



March 31, 2020

Overview

Activision Blizzard, Inc. publishes, develops, and distributes interactive entertainment software and peripheral products. The Company's products cover diverse game categories, including action/adventure, action sports, racing, role playing, simulation, first-person action, music-based gaming, and strategy.

Investment Thesis

Activision Blizzard is an attractive investment based on the following drivers and catalysts:

1. Secular trend of a higher installed console and player base and a shift toward digital full-game downloads on consoles
2. Exposure to fast growing video game market with greatest diversity of geography, platforms, and genres
3. Strong portfolio of intellectual property and core franchises that have consistent sales and growth
4. Expansion into new sources of revenue including in-game purchases and mobile versions of Activision and Blizzard game franchises

Risks

The following risks could negatively impact Activision Blizzard and prevent it from reaching my target price:

1. Delayed content releases and decreased consumer spending due to coronavirus-related economic damage and work stoppages
2. Cannibalization of base franchise games from new title launches such as *Call of Duty: Warzone*
3. Regulation of in-game purchases, such as loot boxes
4. Over-concentration in too few game franchises

Company Information

Ticker	NASDAQ: ATVI
Sector	Comm Svcs
Industry	Video Game
Price	\$54.43
Market Cap (mm)	\$41,868.7
Shares Outstanding	769.2

Recommendation

Stock Rating	Buy
Price Target	\$69.23
Implied Upside	27.2%
Dividend Yield	0.8%
Total Implied Return	27.9%

Key Statistics

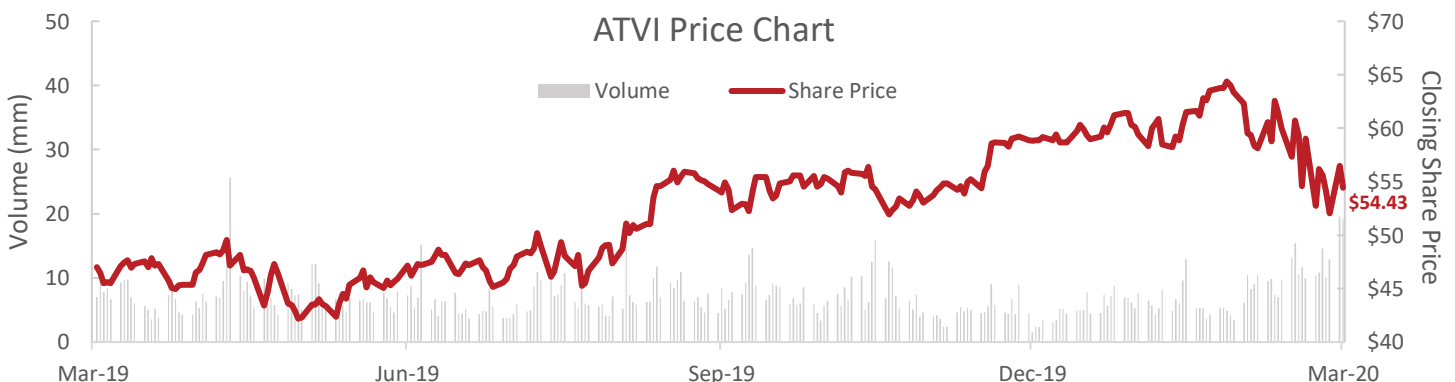
Revenue	6,489.0
EPS	\$1.95
EV / EBITDA	16.1x
P / E	26.7x
Beta	0.87

Performance History

52-Week High	\$64.37
52-Week Low	\$42.19
1-Year Return	15.9%

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Note: In report all \$ in millions (except per-share data) and all financials and figures are updated as of 3/24/2020

Source: All historical ATVI financial statement data is sourced from CapitalIQⁱⁱ

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Business Description

Company Overview

Activision Blizzard, Inc. is a video game publisher headquartered in Santa Monica, California. It publishes, develops, and distributes interactive entertainment software and peripheral products. The company operates in three reportable business segments: Activision Publishing, Inc., Blizzard Entertainment, Inc., and King Digital Entertainment. Its products cover diverse game categories, including action/adventure, action sports, racing, role playing, simulation, first-person action, music-based gaming, and strategy.

ATVI is the largest video game publisher in the US with 15.8%^v market share. Its core franchises are among the most popular and well-known globally and include: *World of Warcraft*, *Overwatch*, *Candy Crush*, and one of the best-selling video game franchises of all time in *Call of Duty*ⁱ. The company also has a well-diversified product offering by creating, selling, and distributing games and services on video game consoles, PC's, and mobile devices throughout the world.

Business Segments

2019 Segment Revenue	
Activision	2,219.0
King	2,031.0
Blizzard	1,676.0
Other	563.0
Total	6,489.0

Table 1: Sales by Segmentⁱ

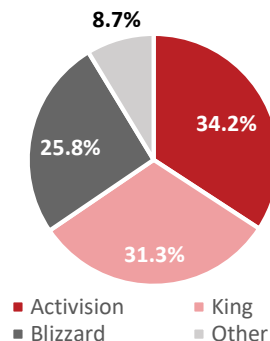


Figure 1: Sales by Segmentⁱ

Activision

Activision Publishing, Inc. is a leading global developer and publisher of interactive software products and entertainment content, particularly for the console platform. Activision primarily delivers content through retail and digital channels, including full-game and in-game sales, as well as by licensing software to third-party or related-party companies that distribute Activision products. Activision develops, markets, and sells products primarily based on our internally developed intellectual properties, as well as some licensed properties.

Activision's key product franchises are: *Call of Duty*, *Destiny*, *Guitar Hero*, *Spiro*, and *Crash Bandicoot*.

Blizzard

Blizzard Entertainment, Inc. is a leading global developer and publisher of interactive software products and entertainment content, particularly for the PC platform. Blizzard primarily delivers content through retail and digital channels, including subscriptions, full-game, and in-game sales, as well as by licensing software to third-party or related-party companies that distribute Blizzard products. Blizzard also maintains a proprietary online gaming service, *Blizzard Battle.net*, which facilitates digital distribution of Blizzard content and selected Activision content, online social connectivity, and the creation of user-generated content. Finally, Blizzard contains all of Activision Blizzard's esports content.

Blizzard's key product franchises are: *World of Warcraft*, *Warcraft*, *Starcraft*, *Diablo*, and *Overwatch*.

King

King Digital Entertainment is a leading global developer and publisher of interactive entertainment content and services, primarily for the mobile platform, including for Google's Android and Apple's iOS. King also distributes its content and services on the PC platform, primarily via Facebook. King's games are free to play; however, players can acquire in-game items, either with virtual currency or real currency. Additionally, in-game advertising is a large source of revenue. *Candy Crush* and its related games are King's largest franchise.

Other

Activision Blizzard also engages in business that are not reportable segments, which are:

- Activision Blizzard Studios – creates original film and television content based on ATVI's library of globally recognized intellectual properties
- Activision Blizzard Distribution business – consists of operations in Europe that provide warehousing, logistics, and sales distribution services to third-party publishers of interactive entertainment software, ATVI's own publishing operations, and manufacturers of interactive entertainment hardware

Geographic Breakdown

2019 Revenue by Geography	
United States	2984.9
EMEA	1460.3
Asia Pacific	909.0
United Kingdom	778.7
Americas (Excluding US)	356.1
Total	6,489.0

Table 2: Revenue by geographyⁱ

Sales by Location

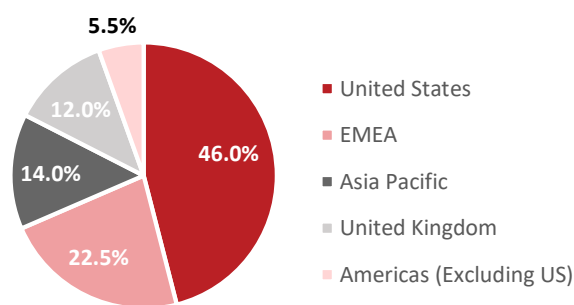


Figure 2: Revenue by geographyⁱ

Activision Blizzard sells products globally and is therefore somewhat shielded from regional economic changes. Its largest sales region is the United States, followed by EMEA.

Industry Overview

Video Game Industry

The video game industry is a growth stage industry experiencing rapid changes. Sales in the industry have grown an average of 14.4% annually^v over the past five years in the US. The way that games are purchased, sold, and played have been overhauled recently due to the emergence of the mobile gaming industry. Mobile gaming has greatly contributed to recent growth, but it is a low-cost and low-margin market that is likely to weigh on growth moving forward. However, the industry is still primed for above

average growth because of increased consumer spending on in-game content and the release of the new generation of gaming consoles in late 2020.

Video Game Industry Statistics			
US Annual Sales Growth		2019 Financials	
2014-2019A	2019-2024P	Revenue	Profit
14.4%	5.5%	\$63,400.0	\$11,200.0

Table 3: Video game industry statistics^v

Product Segmentation

Over 80% of products sold in the video game industry are games with the majority of those games being online. The share of online games has increased recently due to faster download speeds and greater system storage on consoles. This trend bodes well for video game publishers, because games sold online have a higher margin as there are fewer physical costs.

Products and Services Segmentation

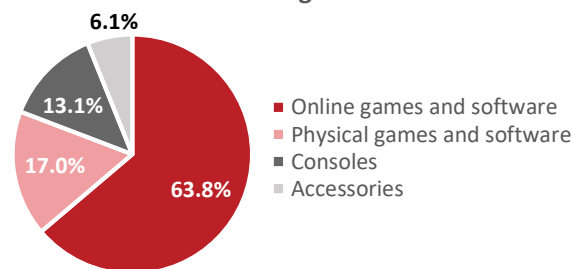


Figure 3: 2019 Products and services segmentation^v

Customer Base

Video games are heavily targeted toward younger males (18-50 years old) with over 67% of games being action or shooter games primarily designed for a male audience^v. However, there is an increasing focus on content creation for women aged 18-50 as they are the fastest growing customer base and recently surpassed adolescent males as the second largest gamer demographic. This recent expansion in women gamers can be attributed to the rapid rise of mobile gaming as well as increased couple gaming. To help cater to this new customer base, game developers are creating more gender-neutral games, such as Blizzard's *Overwatch*.

Video Game Customer Demographics

Men aged 18-50	28.0%
Women aged 18-50	21.0%
Men younger than 18	17.0%
Women older than 50	12.0%
Men older than 50	11.0%
Women younger than 18	11.0%

Table 4: 2019 Video game consumer demographics^v

Video Game Industry Segments

The video game industry is divided into four main segments: game system constructors, game developers, game publishers, and game testers. Activision Blizzard operates almost exclusively as a game publisher.

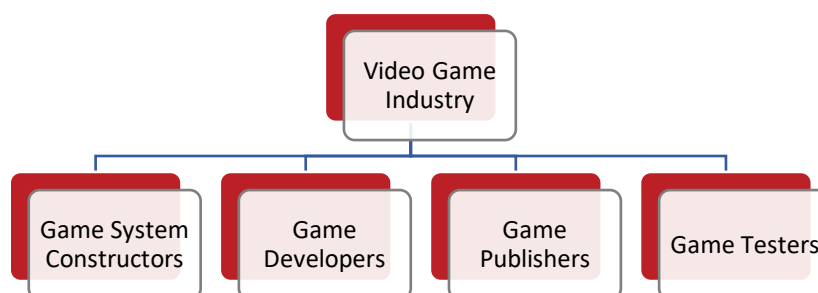


Figure 4: Video game industry overview^{vii}

Video Game Publishing

Video game publishers are responsible for publishing, manufacturing, and marketing games that are created by the developers. These developers can either be an in-house studio or external firm. Publishers also often finance the development of games.

The video game publishing industry has experienced nearly 10% annual growth over the past five years and is also expected by IBISWorld to continue having positive growth over the next five years. The recent historical growth rate spike in 2014-2015 was due to the rise of microtransactions in mobile gaming and the 2017 spike occurred due to the release of *Fortnight* and subsequent rise of in-game transactions in console gaming.



Figure 4: Video game publishing revenue and growth^{iv}

Competitive Dynamics

Concentration

The video game publishing industry is moderately concentrated with the largest three companies accounting for about 30% of total sales and hundreds of smaller, upstart competitors competing for the remaining 70%. The largest drivers of market share are popularity of released games and franchises and partnerships with console-makers.

The largest player in this \$30bn industry is Activision Blizzard with 15.8% of the US market, more than Microsoft and Electronic Arts combined.



Figure 5: Video game publishing market share^{iv}

Barriers to Entry

The video game publishing industry has moderately high barriers to entry. New entrants require a large initial investment and face steep competition from the incumbent, larger players. The largest companies in this industry have several distinct advantages over their smaller competitors: they have stronger relationships with game developers, access to licenses for gaming content, and are able to invest in rapidly changing technology and equipment required to deliver modern games to their customers. Additionally, while the barriers to entry are high for publishers of PC and console games, they are much lower for mobile games as there are no physical product costs and no distribution expenses. This has allowed thousands of incredibly small mobile game publishers to enter the market.

Key Success Factors

There are many factors that lead to success in the video game publishing industry, but the three most notable are^{iv}:

1. Leveraging new technology— Companies in this industry must stay up to date with the most modern technology to compete. They must be able to quickly adapt to new technology and trends, such as the new generation of consoles and the new trend of online game distribution
2. Establishment of strong franchises— To have consistent success video game publishers must develop strong franchises, such as Activision's *Call of Duty* or Blizzard's *World of Warcraft*, which will maintain customer loyalty
3. Maintaining a strong product pipeline— As with most other forms of media, customers are constantly craving new content, so game publishers must be cognizant of having a strong product pipeline of upcoming releases

Market Considerations for Share Price

Recent Stock Performance



Figure 6: ATVI annotated stock price chart^{ii,viii}

Activision Blizzard's share price has been very volatile over the past three years with a large increase before a steep crash in 3Q18. All of the different large share price drops can be attributed to some combination of broad macroeconomic factors, *Fortnite* competition, and fears of lower franchise engagement. None of these factors should be considered long-term fundamental risks to the business and the recent pre-coronavirus stock appreciation shows that the market concurs.

Stock Performance

YTD	(7.2%)
6m	0.9%
1y	16.1%
2y	(20.0%)
3y	10.8%

Table 5: ATVI stock performanceⁱⁱ

Industry Performance

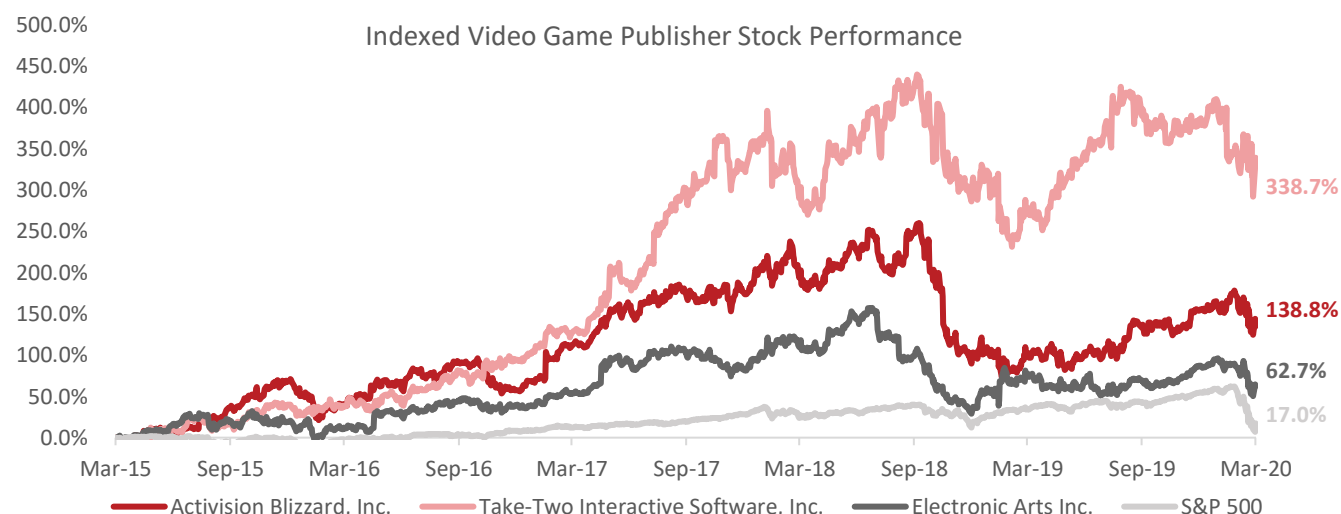


Figure 7: Video game publishing indexed performanceⁱⁱ

Over the past five years, Activision Blizzard's stock has significantly outperformed the S&P 500 and Electronic Arts, its closest competitor. This outperformance can mainly be attributed to the company's strong user growth in new and existing franchises and its highly accretive acquisition of King in early 2016. Take-Two Interactive's strong stock performance is from the incredible success and monetization of *GTA V*, which has become the highest selling video game of all time. However, Take-Two has not had any significant launches since *GTA V* and still hasn't officially announced development of a sequel, so I do not believe that it will continue this outperformance into the futureⁱ.

Coronavirus Impact

While Activision Blizzard's stock has fallen recently due to the economic effects of the coronavirus, I believe that the company is well-positioned to benefit from the virus in the short-term. As more quarantines are enacted and the number of workplace and school disruptions increase, there will be increased demand for at-home-entertainment, such as the video games published by Activision Blizzard. However, I do not believe that the company is immune to the long-term effects of the virus as it could disrupt game sales and development.

Investment Thesis

Catalysts

There are four main drivers that investors should focus on moving forward that will allow Activision Blizzard to grow and increase its valuation:

1. Strong portfolio of **core franchises**
2. Expansion into **new sources of revenue**
3. Leading position in **fast growing video game market**
4. Shift toward **digital full-game downloads** on consoles

Strong Core Franchises

Activision Blizzard has seven core franchises (*Call of Duty*, *World of Warcraft*, *Overwatch*, *Diablo*, *Hearthstone*, *StarCraft*, and *Candy Crush*) that are all very successful with loyal customers. Specifically, *Call of Duty* has generated the most console sales 10 out of the last 11 years, *Overwatch* has over 50m players worldwide, and *Candy Crush* has been the top grossing US app store franchise for multiple years.

The success of these franchises has afforded Activision Blizzard the ability to invest heavily in them leading to more player engagement and in-game monetization, which has allowed for even more investment into these titlesⁱ.

New Sources of Revenue

Having a core portfolio of strong franchises has also given Activision Blizzard the ability to create new offerings for its brands to better address the mobile, free-to-play, and digital download markets. Some of the first efforts into this initiative are the recently released *Call of Duty: Mobile* and planned future mobile ports of Blizzard games. *Call of Duty: Mobile* specifically has been a major success with over 150m downloads and a win for Mobile Game of the Year.

	Monthly Active Users (MAUs)					
	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19
Activision	46.0	53.0	41.0	37.0	36.0	128.0
% growth	-	15.2%	(22.6%)	(9.8%)	(2.7%)	255.6%
Blizzard	37.0	35.0	32.0	32.0	33.0	32.0
King	262.0	268.0	272.0	258.0	247.0	249.0
Total	345.0	356.0	345.0	327.0	316.0	409.0
% growth	-	3.2%	(3.1%)	(5.2%)	(3.4%)	29.4%

Table 6: Activision Blizzard monthly active user dataⁱ

Call of Duty: Mobile has also greatly increased the number of monthly active users of Activision games. With the 128m MAUs reached in December 2019 being an all-time high for the company.

Activision also recently released *Call of Duty: Warzone* in mid-March, which is a free-to-play battle royale style *Call of Duty* game and is a major jump away from the standard yearly \$60, November release game. *Warzone* also had over 15m players in its first three days, which is 50.0% higher than what *Apex Legends*, a similar game published by Electronic Arts, had when it was released in 2019ⁱⁱⁱ.

The new digital offerings that leverage already established franchises in Activision Blizzard's portfolio will add new high margin revenue to the business from digital in-game currency sales and mobile advertisement revenue that does not nearly as high physical, distribution, or marketing costs.

Activision Blizzard is also expanding into new businesses outside of video game publishing, which should help it diversify and grow into new markets. The most notable are its studio division, which will create media involving its IP and its new Esports division under Blizzard, which has already launched an *Overwatch* league that has viewers around the world.

Fast Growing Market

In the past decade, online gaming grew from a fledgling industry to one worth over \$40bn annually^{iv}. In the next decade this growth will continue with the further growth of mobile gaming and the new ways to monetize console and PC games through post-purchase downloadable content, loot boxes, and other purchasable add-ons. There is also a new generation of gaming consoles from Sony and Microsoft being released in late 2020, which will provide a large boost to the publishing industry as consumers flock to buy games for their recently purchased consoles. Activision is perfectly positioned to take advantage of these secular trends in the industry, because its leading market position has allowed it to build strong relationships with a myriad of video game publishers and console sellers.

Digital Full-Game Downloads

Another secular shift in favor of Activision Blizzard is the increasing prevalence of mobile downloads. Video game players are now able to download content and games directly to their device instead of purchasing discs at the store. This has a three-fold effect that will help the company moving forward. First, it vastly increases the ease of purchase of consumers, which makes it more likely that they spend money on games or add-ons. Second, it allows video game publishers to increase their margins because they no longer have to pay physical retailers a percentage of the gross profit from the game sales and can instead take a larger cut of the proceeds. Finally, the direct physical costs of discs, such as manufacturing and transport, are eliminated, which further improve margins.

Financial Analysis

Financial Projections

To project Activision Blizzard's income statement, I first found the historical growth rates of each of the four individual segments of the business and then I used those figures along with IBESWorld estimates of future industry growth to find projected revenue for the company. While I found consensus estimates after the market declined over 20% from coronavirus fears, I still made my projections generally lower than consensus to account for a potential decrease in consumer spending and researchers not yet fully accounting for the effects of the virus in their models.

Even after having lower revenue estimates than consensus, my EPS figures are higher due to a combination of straight-lining share count instead of growing it like many Activision Blizzard researchers and increasing margins over time due to my conviction that an increased digital presence will allow the business to retain more revenue as profit.

Income Statement

Fiscal Year	2017A	2018A	2019A	2020P	2021P	2022P	2023P	2024P
Fiscal Year End Date	12/31/17	12/31/18	12/31/19	12/30/20	12/30/21	12/30/22	12/30/23	12/29/24
Revenues:								
Blizzard	2,139.0	2,291.0	1,676.0	1,734.7	1,908.1	2,079.9	2,225.4	2,381.2
Activision	2,628.0	2,458.0	2,219.0	2,318.9	2,585.5	2,844.1	3,043.2	3,256.2
King	1,998.0	2,086.0	2,031.0	2,112.2	2,281.2	2,440.9	2,587.4	2,742.6
Other	252.0	665.0	563.0	568.6	574.3	580.1	585.9	591.7
Total Revenue	7,017.0	7,500.0	6,489.0	6,734.4	7,349.2	7,944.9	8,441.8	8,971.7
Consensus Revenue Estimate				6,818.3	7,446.9	8,132.7	8,324.5	11,041.4
Cost of revenues - product sales								
Product costs	733.0	719.0	656.0	639.8	661.4	715.0	759.8	807.5
Software royalties, amortization, and intellectual property licenses	300.0	371.0	240.0	269.4	294.0	317.8	337.7	358.9
Cost of revenues - subscription, licensing, and other revenues								
Game operations and distribution costs	984.0	1,028.0	965.0	875.5	918.6	953.4	1,013.0	1,076.6
Software royalties, amortization, and intellectual property licenses	484.0	399.0	233.0	269.4	294.0	317.8	337.7	358.9
Gross Profit	4,516.0	4,983.0	4,395.0	4,680.4	5,181.2	5,640.9	5,993.7	6,369.9
Product development	1,069.0	1,101.0	998.0	1,010.2	955.4	1,032.8	1,097.4	1,166.3
Sales and marketing	1,378.0	1,062.0	926.0	942.8	1,028.9	1,112.3	1,181.9	1,256.0
General and administrative	760.0	832.0	864.0	740.8	808.4	873.9	928.6	986.9
Operating Income (EBIT)	1,309.0	1,988.0	1,607.0	1,986.6	2,388.5	2,621.8	2,785.8	2,960.7
Interest and other expense (income)	146.0	71.0	(26.0)	20.9	13.7	6.0	(2.5)	(11.6)
Loss on extinguishment of debt	12.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre-tax Income	1,151.0	1,877.0	1,633.0	1,965.7	2,374.8	2,615.8	2,788.3	2,972.3
Income tax expense (benefit)	878.0	29.0	130.0	412.8	498.7	549.3	585.5	624.2
Net Income	273.0	1,848.0	1,503.0	1,552.9	1,876.1	2,066.5	2,202.7	2,348.1
Basic shares outstanding	754.0	762.0	767.0	767.0	767.0	767.0	767.0	767.0
Impact of dilutive securities	12.0	9.0	4.0	4.0	4.0	4.0	4.0	4.0
Diluted shares outstanding	766.0	771.0	771.0	771.0	771.0	771.0	771.0	771.0
Basic EPS	\$0.36	\$2.43	\$1.96	\$2.02	\$2.45	\$2.69	\$2.87	\$3.06
Diluted EPS	\$0.36	\$2.40	\$1.95	\$2.01	\$2.43	\$2.68	\$2.86	\$3.05
Consensus Diluted EPS				\$1.91	\$2.26	\$2.62	\$3.26	-
Growth rate and margins								
Segment revenue growth								
Blizzard revenue growth	(12.3%)	7.1%	(26.8%)	3.5%	10.0%	9.0%	7.0%	7.0%
Activision revenue growth	18.4%	(6.5%)	(9.7%)	4.5%	11.5%	10.0%	7.0%	7.0%
King revenue growth	26.0%	4.4%	(2.6%)	4.0%	8.0%	7.0%	6.0%	6.0%
Other revenue growth	(30.6%)	163.9%	(15.3%)	1.0%	1.0%	1.0%	1.0%	1.0%
Total revenue growth	6.2%	6.9%	(13.5%)	3.8%	9.1%	8.1%	6.3%	6.3%
Cost of revenues - product sales								
Product costs margin	10.4%	9.6%	10.1%	9.5%	9.0%	9.0%	9.0%	9.0%
Software royalties, amortization, and intellectual property licenses margin	4.3%	4.9%	3.7%	4.0%	4.0%	4.0%	4.0%	4.0%
Cost of revenues - subscription, licensing, and other revenues								
Game operations and distribution costs margin	14.0%	13.7%	14.9%	13.0%	12.5%	12.0%	12.0%	12.0%
Software royalties, amortization, and intellectual property licenses margin	6.9%	5.3%	3.6%	4.0%	4.0%	4.0%	4.0%	4.0%
Gross profit margin	64.4%	66.4%	67.7%	69.5%	70.5%	71.0%	71.0%	71.0%
Product development margin	15.2%	14.7%	15.4%	15.0%	13.0%	13.0%	13.0%	13.0%
Sales and marketing margin	19.6%	14.2%	14.3%	14.0%	14.0%	14.0%	14.0%	14.0%
General and administrative margin	10.8%	11.1%	13.3%	11.0%	11.0%	11.0%	11.0%	11.0%
Tax rate	76.3%	1.5%	8.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Net profit margin	3.9%	24.6%	23.2%	23.1%	25.5%	26.0%	26.1%	26.2%

 Figure 8: Activision Blizzard projected income statement and financial ratios¹

Valuation

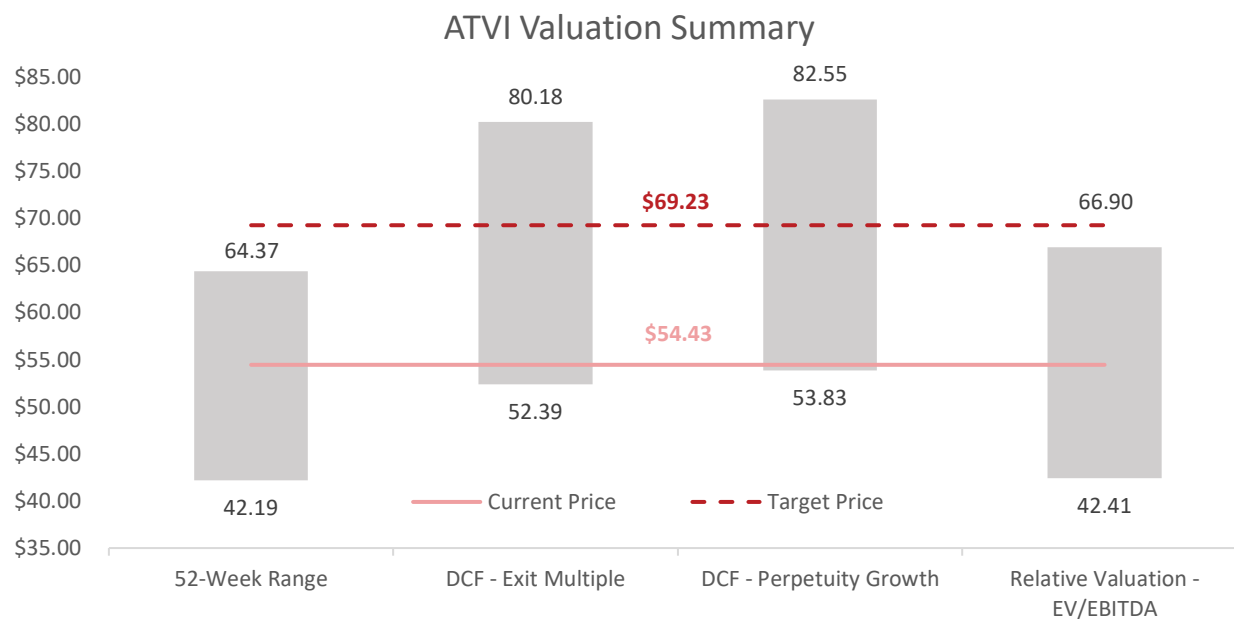


Figure 9: Valuation summary

Due to the recent stock market pullback from coronavirus-related selling, Activision Blizzard is currently trading at a very attractive valuation for an entry point in the stock.

Valuing Activision Blizzard using a discounted cash flow analysis shows that it is mispriced on an intrinsic basis. To evaluate the company a long-term growth rate of 3.0% and an exit EBITDA multiple of 17.0x were used and implied an intrinsic value using base case assumptions of \$74.30 and \$72.20, respectively.

Activision Blizzard also trades at an EV/EBITDA multiple of 17.3x, compared to an industry median multiple of 16.5x, which shows that the company trades in line with its industry and is fairly valued on a relative basis.

As Activision Blizzards grows its product offerings, leverages its franchises, and improves its margins, it will grow faster than its peers and will expand its trading multiples to more closely reflect its intrinsic value.

The target price of \$69.23 is based on a 40.0% weighting of each DCF terminal value method and a 20.0% weighting to an EV/EBITDA multiple of 16.5x.

Full intrinsic and relative valuation models can be found on pages 17 and 18 of the appendix.

Investment Risks

Macroeconomic Risks

As video games are considered consumer discretionary items, their purchase is greatly impacted by how consumers view the economy and how much disposable income they have. This makes video games a very cyclical industry that can be hurt badly during economic downturns and recessions. The best

economic measures available to gauge how much consumers are able to spend and how they view the economy over time are real disposable income per capital and the consumer sentiment index. Looking at the current values of these indicators shows that the US economy is currently at or near its all-time high in both, which means that consumers are willing and able to spend their money on discretionary items, which will help companies like Activision Blizzard.

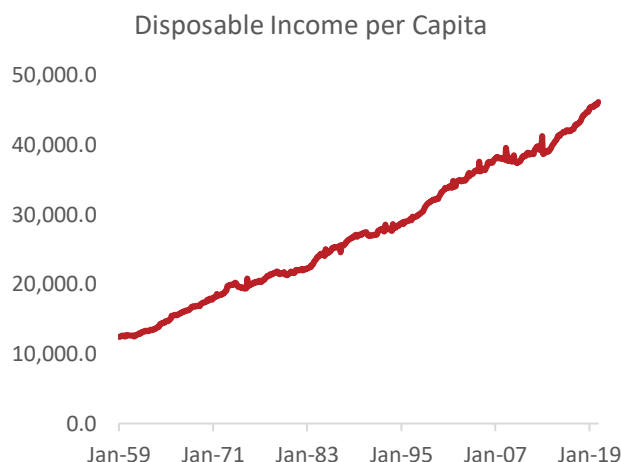


Figure 10: US disposable income per capita^{vi}

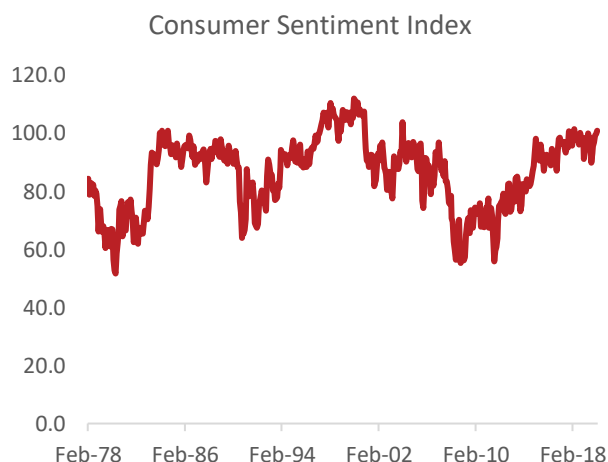


Figure 11: Univ. of Michigan Consumer sentiment index^{vi}

I will note that neither of these figures have been updated to include the month of February 2020 and the effects that the coronavirus has had on the US economy. It is very likely that both figures are substantially lower now than they were just thirty days ago. This recent volatility shows how these macroeconomic factors can be such a large risk for a company like Activision Blizzard that depends on individual US consumers for its revenue. However, I still believe that the company is insulated from many of the short-term effects of the virus due to its nature as a publisher of at home entertainment material.

Industry Risks

There are several risks that could affect Activision Blizzard and all the other players in the video game publishing industry. Because the industry is so reliant on new content, any delayed game releases can significantly harm their publisher. This is a notable risk now, because any work stoppages related to the coronavirus could cause game delays. There is also regulatory risk from the US congress, who have recently discussed regulating in-game purchases and loot boxes more specifically.

Idiosyncratic Risks

There are also several risks specific to Activision Blizzard that could prevent the company from reaching my target price. While they are large sources of growth, new title launches such as *Call of Duty: Warzone* could potentially cannibalize base games within the franchise. This is a risk, but Activision released *Warzone* in March, which is usually one of the months with the lowest *Call of Duty* MAUs, so they are clearly cognizant of this risk. The company may also be over-concentration in too few game franchises. In 2018, the company's four most popular franchises (*Call of Duty*, *Candy Crush*, *Overwatch*, and *World of Warcraft*) accounted for 58.0% of revenue, meaning that one poor launch could have a very

significant impact on earnings^{iv}. While this risk is significant, the company is currently trying to address it by releasing more titles and growing its product pipeline.

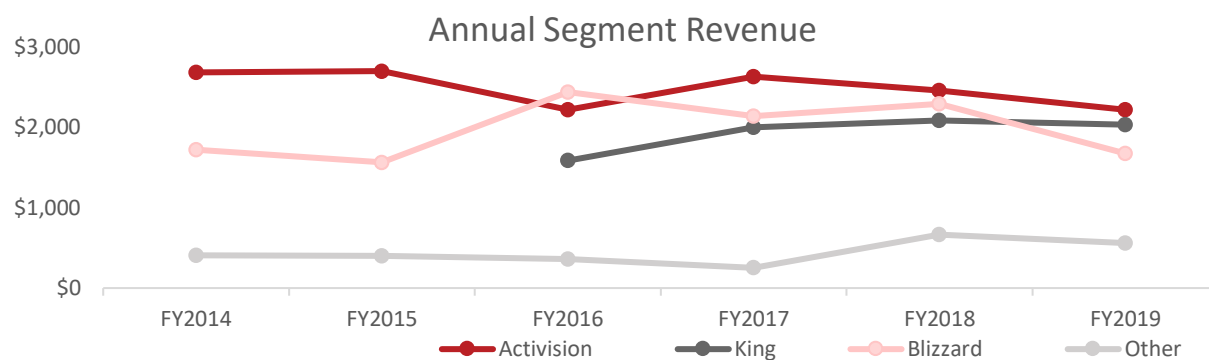
Conclusion

Recommend BUY

The recent coronavirus market sell-off in combination with strong future growth prospects and potential margin expansion make Activision Blizzard, Inc. a buy with a target valuation of \$69.23 and an implied return of 27.9%. The company is the industry leader of the video game publishing industry and is in a strong position to capitalize on future industry growth by leveraging its strong brands and position within the industry while still expanding its presence in newer markets.

Appendix 1

2019 Annual Segment Revenue



2019 Annual Segment Revenue Growth

Segment Revenue Growth						
Segment	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Blizzard	1,720.0	1,565.0	2,439.0	2,139.0	2,291.0	1,676.0
% growth		(9.0%)	55.8%	(12.3%)	7.1%	(26.8%)
Activision	2,686.0	2,700.0	2,220.0	2,628.0	2,458.0	2,219.0
% growth		0.5%	(17.8%)	18.4%	(6.5%)	(9.7%)
King			1,586.0	1,998.0	2,086.0	2,031.0
% growth				26.0%	4.4%	(2.6%)
Other	407.0	399.0	363.0	252.0	665.0	563.0
Total Revenue	4,813.0	4,663.9	6,608.4	7,017.3	7,500.1	6,488.6
% growth	-	(3.1%)	41.7%	6.2%	6.9%	(13.5%)

Appendix 2

Video Game Industry Financials

Industry Financials				
Year	Total Video Game		Video Game Publishing	
	Revenue	% growth	Revenue	% growth
2010A			11,570.9	
2011A	37,733.9		12,068.3	4.3%
2012A	31,070.1	(17.7%)	12,651.6	4.8%
2013A	31,651.5	1.9%	13,363.5	5.6%
2014A	32,333.5	2.2%	15,579.8	16.6%
2015A	33,547.4	3.8%	18,303.1	17.5%
2016A	42,927.9	28.0%	19,465.9	6.4%
2017A	49,887.7	16.2%	21,991.5	13.0%
2018A	58,791.2	17.8%	23,115.1	5.1%
2019A	63,447.5	7.9%	24,229.2	4.8%
2020P	67,954.3	7.1%	25,247.7	4.2%
2021P	71,829.8	5.7%	26,252.9	4.0%
2022P	75,518.8	5.1%	27,215.4	3.7%
2023P	79,136.3	4.8%	28,137.8	3.4%
2024P	82,849.8	4.7%	29,016.4	3.1%
2025P	86,401.3	4.3%		

Activision Monthly Average User (MAUs) Data

Monthly Active Users (MAUs)						
	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19
Activision	46.0	53.0	41.0	37.0	36.0	128.0
% growth	-	15.2%	(22.6%)	(9.8%)	(2.7%)	255.6%
Blizzard	37.0	35.0	32.0	32.0	33.0	32.0
King	262.0	268.0	272.0	258.0	247.0	249.0
Total	345.0	356.0	345.0	327.0	316.0	409.0
% growth	-	3.2%	(3.1%)	(5.2%)	(3.4%)	29.4%

Quarterly Average Revenue per User						
	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19
Activision	\$8.6	\$26.6	\$7.7	\$7.2	\$5.8	\$11.1
% growth	-	208.5%	(71.0%)	(6.3%)	(19.8%)	91.9%
Blizzard	17.2	19.6	10.8	12.0	11.9	18.6
% growth	-	14.2%	(45.2%)	11.6%	(0.5%)	55.7%
King	1.9	2.0	1.9	1.9	2.0	2.0
% growth	-	4.9%	(4.0%)	(0.6%)	4.7%	(0.2%)
Total	27.7	48.2	20.4	21.2	19.8	31.8
% growth	-	74.0%	(57.7%)	3.7%	(6.6%)	60.6%

Appendix 3 – Intrinsic Valuation

Free Cash Flow Build Up									
Fiscal Year	2020P	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P
Fiscal Year End Date	12/30/20	12/30/21	12/30/22	12/30/23	12/29/24	12/31/25	12/31/26	12/31/27	12/31/28
Revenue	6,734.4	7,349.2	7,944.9	8,441.8	8,971.7	9,510.0	9,985.5	10,385.0	10,696.5
% growth	3.8%	9.1%	8.1%	6.3%	6.3%	6.0%	5.0%	4.0%	3.0%
EBITDA	2,307.2	2,728.0	2,988.9	3,175.8	3,375.2	3,676.6	3,860.4	4,014.8	4,135.3
% growth	1.1%	18.2%	9.6%	6.3%	6.3%	8.9%	5.0%	4.0%	3.0%
Depreciation and Amortization	132.0	144.0	155.7	165.5	175.8	186.4	195.7	203.5	209.7
Stock Based Compensation	188.6	195.5	211.3	224.6	238.6	256.8	269.6	280.4	288.8
EBIT	1,986.6	2,388.5	2,621.8	2,785.8	2,960.7	3,233.4	3,395.1	3,530.9	3,636.8
% growth	23.6%	20.2%	9.8%	6.3%	6.3%	9.2%	5.0%	4.0%	3.0%
% margin	29.5%	32.5%	33.0%	33.0%	33.0%	34.0%	34.0%	34.0%	34.0%
Taxes	417.2	501.6	550.6	585.0	621.7	679.0	713.0	741.5	763.7
Tax rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
NOPAT	1,569.4	1,886.9	2,071.2	2,200.8	2,338.9	2,554.4	2,682.1	2,789.4	2,873.1
% growth	6.1%	20.2%	9.8%	6.3%	6.3%	9.2%	5.0%	4.0%	3.0%
(+) Depreciation and Amortization	132.0	144.0	155.7	165.5	175.8	186.4	195.7	203.5	209.7
% capex	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%
(+) Stock Based Compensation	188.6	195.5	211.3	224.6	238.6	256.8	269.6	280.4	288.8
% sales	2.8%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
(-) Change in NWC	430.2	50.3	(1.9)	22.0	(61.3)	47.6	49.9	51.9	53.5
% sales	6.4%	0.7%	(0.0%)	0.3%	(0.7%)	0.5%	0.5%	0.5%	0.5%
(-) Capex	134.7	147.0	158.9	168.8	179.4	190.2	199.7	207.7	213.9
% sales	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Unlevered Free Cash Flow	1,325.1	2,029.1	2,281.3	2,400.0	2,635.3	2,759.8	2,897.8	3,013.7	3,104.1
% growth	(51.6%)	53.1%	12.4%	5.2%	9.8%	4.7%	5.0%	4.0%	3.0%
Discount period	0.38	1.27	2.27	3.27	4.26	5.27	6.27	7.27	8.27
Discount factor	0.97	0.91	0.85	0.79	0.73	0.68	0.63	0.59	0.55
Present Value of Unlevered Free Cash Flows	1,288.8	1,851.2	1,935.7	1,894.1	1,934.8	1,883.8	1,839.8	1,779.6	1,704.9

Perpetuity Approach Terminal Value		Value per share		Perpetuity	Exit Multiple
Cumulative PV of FCF	16,112.7	Enterprise Value		54,919.3	53,290.9
Perpetual Growth Rate	3.00%	Equity Value		58,038.3	56,409.9
2029 Estimated FCF	3,190.6	Diluted SO		780.8	780.8
Terminal Value	70,657.5	Equity Value per share		\$74.3	\$72.2
Present Value of Terminal Value	38,806.6	Fair value premium/(discount) to market		36.6%	32.7%
% of Enterprise Value	70.7%				
Implied Exit Multiple	17.7x				
Enterprise Value	54,919.3				

Exit Multiple Approach Terminal Value		Exit Multiple Sensitivity Analysis				
Cumulative PV of FCF	16,112.7	Exit Multiple				
Exit EBITDA Multiple	17.0x		15.0x	16.0x	17.0x	18.0x
2021 Estimated EBITDA	4,128.9	7.00%	\$68.72	\$71.63	\$74.55	\$77.46
Terminal Value	70,190.5	7.25%	67.62	70.47	73.33	76.18
Present Value of Terminal Value	37,178.3	7.50%	66.54	69.34	72.14	74.94
% of Enterprise Value	69.8%	7.75%	65.49	68.23	70.97	73.71
Implied Perpetuity Growth Rate	2.81%	8.00%	64.46	67.15	69.83	72.52
Enterprise Value	53,290.9					

Weighted Average Cost of Capital		Perpetuity Growth Sensitivity Analysis				
Cost of debt	2.0%	Perpetual Growth Rate				
Marginal tax rate	21.0%		2.80%	2.90%	3.00%	3.10%
After-tax cost of debt	1.6%					3.20%
Risk-free rate	0.84%	7.00%	\$80.36	\$81.77	\$83.24	\$84.79
Beta	1.04	7.25%	76.04	77.27	78.55	79.90
Market risk premium	6.0%	7.50%	72.18	73.26	74.39	75.57
Cost of equity	7.1%	7.75%	68.71	69.67	70.66	71.71
		8.00%	65.57	66.42	67.31	68.23
Market value of equity	Amount					
Net debt	% of Total					
	107.9%					
	(7.9%)					
Weighted Average Cost of Capital	7.52%					

Appendix 4

Relative valuation

Activision Blizzard, Inc. Comparable Company Valuation

Data as of close 3/24/2020

(\$ in millions, except per share data)

Company Info				Share Price Data	Enterprise Value Data	
Company	Ticker	Market Cap	Enterprise Value	Trailing P/E	EV/Revenue	EV/EBITDA
Microsoft Corporation	MSFT	1,138,625.2	1,091,541.2	26.1x	8.1x	17.3x
Nintendo Co., Ltd.	7974	44,535.5	34,439.8	21.8x	3.0x	12.0x
Electronic Arts Inc.	EA	27,626.2	23,262.2	10.0x	4.3x	15.6x
Take-Two Interactive Software, Inc.	TTWO	11,991.6	10,183.0	37.8x	3.6x	22.4x
Ubisoft Entertainment SE	UBI	8,745.3	9,230.9	-	4.7x	-
Low		\$8,745.3	\$9,230.9	10.0x	3.0x	12.0x
25th Percentile		9,556.9	9,468.9	13.0x	3.3x	12.9x
Median		19,808.9	16,722.6	24.0x	4.3x	16.5x
Average		23,224.7	19,279.0	23.9x	4.7x	16.8x
75th Percentile		40,308.2	31,645.4	34.9x	6.4x	21.1x
High		44,535.5	34,439.8	37.8x	8.1x	22.4x
Activision Blizzard, Inc.	ATVI	\$42,496.9	\$39,377.9	27.9x	6.1x	17.3x

Activision Blizzard, Inc. Implied Share Price

	Trailing P/E	EV/Revenue	EV/EBITDA
Low	\$19.49	\$28.93	\$39.07
25th Percentile	\$25.24	\$31.42	\$41.70
Median	\$46.69	\$39.73	\$52.07
Average	\$46.64	\$43.39	\$53.17
75th Percentile	\$67.99	\$57.19	\$65.74
High	\$73.69	\$71.31	\$69.47

Appendix 5

Projected Balance Sheet

Balance Sheet								
Fiscal Year	2017A	2018A	2019A	2020P	2021P	2022P	2023P	2024P
Fiscal Year End Date	12/31/17	12/31/18	12/31/19	12/30/20	12/30/21	12/30/22	12/30/23	12/29/24
Cash and cash equivalents	4,713.0	4,225.0	5,794.0	7,229.2	8,677.0	10,329.2	12,062.9	13,996.3
Accounts receivable	918.0	1,035.0	848.0	875.5	955.4	1,032.8	1,097.4	1,166.3
Inventories, net	46.0	43.0	32.0	30.8	32.5	34.6	36.7	39.0
Other current assets	476.0	539.0	296.0	404.1	441.0	476.7	506.5	538.3
Total Current Assets	6,153.0	5,842.0	6,970.0	8,539.6	10,105.9	11,873.3	13,703.6	15,739.9
Cash in escrow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Software development	453.0	329.0	376.0	699.3	1,005.0	1,335.5	1,686.7	2,059.9
Property and equipment, net	294.0	282.0	253.0	255.7	258.6	261.8	265.2	268.8
Deferred income taxes, net	459.0	403.0	1,293.0	404.1	441.0	476.7	506.5	538.3
Other assets	440.0	482.0	658.0	437.7	477.7	516.4	548.7	583.2
Intangible assets, net	1,106.0	735.0	531.0	531.0	531.0	531.0	531.0	531.0
Goodwill	9,763.0	9,762.0	9,764.0	9,764.0	9,764.0	9,764.0	9,764.0	9,764.0
Total Assets	18,668.0	17,835.0	19,845.0	20,631.3	22,583.1	24,758.7	27,005.7	29,485.1
Accounts payable	323.0	253.0	292.0	262.1	262.1	262.1	262.1	262.1
Deferred revenues	1,929.0	1,493.0	1,375.0	1,346.9	1,396.3	1,509.5	1,603.9	1,704.6
Accrued expenses and other liabilities	1,411.0	896.0	1,248.0	1,010.2	1,028.9	1,032.8	1,013.0	1,076.6
Total Current Liabilities	3,663.0	2,642.0	2,915.0	2,619.2	2,687.4	2,804.5	2,879.1	3,043.4
Long-term debt, net	4,390.0	2,671.0	2,675.0	2,675.0	2,675.0	2,675.0	2,675.0	2,675.0
Deferred income taxes, net	21.0	18.0	505.0	13.5	14.7	15.9	16.9	17.9
Other liabilities	1,132.0	1,147.0	945.0	1,010.2	1,102.4	1,191.7	1,266.3	1,345.8
Revolver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Liabilities	9,206.0	6,478.0	7,040.0	6,317.8	6,479.4	6,687.1	6,837.3	7,082.1
Common stock / Additional paid-in capital	10,747.0	10,963.0	11,174.0	11,362.56	11,558.05	11,769.39	11,993.94	12,232.59
Treasury stock	(5,563.0)	(5,563.0)	(5,563.0)	(5,563.0)	(5,563.0)	(5,563.0)	(5,563.0)	(5,563.0)
Retained earnings	4,916.0	6,558.0	7,813.0	9,133.0	10,727.6	12,484.1	14,356.5	16,352.4
Accumulated other comprehensive loss	(638.0)	(601.0)	(619.0)	(619.0)	(619.0)	(619.0)	(619.0)	(619.0)
Total stockholders' equity	9,462.0	11,357.0	12,805.0	14,313.5	16,103.7	18,071.5	20,168.4	22,403.0
<i>Balance Check</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<u>Ratios</u>								
Net debt	(323.0)	(1,554.0)	(3,119.0)	(4,554.2)	(6,002.0)	(7,654.2)	(9,387.9)	(11,321.3)
Asset turnover (Revenue / Total assets)	0.4x	0.4x	0.3x	0.3x	0.3x	0.3x	0.3x	0.3x
Return on assets (ROA)	1.5%	10.4%	7.6%	7.5%	8.3%	8.3%	8.2%	8.0%
Return on book equity (ROE)	2.9%	16.3%	11.7%	10.8%	11.6%	11.4%	10.9%	10.5%
Return on invested capital (ROIC)	2.2%	14.0%	9.6%	9.2%	10.0%	10.0%	9.6%	9.3%

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