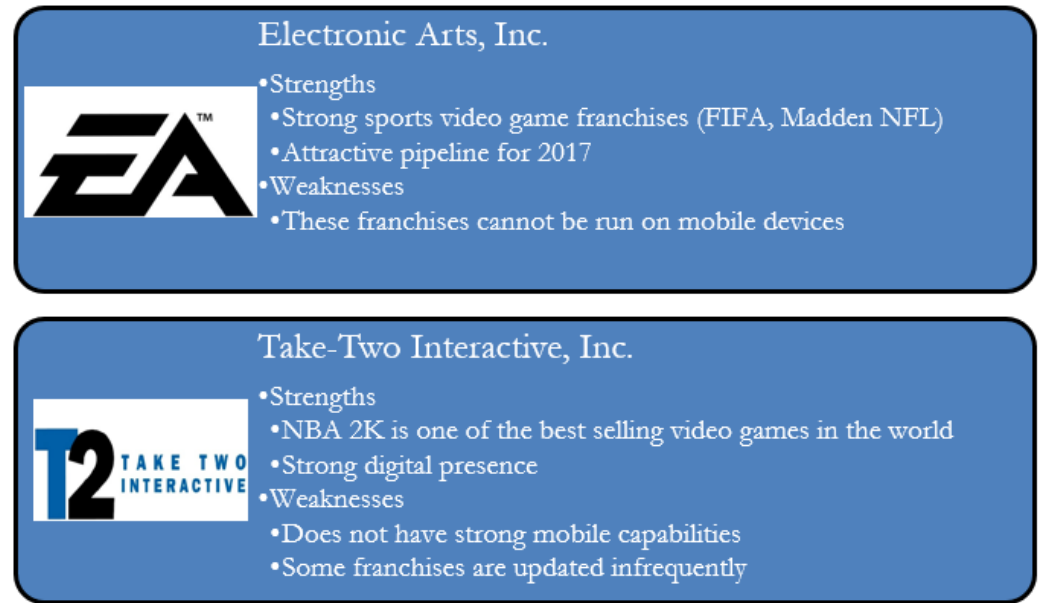


Source: Company Data

Figure 9 – Blizzard Franchise



Source: Company Data



## Investment Thesis

### Dominant Franchise Names and Brand Leadership

Activision Blizzard's portfolio holds some of the strongest franchises in the video game industry. The company has two different business models that it uses with its Activision Publishing and Blizzard Entertainment segments. Activision Publishing is based on developing sequels, expansions and special editions to its highly successful assets such as *Call of Duty*, *Skylanders* and *Destiny*. This strategy results in very stable revenue streams because of the developed fan base these games have had historically.

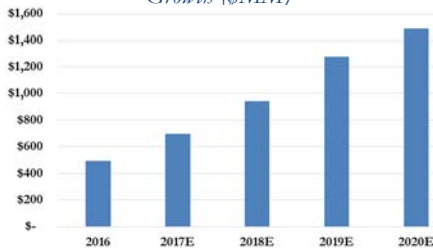
Blizzard Entertainment on the other hand is driven using a massively multiplayer online (MMO) game strategy, with games such as *World of Warcraft*, *Hearthstone* and most recently *Overwatch*. With an MMO model, players pay a monthly fee for access to the game, which is used to fund additions and server maintenance. This allows for players to pay and play for much longer periods of time than traditional single release games. This business model is relatively new, but has gained massive popularity among video game enthusiasts due to the constant stream of new content and social aspect of playing a game that is populated largely by other players. Additionally, the updates Blizzard has to develop for these games are far less labor intensive, which leads to lower costs when compared to developing a new game from the ground up allowing the company to utilize a razor blade business model with these updates.

### Expansion in Growth Markets

#### ESports

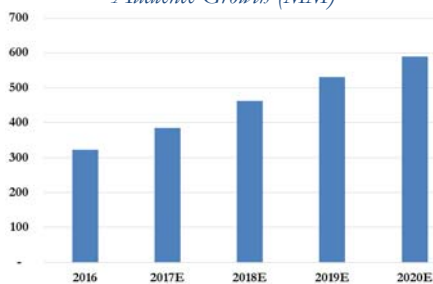
The market for ESports has experienced tremendous growth since 2015 and is expected to continue grow into the distant future. ESports are multiplayer video games played competitively for spectators, typically by professional gamers. In 2017,

Figure 10 – ESports Estimated Sales Growth (\$MM)



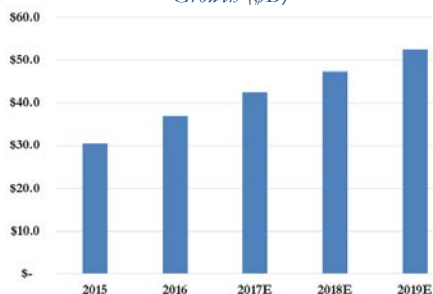
Source: Newzoo

Figure 11 – ESports Estimated Audience Growth (MM)



Source: Newzoo

Figure 12 – Estimated Mobile Sales Growth (\$B)



Source: Newzoo

ESports revenue is expected to grow to \$696 million, representing a year-over-year growth of 41.3%. Additionally, total revenues from ESports are expected to grow at a 35.6% CAGR through 2020. Brands are also expected to invest \$517 million this year. The investments can be broken down into \$155 million on advertising, \$266 million on sponsorship, and \$95 million on media rights. Brand investments are predicted to double by 2020, pushing the total market to \$1.5 billion. Consumer spending in 2017 will amount to roughly \$64 million on purchases of tickets and merchandise. With the growing popularity of ESports, they are becoming engrained in the DNA of successful competitive games and publishers are actively looking to grow their franchises as spectator sports, with the aim to engage their current fan base. The global ESports audience is expected to reach 385 million in 2017, which consists of 191 million enthusiasts and 194 million from occasional viewers. Audience growth is expected to continue at a 20.1% CAGR through 2020 equaling a total of roughly 589 million viewers. Based on the audience and revenue expectations for this year, the average revenue per fan this year will equal \$3.64. As the industry matures, it will incorporate an increasing number of local events, leagues, and media rights deals, which would boost the average revenue per fan to an estimated \$5.20 by 2020. Although this is still three factors lower than the popular National Basketball Association, it offers additional revenue streams for companies such as Activision, who invest in platforms that can take advantage of ESports.

In January 2016, Activision acquired a professional ESports organization called Major League Gaming Inc. (MLG). MLG is known as the global leader in ESports and operates MLG.tv, the number one online broadcast network for professional level gaming. It also operates the MLG Pro Circuit, which is the longest-running ESports league in North America and currently has over 9 million registered users across the globe. Activision intends to leverage the purchase as part of its plan to build an ESports-focused television network. Another factor that will facilitate Activision's transition into ESports is their recently released game, *Overwatch*. *Overwatch* is one of the fastest growing video games in the world with 25 million registered users in less than a year. Activision has announced its intention to create an *Overwatch* League with the MLG arm of the company to garner sales from audiences and franchising fees.

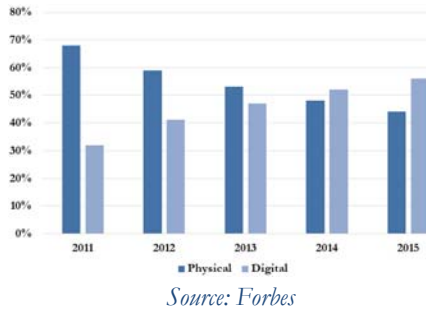
### Mobile Gaming

With the growing popularity of large screen smartphones, the mobile gaming market reached \$37 billion in 2016. This represented 37% of the global games market and grew larger than PC games (\$32 billion) and console games (\$29 billion) for the first time. Mobile gaming is expected to grow at a 12.5% CAGR through 2019. Activision is well positioned to take advantage of this growth with its recent acquisition of King Digital Entertainment, whose *Candy Crush* franchise consists of 2 of the top 10 grossing mobile games in the U.S. for 13 straight quarters. Currently, the *Candy Crush* franchise does not contain in-game advertisements that many other free-to-play games contain. The company has announced at the end of 2016 that they are testing in-game advertisements and have received positive feedback from consumers. When the advertisements are implemented into the *Candy Crush* games, Activision will generate additional revenue. Additionally, the transition into the mobile gaming market diversifies Activision's revenue stream away from the traditional console and



PC software. Now the company's revenues are more diversified with 39% coming from Blizzard, 36% from Activision, and 25% from King.

Figure 13 – Video Game Sales by Distribution Channel (%)

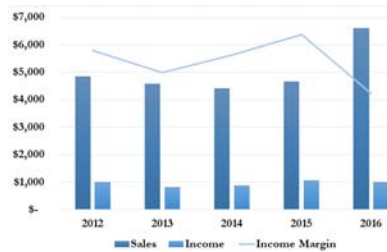


### Shift Towards New Distribution Channels

Through technological advancements in programming and data management, playing video games digitally has now become possible, just in the way it became possible to download music in the early 2000's. While this channel of distribution is relatively new, it is constantly growing and has recently surpassed sales of physical copies in 2015, as **Figure 13** shows.

With expectations of digital distribution to become the industry norm for consumers, Activision Blizzard stands to benefit substantially for two reasons. Firstly, the costs for manufacturing the actual video game will become lower and intermediation between consumers will reduce, which is expected to increase the gross margins for the company. Secondly, digital distribution also means that developers can continue working on products past official release dates. This allows Activision to have a permanent connection with consumers, developing certain add-ons or patches, increasing the company's brand reputation.

Figure 14 – 5 Year Sales and Net Income (\$MM)



### Favorable Shareholder Return Policies

Activision Blizzard has recently started to focus on shareholders, which will provide investors additional returns in the future. The company's dividend rate has been steadily increasing since 2010 and just recently was upped to 30 cents per share for 2017. Additionally, the Board of Directors authorized a \$1 billion stock-buyback program, with an expiration date of February of 2019. Through these policies, management has shown that they constantly evaluate returning capital to shareholders. With this in mind, we believe Activision Blizzard will provide investors with additional returns in the future.

## Financial Analysis

### Sales and Income

While revenue for Activision Blizzard has been growing in the past five years, income has plateaued due to the various investments the company is making in ESports and film studio development. As **Figure 14** displays, revenues leveled off from 2012 to 2015 due to weakness in sales from the *Call of Duty* Franchise. But, with the acquisition of King Digital in 2015, revenues dramatically increased 42% from the new segment of mobile users (10% organically). With little growth in income, the margin for Activision has decreased to 15% in 2016 from constant results in the low 20% range. However, we expect income and margins to increase in the future based on the company's new growth initiatives, and also from the continuing shift of video games through digital distribution channels since it becomes significantly less expensive when compared to physical distribution.

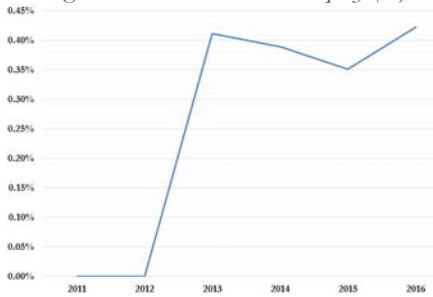
Figure 15 – 6 Year Current Ratio



### Liquidity and Leverage

Activision Blizzard maintains a strong balance sheet, and we expect management to continue this trend in the coming years. With regards to liquidity, **Figure 15** shows the company's current ratio, which depicts a drop from 2013 to 2015, but then steadily rises in 2016. This was due to the company's acquisitions in 2014 and 2015.

Figure 16 – 6 Year Debt to Equity (%)



Source: Company Data

Figure 17 – DCF Sensitivity Table

		WACC				
		7.80%	8.05%	8.30%	8.55%	8.80%
Terminal Growth Rate	1.50%	59.92	57.48	55.22	53.12	51.17
	1.75%	61.52	58.93	56.54	54.32	52.26
	2.00%	63.26	60.50	57.96	55.61	53.44
	2.25%	65.16	62.20	59.50	57.01	54.71
	2.50%	67.23	64.06	61.17	58.52	56.07

Source: Analyst Projections

From a leverage prospective, the company has experienced large swings on account of its repurchase of shares from Vivendi in 2013 and the King Digital acquisition in 2015. Additionally, the company has a relatively high level of interest coverage with its strong cash flow generation. With management appearing confident about the company's financial position, we expect these metrics to continue to improve as the company will generate higher levels of cash flow and pay back its debt.

## Valuation

### Discounted Cash Flow Model

Using a discounted cash flow model, Activision Blizzard is worth approximately \$58 per share, which is an 18% margin of safety from the current price. This model assumes an initial jump in sales for the first couple of years from the expansion in mobile from the King Digital acquisition and also from the company's developments in ESports. By 2019, we assume growth of sales in line with historical growth statistics. Another significant assumption we made was an increase in gross margins with increases to 69% as the company continues to shift towards digital distribution. As the company offers digitally downloadable content, which can potentially lead to higher margins, our assumption is most likely conservative.

In regards to the terminal growth rate, we assume a rate of 2%, which is right in line with the United States long-term GDP growth rate. Our estimated intrinsic value assumes a discount rate of 8.3%, which was adjusted using a debt adjustment factor since we do not project the low interest rate climate will persist in the future. Finally, using a sensitivity analysis with terminal growth rates and discount rates as the variables, we calculated a price range of \$54.32-\$62.20 per share.

Figure 18 – Discounted Cash Flow Model

(in Thousands)				Activision Blizzard DCF Model							
Base Year:											
Revenue	\$		7,930	Terminal Value	\$		25,952				
COGS	\$		2,775	Sum of Present Value of FCF	\$		18,580				
Gross Margin	\$		5,155	Total Enterprise Value	\$		44,532				
SG&A	\$		2,220	Less: Net Debt & Pensions	\$		1,642				
EBIT	\$		1,745	Total Equity Value	\$		42,890				
Taxes	\$		436	Shares Outstanding			740				
NOPAT	\$		1,308	Per Share Value	\$		57.96				
Depr & Amort	\$		952								
Change in NOWC	\$		(282)	Current Share Price	\$		49.09				
CapEx	\$		159	Margin of Safety			18%				
Free Cash Flow	\$		2,383								

		2017E		2018E		2019E		2020E		2021E		2022E		2023E		2024E		2025E		2026E		Terminal Year	
Total Free Cash Flow	\$		2,383	\$	2,013	\$	2,295	\$	2,345	\$	2,725	\$	3,176	\$	3,114	\$	3,207	\$	3,303	\$	3,419	\$	55,352
Discounted FCF	\$		2,290	\$	1,786	\$	1,880	\$	1,774	\$	1,904	\$	2,048	\$	1,854	\$	1,764	\$	1,677	\$	1,603	\$	25,952



### ***Competitive Advantage*** ***Insight: CEO Biography***

Robert Kotick has built Activision Blizzard into the largest interactive entertainment company in the world. Growing up, Kotick credits his role model Steve Jobs for dropping out of college to pursue his entrepreneurial interests in the software business. After receiving start-up capital from casino mogul Steve Wynn in 1983, Kotick started his company jointly developing games for various publishing companies including Electronic Arts.

It was not until 1990 when Kotick purchased a 25% stake in Activision (then called Mediagenic) for \$400,000 and started creating original and sequel products with his own development team. He has stated that the reason behind this purchase was the opportunity to remake classic Activision games, which proved to be successful once Kotick started the process for the company's old assets. By the early 2000's, Kotick built Activision into a company with household franchise names such as *Tony Hawk's Pro Skater*, *Call of Duty*, and *Guitar Hero*.

We see Kotick as an additional competitive advantage to the company, leading both the creative and management efforts moving forward. His ingenuity in developing video games and enterprising spirit lead us to conclude that Activision Blizzard's success should partly be contributed to Kotick's ability to develop and produce interactive entertainment products. Just like Walt Disney was seen as a pioneer in the animation industry and Kotick's hero, Steve Jobs was in the computer industry, Robert Kotick will be credited for the tremendous achievements he made in this industry in the forthcoming years. Additionally, with Kotick at 54 years old, he is expected to operate the company in the foreseeable future.

## **Investment Risks**

### **Dependence on Small Number of Franchises**

Activision has faces the risk that their revenue is dependent on a small number of franchises. *Call of Duty*, *World of Warcraft*, *Skylanders*, and *Destiny* have accounted for approximately 71% of net revenues. However, Activision has actively sought to mitigate this risk. They have expanded into the mobile video game market with their acquisition of King Digital Entertainment. This provides a reliable source of cash flow from an established *Candy Crush* series. In 2016, King contributed greatly, making up 25% of Activision's net revenues. Additionally, the development of the game *Overwatch* generated over \$1 billion in revenue in 2016. The success of *Overwatch*, coupled with the acquisition of King has resulted in a total of seven \$1 billion and growing franchises across their portfolio of IP.

### **Delivery of High-Quality Content**

In the video game industry, it is difficult to predict how well new content will be received. Therefore, new developments can result in less than expected sales for Activision. The company released *Call of Duty: Infinite Warfare* in 2016, which featured a more futuristic theme than previous games. Even though the company experienced high sales, the game was not well received by fans, however, Activision is receptive to the gaming community and has announced that the 2017 iteration of the game will go back to the franchise's "roots".

## **Conclusion**

To conclude, we believe Activision Blizzard, Inc. is a **Buy**, with a target price of \$58 per share, providing an 18% margin of safety. In our eyes, the company has a powerful competitive advantage with its critically acclaimed franchise name and because of the company's CEO; Robert Kotick. Additionally, we also believe the company's expansion into growth markets such as ESports and mobile gaming will allow for larger growth in the future, with more diversified sources of sales. Finally, we believe the company will improve costs from the industry shift to digital gaming, eventually leading to growth and higher returns for shareholders. The company is transforming itself into an all-encompassing interactive entertainment company, which we believe will help the company prosper in the future.

## Appendix 1: Income Statement

## Activision Blizzard Inc (ATVI US) - Income Statement

In Millions of USD except F 12 Months Ending	FY 2010 /31/2010	FY 2011 /31/2011	FY 2012 /31/2012	FY 2013 /31/2013	FY 2014 /31/2014	FY 2015 /31/2015	FY 2016 /31/2016	Last 12M /31/2016	2017 Est /31/2017	2018 Est /31/2018
<b>Revenue</b>	<b>4,447.0</b>	<b>4,755.0</b>	<b>4,856.0</b>	<b>4,583.0</b>	<b>4,408.0</b>	<b>4,664.0</b>	<b>6,608.0</b>	<b>6,607.0</b>	<b>6,474.6</b>	<b>6,981.0</b>
+ Sales & Services Revenue	4,447.0	4,755.0	4,856.0	4,583.0	4,408.0	4,664.0	6,608.0	6,607.0		
- Cost of Revenue	2,126.0	1,772.0	1,662.0	1,531.0	1,525.0	1,585.0	2,394.0	2,394.0		
+ Cost of Goods & Services	2,126.0	1,772.0	1,662.0	1,531.0	1,525.0	1,585.0	2,394.0	2,394.0		
<b>Gross Profit</b>	<b>2,321.0</b>	<b>2,983.0</b>	<b>3,194.0</b>	<b>3,052.0</b>	<b>2,883.0</b>	<b>3,079.0</b>	<b>4,214.0</b>	<b>4,213.0</b>	<b>4,584.9</b>	<b>5,062.0</b>
+ Other Operating Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
- Operating Expenses	1,852.0	1,655.0	1,743.0	1,680.0	1,700.0	1,760.0	2,802.0	2,801.0		
+ Selling, General & Admin	884.0	1,001.0	1,139.0	1,096.0	1,129.0	1,114.0	1,844.0	1,843.0		
+ <i>Selling &amp; Marketing</i>	<i>520.0</i>	<i>545.0</i>	<i>578.0</i>	<i>606.0</i>	<i>712.0</i>	<i>734.0</i>	<i>1,210.0</i>	<i>1,210.0</i>		
+ <i>General &amp; Administrative</i>	<i>364.0</i>	<i>456.0</i>	<i>561.0</i>	<i>490.0</i>	<i>417.0</i>	<i>380.0</i>	<i>634.0</i>	<i>633.0</i>		
+ Research & Development	642.0	629.0	604.0	584.0	571.0	646.0	958.0	958.0		
+ Other Operating Expense	326.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Operating Income (Loss)</b>	<b>469.0</b>	<b>1,328.0</b>	<b>1,451.0</b>	<b>1,372.0</b>	<b>1,183.0</b>	<b>1,319.0</b>	<b>1,412.0</b>	<b>1,412.0</b>	<b>2,042.7</b>	<b>2,471.7</b>
- Non-Operating (Income) Loss	-23.0	-3.0	-7.0	53.0	202.0	198.0	306.0	305.0		
+ Interest Expense, Net	-3.0	-10.0	-5.0	53.0	204.0	-	-	-		
+ <i>Interest Expense</i>	<i>5.0</i>	<i>4.0</i>	<i>1.0</i>	<i>58.0</i>	<i>208.0</i>	<i>193.0</i>	-	-		
- <i>Interest Income</i>	<i>8.0</i>	<i>14.0</i>	<i>6.0</i>	<i>5.0</i>	<i>4.0</i>	-	-	-		
+ Other Investment (Inc) Loss	-23.0	7.0	-2.0	-	-2.0	-	-	-		
+ Foreign Exch (Gain) Loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
+ (Income) Loss from Affiliates	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
+ Other Non-Op (Income) Loss	3.0	0.0	0.0	0.0	0.0	5.0	306.0	147.0		
<b>Pretax Income</b>	<b>492.0</b>	<b>1,331.0</b>	<b>1,458.0</b>	<b>1,319.0</b>	<b>981.0</b>	<b>1,121.0</b>	<b>1,106.0</b>	<b>1,107.0</b>	<b>1,988.8</b>	<b>2,305.3</b>
- Income Tax Expense (Benefit)	74.0	246.0	309.0	309.0	146.0	229.0	140.0	191.0		
+ Current Income Tax	374.0	170.0	319.0	137.0	166.0	240.0	-	-		
+ Deferred Income Tax	-301.0	76.0	-10.0	161.0	-50.0	-11.0	-	-		
+ Tax Allowance/Credit	1.0	0.0	0.0	11.0	30.0	-	-	-		
<b>Income (Loss) from Cont O</b>	<b>418.0</b>	<b>1,085.0</b>	<b>1,149.0</b>	<b>1,010.0</b>	<b>835.0</b>	<b>892.0</b>	<b>966.0</b>	<b>916.0</b>	<b>576.4</b>	<b>1,040.3</b>
- Net Extraordinary Losses (Gain)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
+ Discontinued Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
+ XO & Accounting Changes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Income (Loss) Incl. MI</b>	<b>418.0</b>	<b>1,085.0</b>	<b>1,149.0</b>	<b>1,010.0</b>	<b>835.0</b>	<b>892.0</b>	<b>966.0</b>	<b>916.0</b>		
- Minority Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Net Income, GAAP</b>	<b>418.0</b>	<b>1,085.0</b>	<b>1,149.0</b>	<b>1,010.0</b>	<b>835.0</b>	<b>892.0</b>	<b>966.0</b>	<b>916.0</b>	<b>576.4</b>	<b>1,040.3</b>
- Preferred Dividends	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
- Other Adjustments	0.0	16.0	24.0	23.0	18.0	11.0	0.0	5.0		
<b>Net Income Available to Comm</b>	<b>418.0</b>	<b>1,069.0</b>	<b>1,125.0</b>	<b>987.0</b>	<b>817.0</b>	<b>881.0</b>	<b>966.0</b>	<b>911.0</b>	<b>576.4</b>	<b>1,040.3</b>
<b>Net Income Available to Comm</b>	<b>628.4</b>	<b>1,100.0</b>	<b>1,132.8</b>	<b>1,005.9</b>	<b>817.0</b>	<b>886.9</b>	<b>1,064.8</b>	<b>997.5</b>	<b>1,490.3</b>	<b>1,823.0</b>
Net Abnormal Losses (Gains)	210.4	31.0	7.8	18.9	0.0	5.9	98.8	86.5		
Net Extraordinary Losses (Gain)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Basic Weighted Avg Shares	1,222.0	1,148.0	1,112.0	1,024.0	716.0	728.0	740.0	744.0		
<b>Basic EPS, GAAP</b>	<b>0.34</b>	<b>0.93</b>	<b>1.01</b>	<b>0.96</b>	<b>1.14</b>	<b>1.21</b>	<b>1.30</b>	<b>1.23</b>	<b>0.95</b>	<b>1.57</b>
<b>Basic EPS from Cont Ops</b>	<b>0.34</b>	<b>0.93</b>	<b>1.01</b>	<b>0.96</b>	<b>1.14</b>	<b>1.21</b>	<b>1.30</b>	<b>1.23</b>	<b>0.95</b>	<b>1.57</b>
<b>Basic EPS from Cont Ops,</b>	<b>0.51</b>	<b>0.96</b>	<b>1.02</b>	<b>0.98</b>	<b>1.14</b>	<b>1.22</b>	<b>1.44</b>	<b>1.35</b>	<b>1.97</b>	<b>2.36</b>
Diluted Weighted Avg Shares	1,236.0	1,156.0	1,118.0	1,035.0	726.0	739.0	754.0	757.0		
<b>Diluted EPS, GAAP</b>	<b>0.33</b>	<b>0.92</b>	<b>1.01</b>	<b>0.95</b>	<b>1.13</b>	<b>1.19</b>	<b>1.28</b>	<b>1.21</b>	<b>0.95</b>	<b>1.57</b>
<b>Diluted EPS from Cont Ops</b>	<b>0.33</b>	<b>0.92</b>	<b>1.01</b>	<b>0.95</b>	<b>1.13</b>	<b>1.19</b>	<b>1.28</b>	<b>1.21</b>	<b>0.95</b>	<b>1.57</b>
<b>Diluted EPS from Cont Ops</b>	<b>0.50</b>	<b>0.95</b>	<b>1.02</b>	<b>0.97</b>	<b>1.13</b>	<b>1.20</b>	<b>1.41</b>	<b>1.32</b>	<b>1.97</b>	<b>2.36</b>

## Appendix 2: Balance Sheet

Activision Blizzard Inc (ATVI US) - Balance Sheet										
In Millions of USD except Per Share 12 Months Ending	FY 2007 03/31/2007	FY 2008 12/31/2008	FY 2009 12/31/2009	FY 2010 12/31/2010	FY 2011 12/31/2011	FY 2012 12/31/2012	FY 2013 12/31/2013	FY 2014 12/31/2014	FY 2015 12/31/2015	FY 2016 12/31/2016
<b>Total Assets</b>										
+ Cash, Cash Equivalents & STI	954.8	3,002.0	3,245.0	3,508.0	3,525.0	4,375.0	4,443.0	4,858.0	1,831.0	3,245.0
+ Cash & Cash Equivalents	384.4	2,958.0	2,768.0	2,812.0	3,165.0	3,959.0	4,410.0	4,848.0	1,823.0	3,245.0
+ ST Investments	570.4	44.0	477.0	696.0	360.0	416.0	33.0	10.0	8.0	0.0
+ Accounts & Notes Receiv	148.7	974.0	739.0	673.0	649.0	707.0	515.0	659.0	679.0	732.0
+ Accounts Receivable, Net	148.7	974.0	739.0	673.0	649.0	707.0	515.0	659.0	679.0	732.0
+ Notes Receivable, Net	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Inventories	91.2	262.0	241.0	112.0	144.0	209.0	171.0	123.0	128.0	49.0
+ Raw Materials	2.2	11.0	40.0	14.0	28.0	58.0	22.0	11.0	27.0	—
+ Work In Process	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—
+ Finished Goods	89.0	251.0	201.0	98.0	116.0	151.0	149.0	112.0	101.0	—
+ Other Inventory	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—
+ Other ST Assets	206.5	1,021.0	1,104.0	1,139.0	1,062.0	983.0	1,112.0	901.0	749.0	804.0
+ Derivative & Hedging Assets	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Deferred Tax Assets	—	—	498.0	648.0	507.0	487.0	321.0	—	—	—
+ Misc ST Assets	—	—	606.0	491.0	555.0	496.0	791.0	901.0	749.0	804.0
<b>Total Current Assets</b>	<b>1,401.2</b>	<b>5,259.0</b>	<b>5,329.0</b>	<b>5,432.0</b>	<b>5,380.0</b>	<b>6,274.0</b>	<b>6,241.0</b>	<b>6,541.0</b>	<b>3,387.0</b>	<b>4,830.0</b>
+ Property, Plant & Equip, Net	46.5	149.0	138.0	169.0	163.0	141.0	138.0	157.0	189.0	258.0
+ Property, Plant & Equip	106.6	396.0	437.0	512.0	533.0	513.0	586.0	501.0	597.0	—
- Accumulated Depreciation	60.1	247.0	299.0	343.0	370.0	372.0	448.0	344.0	408.0	—
+ LT Investments & Receivables	—	78.0	23.0	23.0	16.0	8.0	9.0	9.0	9.0	0.0
+ LT Investments	—	—	23.0	23.0	16.0	8.0	9.0	9.0	9.0	—
+ Other LT Assets	346.2	8,979.0	8,252.0	7,823.0	7,718.0	7,777.0	7,624.0	7,935.0	11,666.0	12,364.0
+ Total Intangible Assets	291.0	9,139.0	8,243.0	7,808.0	7,706.0	7,736.0	7,589.0	7,586.0	7,657.0	11,680.0
+ Goodwill	195.4	7,227.0	7,154.0	7,132.0	7,111.0	7,106.0	7,092.0	7,086.0	7,085.0	7,088.0
+ Other Intangible Assets	95.6	1,912.0	1,089.0	676.0	595.0	630.0	497.0	500.0	562.0	1,912.0
+ Deferred Tax Assets	—	—	—	—	—	—	—	264.0	275.0	283.0
+ Derivative & Hedging Assets	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Misc LT Assets	55.2	-160.0	9.0	15.0	12.0	41.0	35.0	85.0	3,734.0	401.0
<b>Total Noncurrent Assets</b>	<b>392.7</b>	<b>9,206.0</b>	<b>8,413.0</b>	<b>8,015.0</b>	<b>7,897.0</b>	<b>7,926.0</b>	<b>7,771.0</b>	<b>8,101.0</b>	<b>11,864.0</b>	<b>12,622.0</b>
<b>Total Assets</b>	<b>1,793.9</b>	<b>14,465.0</b>	<b>13,742.0</b>	<b>13,447.0</b>	<b>13,277.0</b>	<b>14,200.0</b>	<b>14,012.0</b>	<b>14,642.0</b>	<b>15,251.0</b>	<b>17,452.0</b>

## Appendix 3: Balance Sheet Contd.

Activision Blizzard Inc (ATVI US) - Balance Sheet										
In Millions of USD except Per Share 12 Months Ending	FY 2007 03/31/2007	FY 2008 12/31/2008	FY 2009 12/31/2009	FY 2010 12/31/2010	FY 2011 12/31/2011	FY 2012 12/31/2012	FY 2013 12/31/2013	FY 2014 12/31/2014	FY 2015 12/31/2015	FY 2016 12/31/2016
<b>Liabilities &amp; Shareholders' Equity</b>										
+ Payables & Accruals	136.5	319.0	1,081.0	1,234.0	1,084.0	995.0	991.0	917.0	909.0	1,028.0
+ Accounts Payable	136.5	319.0	302.0	363.0	390.0	343.0	355.0	325.0	284.0	222.0
+ Accrued Taxes	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—
+ Interest & Dividends Payable	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—
+ Other Payables & Accruals	—	—	779.0	871.0	694.0	652.0	636.0	592.0	625.0	806.0
+ ST Debt	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0
+ ST Borrowings	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ ST Capital Leases	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Current Portion of LT Debt	—	—	—	—	—	—	25.0	0.0	0.0	—
+ Other ST Liabilities	204.7	1,765.0	1,426.0	1,726.0	1,472.0	1,657.0	1,389.0	1,797.0	1,702.0	1,628.0
+ Deferred Revenue	—	—	1,426.0	1,726.0	1,472.0	1,657.0	1,389.0	1,797.0	1,702.0	1,628.0
+ Derivatives & Hedging	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Misc ST Liabilities	204.7	1,765.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Current Liabilities</b>	<b>341.2</b>	<b>2,084.0</b>	<b>2,507.0</b>	<b>2,960.0</b>	<b>2,556.0</b>	<b>2,652.0</b>	<b>2,405.0</b>	<b>2,714.0</b>	<b>2,611.0</b>	<b>2,656.0</b>
+ LT Debt	0.0	0.0	0.0	0.0	0.0	0.0	4,668.0	4,324.0	4,079.0	4,887.0
+ LT Borrowings	—	—	0.0	0.0	0.0	0.0	4,668.0	4,324.0	4,079.0	4,887.0
+ LT Capital Leases	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Other LT Liabilities	41.2	854.0	479.0	284.0	229.0	231.0	317.0	371.0	493.0	790.0
+ Accrued Liabilities	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Pension Liabilities	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Pensions	—	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0
+ Other Post-Ret Benefits	—	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0
+ Deferred Revenue	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—
+ Deferred Tax Liabilities	—	—	270.0	120.0	55.0	25.0	20.0	10.0	10.0	44.0
+ Derivatives & Hedging	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Misc LT Liabilities	41.2	854.0	209.0	164.0	174.0	206.0	297.0	361.0	483.0	746.0
<b>Total Noncurrent Liabilities</b>	<b>41.2</b>	<b>854.0</b>	<b>479.0</b>	<b>284.0</b>	<b>229.0</b>	<b>231.0</b>	<b>4,985.0</b>	<b>4,695.0</b>	<b>4,572.0</b>	<b>5,677.0</b>
<b>Total Liabilities</b>	<b>382.4</b>	<b>2,938.0</b>	<b>2,986.0</b>	<b>3,244.0</b>	<b>2,785.0</b>	<b>2,883.0</b>	<b>7,390.0</b>	<b>7,409.0</b>	<b>7,183.0</b>	<b>8,333.0</b>
+ Preferred Equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Share Capital & APIC	963.6	12,170.0	12,376.0	12,353.0	9,616.0	9,450.0	9,682.0	9,924.0	10,242.0	10,442.0
+ Common Stock	—	—	—	—	—	—	0.0	0.0	0.0	0.0
+ Additional Paid in Capital	—	—	12,376.0	12,353.0	—	—	9,682.0	9,924.0	10,242.0	10,442.0
- Treasury Stock	0.0	126.0	1,235.0	2,194.0	0.0	0.0	5,814.0	5,762.0	5,637.0	5,563.0
+ Retained Earnings	427.8	-474.0	-361.0	57.0	948.0	1,893.0	2,686.0	3,374.0	4,096.0	4,869.0
+ Other Equity	20.2	-43.0	-24.0	-13.0	-72.0	-26.0	68.0	-303.0	-633.0	-629.0
<b>Equity Before Minority Interest</b>	<b>1,411.5</b>	<b>11,527.0</b>	<b>10,756.0</b>	<b>10,203.0</b>	<b>10,492.0</b>	<b>11,317.0</b>	<b>6,622.0</b>	<b>7,233.0</b>	<b>8,068.0</b>	<b>9,119.0</b>
+ Minority/Non Controlling Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Equity</b>	<b>1,411.5</b>	<b>11,527.0</b>	<b>10,756.0</b>	<b>10,203.0</b>	<b>10,492.0</b>	<b>11,317.0</b>	<b>6,622.0</b>	<b>7,233.0</b>	<b>8,068.0</b>	<b>9,119.0</b>
<b>Total Liabilities &amp; Equity</b>	<b>1,793.9</b>	<b>14,465.0</b>	<b>13,742.0</b>	<b>13,447.0</b>	<b>13,277.0</b>	<b>14,200.0</b>	<b>14,012.0</b>	<b>14,642.0</b>	<b>15,251.0</b>	<b>17,452.0</b>

## Appendix 4: Statement of Cash Flow

Activision Blizzard Inc (ATVI US) - Cash Flow Statement										
In Millions of USD except Per Share	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Last 12M
12 Months Ending	3/31/2008	3/31/2009	12/31/2010	3/31/2011	12/31/2012	12/31/2013	3/31/2014	2/31/2015	2/31/2016	2/31/2016
<b>Cash from Operating Activities</b>										
+ Net Income	-107.0	113.0	418.0	1,085.0	1,149.0	1,010.0	835.0	892.0	966.0	916.0
+ Depreciation & Amortization	561.0	628.0	517.0	435.0	328.0	315.0	346.0	494.0	1,150.0	1,150.0
+ Non-Cash Items	-672.0	122.0	175.0	103.0	200.0	207.0	86.0	69.0	287.0	337.0
+ Stock-Based Compensation	70.0	77.0	109.0	79.0	121.0	79.0	65.0	25.0	147.0	147.0
+ Deferred Income Taxes	-432.0	-256.0	-278.0	75.0	-10.0	161.0	-44.0	-27.0	-9.0	-9.0
+ Other Non-Cash Adj	-310.0	301.0	344.0	-51.0	89.0	-33.0	65.0	71.0	149.0	199.0
+ Chg in Non-Cash Work Cap	615.0	320.0	266.0	-671.0	-332.0	-268.0	25.0	-263.0	-248.0	-248.0
+ (Inc) Dec in Accts Receiv	-664.0	235.0	76.0	13.0	-46.0	198.0	-177.0	-40.0	84.0	84.0
+ (Inc) Dec in Inventories	-20.0	21.0	124.0	-34.0	-62.0	6.0	-2.0	-54.0	32.0	32.0
+ Inc (Dec) in Accts Payable	322.0	-18.0	70.0	31.0	-54.0	7.0	-12.0	-25.0	-50.0	-50.0
+ Inc (Dec) in Other	977.0	82.0	-4.0	-681.0	-170.0	-479.0	216.0	-144.0	-314.0	-314.0
+ Net Cash From Disc Ops	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cash from Operating Activities</b>	<b>397.0</b>	<b>1,183.0</b>	<b>1,376.0</b>	<b>952.0</b>	<b>1,345.0</b>	<b>1,264.0</b>	<b>1,292.0</b>	<b>1,192.0</b>	<b>2,155.0</b>	<b>2,155.0</b>
<b>Cash from Investing Activities</b>										
+ Change in Fixed & Intang	-37.0	-69.0	-97.0	-72.0	-73.0	-74.0	-107.0	-111.0	-136.0	-136.0
+ Disp in Fixed & Intang	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Disp of Fixed Prod Assets	—	—	—	—	—	0.0	—	0.0	0.0	0.0
+ Disp of Intangible Assets	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Acq of Fixed & Intang	-46.0	-69.0	-97.0	-72.0	-73.0	-74.0	-107.0	-111.0	-136.0	-136.0
+ Acq of Fixed Prod Assets	—	-69.0	-97.0	-72.0	-73.0	-74.0	-107.0	-111.0	-136.0	-136.0
+ Acq of Intangible Assets	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Net Change in LT Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Dec in LT Investment	0.0	0.0	0.0	—	—	0.0	—	0.0	0.0	0.0
+ Inc in LT Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Net Cash From Acq & Div	—	0.0	-4.0	-3.0	0.0	0.0	0.0	-46.0	-4,588.0	-4,588.0
+ Cash from Divestitures	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Cash for Acq of Subs	—	0.0	-4.0	-3.0	0.0	0.0	0.0	-46.0	-4,588.0	-4,588.0
+ Cash for JVs	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Other Investing Activities	1,120.0	-374.0	-211.0	341.0	-51.0	382.0	23.0	-3,559.0	3,547.0	3,547.0
+ Net Cash From Disc Ops	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cash from Investing Activities</b>	<b>1,083.0</b>	<b>-443.0</b>	<b>-312.0</b>	<b>266.0</b>	<b>-124.0</b>	<b>308.0</b>	<b>-84.0</b>	<b>-3,716.0</b>	<b>-1,177.0</b>	<b>-1,177.0</b>
<b>Cash from Financing Activities</b>										
+ Dividends Paid	0.0	0.0	-189.0	-194.0	-204.0	-216.0	-147.0	-170.0	-195.0	-195.0
+ Cash From (Repayment) Debt	0.0	0.0	0.0	0.0	0.0	4,744.0	-375.0	-250.0	821.0	821.0
+ Cash From (Repay) ST Debt	—	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Cash From LT Debt	—	—	0.0	0.0	0.0	4,750.0	0.0	0.0	6,925.0	6,925.0
+ Repayments of LT Debt	—	—	—	0.0	0.0	-6.0	-375.0	-250.0	-6,104.0	-6,104.0
+ Cash (Repurchase) of Equity	1,646.0	-949.0	-864.0	-614.0	-277.0	-5,643.0	214.0	173.0	106.0	106.0
+ Increase in Capital Stock	1,774.0	160.0	95.0	78.0	38.0	187.0	214.0	173.0	106.0	106.0
+ Decrease in Capital Stock	-128.0	-1,109.0	-959.0	-692.0	-315.0	-5,830.0	0.0	0.0	0.0	0.0
+ Other Financing Activities	—	0.0	0.0	0.0	-16.0	-108.0	-66.0	112.0	-232.0	-232.0
+ Net Cash From Disc Ops	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cash from Financing Activities</b>	<b>1,416.0</b>	<b>-949.0</b>	<b>-1,053.0</b>	<b>*****</b>	<b>-497.0</b>	<b>-1,223.0</b>	<b>-374.0</b>	<b>-135.0</b>	<b>500.0</b>	<b>500.0</b>
Effect of Foreign Exchange Rates	—	19.0	33.0	-57.0	70.0	102.0	-396.0	-366.0	-56.0	-56.0
<b>Net Changes in Cash</b>	<b>2,896.0</b>	<b>-190.0</b>	<b>44.0</b>	<b>353.0</b>	<b>794.0</b>	<b>451.0</b>	<b>438.0</b>	<b>-3,025.0</b>	<b>1,422.0</b>	<b>1,422.0</b>

## Appendix 5: Discounted Cash Flow

Discounted Cash Flows (Dollars in millions)	5 Year Statistical Analysis Avg. S.D.	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Terminal Year
<b>Revenue</b>		7,930	9,119	10,031	11,034	11,862	12,217	12,584	12,961	13,350	13,751	
<i>Revenue growth</i>	9.5% 22.0%	20%	15%	10%	10%	7.5%	3%	3%	3%	3%	3%	
<b>COGS</b>		2,775	3,100	3,411	3,641	3,796	3,910	4,027	4,148	4,272	4,263	
<b>Gross profit</b>		5,154	6,019	6,620	7,393	8,066	8,308	8,557	8,814	9,078	9,488	
<i>Gross margin</i>	65.5% 1.1%	65%	66%	66%	67%	68%	68%	68%	68%	68%	69%	
<b>S,G&amp;A</b>		2,220	2,645	2,708	2,869	2,965	3,054	3,146	3,240	3,338	3,438	
<i>S,G&amp;A as % of revenue</i>	28.0% 1.8%	28.0%	29.0%	27.0%	26.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	
<b>R&amp;D</b>		1,189	1,550	1,806	2,207	2,372	1,955	1,888	1,944	2,003	2,063	
<i>R&amp;D as % of revenue</i>	13.3% 0.9%	15.0%	17.0%	18.0%	20.0%	20.0%	16.0%	15.0%	15.0%	15.0%	15.0%	
<b>EBIT</b>		1,745	1,824	2,106	2,317	2,728	3,299	3,524	3,629	3,738	3,988	
<i>EBIT margin</i>	27.3% 3.5%	22%	20%	21%	21%	23%	27%	28%	28%	28%	29%	
<b>Taxes</b>		436	456	527	579	682	825	881	907	935	997	
<i>Tax rate</i>	18.5% 4.5%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	
<b>NOPLAT</b>		1,308	1,368	1,580	1,738	2,046	2,474	2,643	2,722	2,804	2,991	
<b>D&amp;A (+)</b>		952	912	1,003	883	949	977	755	778	801	688	
<b>CapEx (-)</b>		159	182	201	221	237	244	252	259	267	275	
<b>Change in W/C (-)</b>		(282)	85	87	55	32	31	32	33	34	(15)	
<b>Free cash flow</b>		2,383	2,013	2,295	2,345	2,725	3,176	3,114	3,207	3,303	3,419	55,352
<b>Discount period</b>		0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	
<b>Discount rate</b>		8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	
<b>PV of FCF</b>		2,290	1,786	1,880	1,774	1,904	2,048	1,854	1,764	1,677	1,603	25,952

Terminal rate	2.00%
Enterprise value	44,531
Debt (-)	4,887
Cash (+)	3,245
Equity value	42,889
Shares	740
Intrinsic value	\$ 57.96
Trading value	\$ 49.09
Margin of safety	18%



## Appendix 6: Net Working Capital and CAPEX Projections

NWC Projections (Dollars in millions)	Statistical Analysis		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	Avg.	S.D.										
<b>Total current assets</b>			2,442	2,801	3,082	3,381	3,625	3,734	3,846	3,961	4,080	4,191
Inventories			222	248	273	291	304	313	322	332	342	341
A/R			1,031	1,185	1,304	1,434	1,542	1,588	1,636	1,685	1,736	1,788
Other assets			1,189	1,368	1,505	1,655	1,779	1,833	1,888	1,944	2,003	2,063
<b>Total current liabilities</b>			3,231	3,675	4,042	4,397	4,673	4,814	4,958	5,107	5,260	5,356
A/P			1,249	1,395	1,535	1,639	1,708	1,759	1,812	1,866	1,922	1,918
Other			1,982	2,280	2,508	2,759	2,965	3,054	3,146	3,240	3,338	3,438
<b>Net working capital (Increase)/ Decrease in WC</b>			(789) (282)	(874) 85	(961) 87	(1,016) 55	(1,049) 32	(1,080) 31	(1,112) 32	(1,146) 33	(1,180) 34	(1,165) (15)
<b>WC drivers</b>												
Revenue			7,930	9,119	10,031	11,034	11,862	12,217	12,584	12,961	13,350	13,751
Cost of revenue			2,775	3,100	3,411	3,641	3,796	3,910	4,027	4,148	4,272	4,263
Inventories as % of cost	7.9%	3.5%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
A/R as % of revenue	13.6%	1.7%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
Other as % of revenue	20.2%	4.7%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
A/P as % of cost	57.7%	7.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
Accrued as % of revenue	33.7%	5.6%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
<b>Projections</b>												
Capex			159	182	201	221	237	244	252	259	267	275
Depreciation			952	912	1,003	883	949	977	755	778	801	688
<b>Metrics</b>												
Capex as % of revenue	1.9%	0.4%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Depreciation as % of revenue	8.8%	2.0%	12.0%	10.0%	10.0%	8.0%	8.0%	8.0%	6.0%	6.0%	6.0%	5.0%
Capex as % of depreciation			0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4