

**U.S. Equity Research** 

June 9, 2016

## Technology Research Internet & Interactive Entertainment

**Industry Commentary** 

# Mizuho's 2016 E3 Guide for Gamers & Investors

# Key Investor Questions for the Big Four Publishers

# Summary

Next week we will be joining the gaming world at E3 in Los Angeles. While some have claimed that this E3 will probably be uneventful, we believe that the focus will be around the quality of games, new IP, and new platforms like VR and eSports. In this report, we highlight the key questions that investors should focus on when meeting with the management teams of the big 4 publishers. Our top video game stock is EA given clear catalysts expected from a robust title slate this year.

#### **Key Points**

What to expect and not expect at E3: This E3 would be a lot more exciting if Nintendo would showcase its upcoming NX system, but alas Nintendo said that it would not be displaying the new console at E3. We'd also be thrilled to get more details on a potential mid-cycle console refresh, but given that we are less than three years into the current cycle, it might be too early for that. But, we do plan on seeing more games for VR platforms, we expect to potentially get new details around Nintendo's NX system (but no demo), and we are anticipating some really great game demos like *CoD*, *Battlefield 1*, *Titanfall 2*, *Ghost Recon: Wildlands*, *Mafia* and hopefully a demo of *Red Dead Redemption*.

**Key Questions For ATVI:** 1) How is *Overwatch* doing relative to expectations? 2) Any Concerns About *Call of Duty: Infinite Warfare*? How should we think about synergies with King? 3) *CoD China* update? 4) How is the WoW Beta going and what are expectations for *Legion*? 5) Update on Studios and eSports?

**Key Questions for EA:** 1) Is \$1B in incremental rev and \$1B Op. Inc. achievable by 2021? 2) How high can operating margins go? 3) How should we think about FCF and use of cash? 4) What is the digital revenue opportunity? 5) When can we see new IP? 6) What is the revenue opportunity for EA in eSports?

**Key Questions for TTWO:** 1) Is the non-GAAP EPS guide For FY2017 conservative? 2) Expectations for Mafia III? 3) Looking ahead to FY2018 – will we see Red Dead? 4) What to do with Cash? 5) Can we get mid-term margin profile targets? 6) How should we think about Digital Revenue Growth? 7) Can GTA Online still grow?

		Price	R	ating	
Company	Symbol	(6/09)	Prior	Curr	PT
Activision Blizzard Inc	ATVI	\$38.54	-	Buy	\$42.00
Electronic Arts Inc.	EA	\$76.25	-	Buy	\$84.00
Take-Two Interactive Software, Inc.	TTWO	\$39.58	-	Buy	\$40.00
Ubisoft Entertainment SA	UBI FP	€33.30	-	Neutral	€28.00

Source: Bloomberg and Mizuho Securities USA

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#### Mizuho's 2016 E3 Guide

Gamers, geeks, industry participants, investors and analysts alike will converge in Los Angeles next week, for the biggest U.S. video game conference, the E3 Expo. We will be attending E3 next week, from June 13-June 17, and have a solid line up of meetings with U.S. and Japanese video game publisher and hardware companies.

In this report, we highlight the key questions that we'd like to ask U.S. based gaming companies, including EA, ATVI, TTWO, UBI (okay, not really U.S. based), and Microsoft.

While we have Buys on EA, ATVI and TTWO, we believe that EA has the most potential near-term catalysts this year. Aside from a strong sports line-up, *Battlefield 1* and *Titanfall 2* have the potential to each sell well over 10 million units, and we think the two games alone can sell approximately 22-24 million units. ATVI has *Overwatch* and *CoD* catalysts, but also King synergies can drive EPS upside.

TakeTwo has a somewhat light release slate this year, but we and everyone else will be expecting Rockstar to announce and preview Red Dead Redemption and possibly a standalone DLC for GTA V.

Ubisoft had a solid year last year, and the title slate looks impressive for this year. But we think investors are more focused on Vivendi, which could possibly make a play for UBI.

#### Exhibit 1: Mizuho 2016 E3 Agenda

# Tuesday, June 14<sup>th</sup> 09:15AM – 10:15AM Sony (6758 JP, SNE) Mr. Justin Hill, Sr. VP, Global Investor Relations 10:50AM – 11:30AM Activision Blizzard (ATVI) Mr. Dennis Durkin, CFO 12:00PM – 12:50PM Microsoft (MSFT) Mr. Tim Stuart, Sr. Finance Director of Xbox Division 01:00PM – 01:50PM Square Enix (9684 JP) Mr. Yoichi Matsuda, CEO 02:00PM – 03:00PM Mizuho Analyst-Hosted Lunch (JW Marriot LA Live, Salon 10) 03:30PM – 04:30PM Capcom (9697 JP) Mr. Shin Kurosawa, IR Manager

#### Wednesday, June 15th

Wednesday, cane	<u> </u>
10:15AM - 11:00AM	Electronic Arts (EA) Mr. Blake Jorgensen, CFO
12:00PM - 12:45PM	Take-Two Interactive Software (TTWO) Ms. Lainie Goldstein, CFO; Mr. Karl Slatoff, President
03:00PM - 04:00PM	Nintendo (7974) Mr. Kenichi Sugimoto, General Manager of IR
05:30PM - 08:00PM	Mizuho-Hosted Dinner with SuperData Research: "Next Gen Gaming Trends for the Future"
	Mr. Joost Van Dreunen, Ph.D, Founder and CEO.
	Cocktails from 5:30-6:30, followed by dinner and presentation by SuperData Research

Source: MSUSA, SurveyMonkey, N=807 (June 2016)



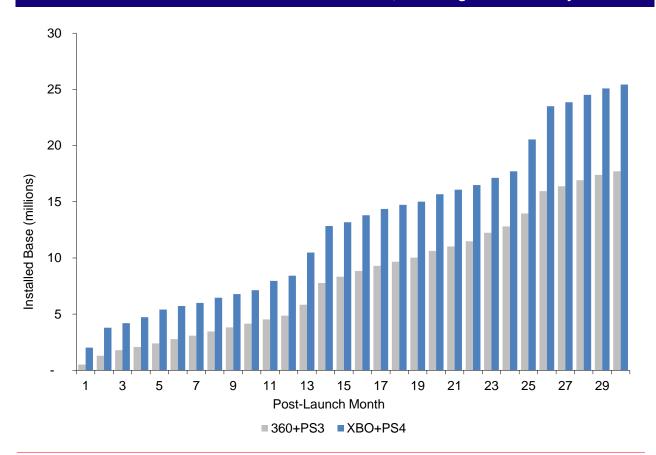
# **Key Market-Related Key Questions**

#### Hardware Installed Base – How Much Can it Grow?

As of April, hardware sales of the PS4 and Xbox One have reached  $\sim 25.5 \mathrm{m}$  units in the U.S. and continue to outpace hardware sales from their predecessor units by 44% according to NPD Data. We believe that figure was closer to 55m units on a global basis at the end of 2015 and expect it to climb another 25m units to 80m units by the end of 2016. This would represent a 45% larger install base in which to sell software into – a strong tailwind for the publishers in our coverage universe.

But the big question will be, how much longer will this last, and what could be the impact to the publishers if sales starts declining on a YoY or MoM basis?

Exhibit 2: U.S. PS4 and XB1 HW Install Base - 25.5m; +44% Higher vs. Prior Cycle



Source: NPD Data (through April 2016) and MSUSA



#### How Material is the VR Opportunity Now?

Estimates vary widely, but many of the global forecasts we've seen have VR software sales growing from ~\$0.5 billion in 2016 to north of \$20 billion by 2020. That implies sales of VR video games in the next four and a half years will be 20% higher than the *entire* console software market last year (\$16.5 billion according to the Entertainment Software Association). We are skeptical that will occur and believe VR software sales will be closer to a fraction of those levels in 2020. In our view, it will take a few years before we know which VR devices truly emerge as true gaming platforms with material installed bases and the major publishers are likely to hold off on greenlighting a core VR title until then. Given it takes 2+ years to develop a Triple-A title, we believe it will be at least 2020 before we see a compelling core VR title from a 3<sup>rd</sup> party publisher at the earliest.

Several years ago, there was a lot of discussion around 3D gaming and how 3D would revolutionize the video game industry. How many 3D games do you currently play? Probably zero. Is VR the next 3D? Or is it here to stay? Given how large platform companies like Facebook, Google, and Apple are investing in VR, we think it is here to stay and can be much bigger than just gaming.

## Impact of Amazon Prime Discount?

Earlier this year in January, we saw Amazon offering Prime subscribers a 20% discount on new video games and that promotion is still in effect. In our view, the promotion is an effective way to attract younger shoppers into the Prime ecosystem. However, this promotion is only valid on physical disks which we believe may hinder the adoption curve of digital full-game downloads for video game publishers. Amazon seems to be a leading place where people buy video games (per our video game survey), so this could be a real concern for the publishers.



# **ATVI Key Questions**

We will be meeting with CFO Dennis Durkin during E3.

Key titles for this year - Call Of Duty: Infinite Warfare, Skylanders Imaginators, Destiny: Rise Of Iron

#### 1) How is Overwatch Doing Relative to Expectations?

The new Blizzard game has garnered more than 7m players in its first 10 days since launching on May 24. However, players do not equal units - we believe actual sell-through units of the game are below 7m because of two key reasons: (i) Korea Internet game rooms where players don't purchase the game, but pay for it on a time-based model; and (ii) console disc sharing. That said, with the rest of June to go, along with high Metacritic scores of 90 and above, we believe sales of *Overwatch* can exceed our initial 2Q16/FY16 sales expectations of 7m/10m units.

We believe that every incremental 1m copies of the game sold could generate at least ~\$45m in non-GAAP revenue and \$0.03 in non-GAAP EPS (after assuming gross margins of 70% and a tax rate of 24%). We expect *Overwatch* to be a high-margin game given that it's internally-developed IP and is weighted more towards PC than the typical console game from Activision Blizzard.

Also incremental to *Overwatch* could be multiple digital revenue streams. In addition to full-game digital download availability of the game, we believe *Overwatch* can generate significant digital sales from in-game microtransactions and upcoming DLC. Players have the option of purchasing "Loot Boxes" in the game to customize their characters - 2 for \$1.99, 5 for \$4.99, 11 for \$9.99, 24 for \$19.99, and 50 for \$39.99.

What's next? We will keep a close eye on continued sales of *Overwatch*, but we are encouraged by strong initial engagement in the game averaging 17 hours per player in less than 10 full days since launch. We also want to get more color on the company's plans to release new content for the game.

## 2) Any Concerns About Call of Duty: Infinite Warfare?

On one hand, the official reveal trailer for *Call of Duty: Infinite Warfare* has been viewed 27 million times since it was released a month ago on YouTube, but on the other hand, the same trailer has prompted only 445,000 likes and more than 2.8m million dislikes (a record second on YouTube only to a Justin Bieber music video from 2010). In sharp contrast, EA's *Battlefield 1* official trailer has been viewed nearly 38 million times over the same period with 1.8m likes and just 33,000 dislikes. Despite this initial negative feedback, which we attribute to sci-fi fatigue for the series in recent years, we believe the game will ultimately be the best selling title in 2016 and we see continued growth potential in the franchise. And based on our

proprietary gaming survey, *CoD* is still the most highly anticipated game of the year. Finally, *Call of Duty* hit record MAUs in 1Q, exceeding the Dec launch quarter while Season Pass attach rates hit all-time highs with # of players purchasing in-game more than doubling alongside stable ARPU levels. Black Ops III was sold with ~85% of all PS4s sold in NA during Q1.

We expect the company to release another game trailer that will do a better job of promoting the upcoming game from Infinity Ward and we think sales of the title will also be boosted by a special edition version with a remastered copy of 2007's Call of Duty: Modern Warfare (one of best-rated first-person shooters of all time; Metacritic score: 94).

#### 3) Synergies with King?

We continue to believe King will accelerate Activision Blizzard's presence in the mobile gaming category with its mobile assets and over 460m MAUs. King managed to post QoQ growth in 1Q16, boosted by Candy Crush Jelly Saga, and we expect to see more of Activision Blizzard's library of content make their way to mobile next year. We also see a vast opportunity for the company to monetize the ~98% of King's player base that do not currently generate revenue (from in-game micro-transactions) through advertising. In our view, King's player base is one of the largest untapped audiences for advertisers in the world. However, in the short-term, we believe Activision Blizzard can capture more cost synergies from the King acquisition, particularly with sales and marketing.

# 4) CoD China? Why no new Update?

The company first announced it was working with Tencent to bring a free-to-play (FTP) version of *Call of Duty* to China in 2011 and *Call of Duty Online* finally entered public beta testing in China in January 2015. Early expectations were high for CoD Online considering China's largest online, first-person shooter game was CrossFire, an eight-year old game from Korean developer Smilegate Games that generated roughly \$1 billion dollars a year. We have not heard or seen much regarding *Call of Duty Online* from Activision, Tencent, or industry news sources, so we believe the game has not ramped up well and is unlikely to generate meaningful revenue at this point. What can Activision do to drive more engagement and extract more revenue from this property?

# 5) How is the WoW Beta Going and What are Expectations for Legion?

Scheduled to be released on August 30, 2016, *World of Warcraft: Legion* is currently undergoing beta testing. In our view, the delay of the Pre-Legion Event Test (from June 2) due to technical difficulties does not appear to be a significant issue given that specific test will only last 24 hours. We would like to hear more about how participation in the beta is trending and the company's expectations for the expansion pack. Also, why Blizzard is not



launching the game to coincide with the movie launch in order to take advantage of a marketing halo effect from the movie? Although we expect *Legions* to provide a heavily needed boost to WoW subscriber levels, we believe the best player count the series can reach will be in the high single-digit million count. The company stopped reporting WoW subscribers as of 4Q15 (5.5m, down from 10.0m subscribers in 4Q15 when *Warlords of Draenor* launched). Why not make WoW a free-to-play property and monetize through in-game transactions?

#### 6) Update on Studios and eSports?

Nick Van Dyk last discussed Activision Blizzard Studios, the new group that will produce TV, film and short form content based on the company's IP at the company's Investor Day in November 2015. We know the group is developing a cartoon series called Skylanders Academy set to debut in late 2016, and they are also planning to develop a movie based on Call of Duty which could be released in 2018 or 2019. We expect Activision Blizzard Studios to take a measured approach to projects and testing/iterating as they go along.

In our view, Activision Blizzard has the most aggressive plan among the key publishers in aiming to be the ESPN of eSports and recruited some outside big guns to lead this effort. Former CEO of ESPN and the NFL Network Steve Bornstein is the division's Chairman and Mike Sepso, who was a cofounder and President of Major League Gaming (MLG), serves as its Senior Vice President. Many of ATVI's games are well suited for eSports, including Call of Duty, Destiny, Starcraft, Heroes of the Storm, Hearthstone, and now Overwatch. We expect eSports to improve the awareness of these properties as the company positions itself to bring in additional revenue streams in the future. In our view, Activision Blizzard could leverage advertising and sponsorships as a way to monetize eSports. But we want to know what the company is doing to build the leagues and codify its place as the NFL or NBA of eSports? We think Activision has the content but now must also build the "infrastructure" and hierarchy to own the process.

What progress has Activision Blizzard made to date in building out its eSports division and what's the roadmap the company envisions over the next several years? What areas does the company plan to invest in most as part of this initiative?



## **EA Key Questions**

We plan on meeting with CFO Blake Jorgensen at E3.

Key titles for this year include - *Battlefield 1, Titanfall 2, Mass Effect Andromeda, EA Sports* titles, and possibly a new action-adventure *Star Wars* title from Visceral Games.

# 1) Is \$1B Incremental Revenue and \$1B Operating Income Achievable By 2021?

EA believes it can achieve \$5.9b in revenue sometime around FY21 from its current guide of \$4.9b for FY17 – a 5-year CAGR of <4%, which we believe is conservative considering the strength of the company's digital growth, new titles, expansion into Asia and other opportunities like competitive gaming. For context, EA's revenue has grown between 5%-7% over the past three years.

Action-Adventure represents a major growth opportunity for EA as the company only has ~1% market share in this \$3b+ genre. We have high conviction that the company will be able boost its share under the leadership of Jade Raymond and Amy Hennig. We expect the first of these new titles (Visceral Games' new Star Wars property) to be unveiled at E3, with new original IP from Motive Studios to come in FY20 or FY21. We estimate that a blockbuster action-adventure game can generate \$300-\$500m in revenue for EA.

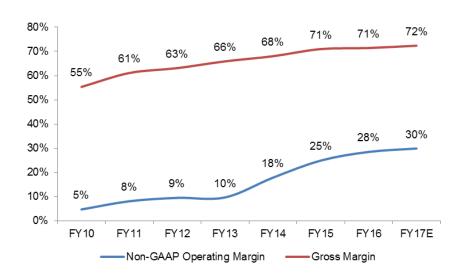
Free cash flow of \$1b seems achievable, but implies significant margin expansion. This assumes: 1) the company can continue to expand gross margins from ~69% to the mid-70% range (possible on increased full game downloads and extra content revenue); 2) strong opex control at 40% of revenue; and 3) annual capital expenditures of ~\$100m. We think this is all achievable, and there could be upside if full game downloads exceed 50% of total units sold.

## 2) How High Can Operating Margins Go?

In FY2010, EA's gross margins were 55% and operating margins were 5%. Fast forward to today and the company just ended FY2016 hitting 71% in gross margins and 28% in operating margin. This impressive performance has been driven by growing digital sales combined with strong cost control. We believe the company can continue to expand gross margins by roughly 100 bps annually over the mid-term driven by greater digital revenue. We could see upside if EA's revenue mix shifts more toward original-owned IP. That said, we believe operating leverage will begin to moderate now that the company has reached its targeted R&D levels of 21% to 22%, marketing levels of 12% to 13%, and G&A in the 7% to 8% range.

Given EA's strong bench of licensed IP (particularly its EA Sports titles), lower PC presence (PC sales don't require a platform royalty), and no material subscription revenue (like Blizzard's World of Warcraft), we generally expect EA's operating margins to trail behind ATVI's, which have yet to exceed 34%.

Exhibit 1: EA - Continued Gross and Operating Margin Expansion



Source: Company reports and MSUSA estimates

# 3) Strong Cash Balance, Strong FCF – Where Will It Go?

EA has been able to grow its free cash flow dramatically over the past several years, exceeding the \$1 billion mark this past fiscal year. The company returned over \$1 billion through stock repurchases this past year and has about \$540 million left in the current authorization. The company has already redeemed \$470 million of its \$630 million in convertible notes with another \$30 million or so to settle in the current quarter. With capital expenditures hovering around \$100 million over the past four years and expected to be ~\$110 million this year, we continue to expect low capital requirements for the business.

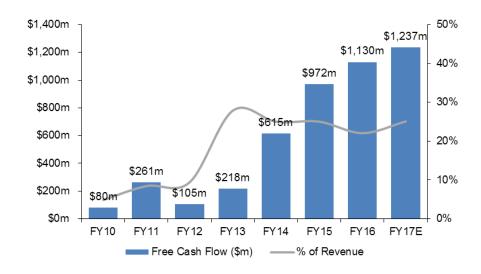
With a healthy balance sheet of \$3.8 billion (\$2.7 billion in net cash), strong operating cash flow (we estimate over \$1.3 billion in the current fiscal year), and low CapEx requirements, we expect the company to continue buying back stock and possibly announcing dividend payments for the first time within the next year.

It is conceivable that EA could be interested in M&A to secure more compelling original IP or expand its presence in mobile gaming. That said,



we believe the current management team is much more prudent on valuation that than that of years past.

#### Exhibit 3: EA – Rising Free Cash Flow



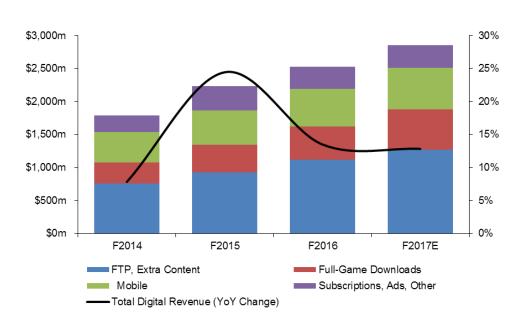
Source: Company reports and MSUSA estimates

#### 4) What is the Digital Revenue Opportunity?

EA has a significant presence across all three gaming platforms (console, PC, and mobile). In FY2016, the company generated revenue of \$3.1 billion on console, ~\$800 million on PC, and \$600 million on mobile. Digital sales accounted for 55% of that combined total, growing 13% YoY to reach \$2.5 billion. Aside from general digital trends such increasing digital full-game downloads (now approximately 30%) and DLC, strength in FY2016 digital sales came from Ultimate Team, up 18% YoY (26% on constant currency).

We expect digital sales to grow to 58% of the company's total revenue in FY2017, which should drive greater margins and EPS growth. Digital sales connect the company directly with its players and offer more opportunities for operating leverage with sales and marketing – we expect to hear more on this front. We also expect the company to highlight the various growth profiles for each of EA's digital segments – not only across console, PC, and mobile, but also across digital mediums – extra content, full-game downloads, mobile, and subscription/ads/other.





#### Exhibit 4: EA - Steady Digital Growth

Source: Company reports and MSUSA estimates

#### 5) IP Portfolio

With the exception of NBA Live (which we think the company should concede to Take-Two), we believe the company has created deep moats around its annualized sports titles that consistently generate north of a billion dollars each year, while Battlefield remains the #2 first-person shooter (FPS) in the market. Battlefield 1 arrives October 21, 2016 and returns the series to traditional military combat which we believe will differentiate it from Activision's futuristic Call of Duty: Infinite Warfare (November 4, 2016) later this fall.

In our view, the company successfully expanded its portfolio of games with Titanfall, while successfully bringing back Star Wars: Battlefront. That said, both these properties are licensed IP and we would like to see more, higher margin internal IP from the company. We know Jade Raymond (former head of Ubisoft Montreal and executive producer of the early Assassin's Creed games) and Amy Hennig (former creative director of Sony's Uncharted series) are collaborating on Visceral Games' new Star Wars property - not surprisingly an action-adventure game given their experience and success in the genre, one that has been essentially absent from EA's list of successful properties. We believe that title will arrive in FY18 and will likely be unveiled at E3 next week. We also know Motive Studios, the development studio Ms. Raymond founded upon joining EA last year focused on actionadventure games and incubating new, wholly-owned IP, is working on a new

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open-world title centered around an immersive single-player campaign (similar to *Grand Theft Auto* and *Assassin's Creed*), but that doesn't appear to be arriving until FY20 or FY21.

#### 6) eSports

Peter Moore, EA's COO heads up the division, so we know it is a strategic area of growth for the company. Rather than focusing on the headline championships, EA wants to provide the tools and content necessary to building the leagues. There are many more players and potential contestant at the bottom of the pyramid, than at the top.

We believe EA's *Battlefield* and *Titanfall* first-person shooter properties are perfect for competitive gaming and eSports could help drive further engagement and monetization of the company's upcoming releases of *Battlefield 1* and *Titanfall 2* later this year. We expect eSports to improve the awareness of these properties as the company positions itself to bring in additional revenue streams in the future. In our view, EA could leverage advertising and sponsorships as a way to monetize eSports.



# **TTWO Key Questions**

We will be meeting with COO Karl Slatoff and CFO Lainie Goldstein.

Key titles for this year include – *Civilization VI, Mafia III, NBA 2K17, WWE 2K17*, and a slight chance the next *Red Dead* title may be unveiled at E3 or during E3 in general.

#### 1) Is the EPS Guide for FY2017 Extremely Conservative?

We believe many were modeling for Red Dead to land in F2017, but the company confirmed that will not be the case. FY17 high end revenue and EPS guide of \$1,600m/\$1.25 was well below Street expectations of \$1,762/\$1.91. That said, we note the company just finished FY16 beating its initial revenue guide by 11% and EPS by 96%. Even adjusting out \$0.33 in tax benefits, the company still would have beaten its initial EPS guide by 63%. We expect upside to come from digital which should drive margin expansion as well.

FY17 guide also implies a big cushion with marketing expenses. For F17, the company guided to marketing expenses of 18% of revenue (midpoint) or ~\$90m higher than the \$188m the company spent in F16 and ~\$50m more than F15 and F14 (when GTA V launched). We note that an early big launch in FY2018 could result in higher than normal marketing expenses in FY4Q17.

## 2) Expectations for Mafia III?

Mafia III is the marque title for Take-Two this fiscal year (October 7) and we believe the game can match the life-to-date performance of its predecessor in FY3Q17/4Q17 alone. Mafia II has sold in ~7m units since its August 2010 release. What should investors expect from this year's release? How will the game be similar or different from previous Mafia games?

## 3) Looking Ahead to FY2018 – Red Dead?

Take-Two has indicated the company expects "growth" in revenue and EPS for FY2018. Along with comments that Rockstar is "hard at work on some exciting future projects that will be revealed soon," we have increased confidence that the next Red Dead and/or GTA 5 DLC could finally arrive in FY18. The last Red Dead game was released back in 2010 (Red Dead Redemption – May 2010) and has sold-in over 14 million units. Furthermore, we spotted 35 job postings at Rockstar San Diego (the development studio behind the Red Dead series) last year that indicated the studio is gearing up for a major upcoming release. The various job descriptions mentioned the PS4 and Xbox One platforms and numerous descriptions that could be indicative of a Red Dead game – "dynamic



multiplayer...open-world...densely populated worlds...varying terrain types...facial animation," among other things.

#### 4) What to do With All That Cash?

The company has a strong balance sheet of \$1.3 billion in net cash (assuming the convertible debt is already factored into the if-converted share count), representing roughly \$11.50 in net cash per share or ~30% of its market capitalization. In our view, the company will continue to lean towards investing in organic growth, but remains open to opportunistic accretive M&A. Based on the prudent track record of the current management team, we believe management is more interested in expanding the scale of Take-Two's current offerings versus expanding the scope of the company into new areas that it is not really involved in at the moment. Maybe TakeTwo would merge with Ubisoft? Buy Bethesda?

#### 5) Margin Profile

In FY2016, Take-Two generated gross margin of 46% and operating margin of 15%, significantly lower than ATVI and EA. Take-Two's performance has generally been less consistent than its two larger competitors given its outsized historical reliance on the GTA franchise as a profit driver, as well as sporadic releases of key franchise games. However, we believe the peaks and valleys are smoothing out with an expanding portfolio of Triple-A content and continued growth in digital sales. What margin profile can we expect to see over the next several years?

## 6) Digital Revenue Growth? Can GTA Online Still Grow?

The company's digital sales grew 36% in FY2016 to \$835 million, or 54% of total revenue fueled by 38% growth in full game downloads and 33% growth in recurrent consumer spending. However, we expect single digit revenue growth in FY2017 driven by full game downloads to be roughly flat based on the release schedule and moderately lower recurrent consumer spending from *Grand Theft Auto Online* entering its fourth year on the market. Can GTA Online possibly grow in FY2017 with the company's planned content drops for the series?



# **UBI Key Questions (UBI, Neutral, EUR28)**

Ubisoft is not hosting meetings with investors, but it is hosting a mini-Investor day where several members of management will be present. Here are the key questions we hope the company will address.

## 1) What Are Digital Plans For The Division?

We last heard the game had more than 9.5 million registered users with 30% of units sold via digital distribution (not every registered user purchased the game). The game also saw healthy 20% attach rates for its digital Season Pass. We would like to know if the company plans to continue supporting the game with DLC alone or introducing micro-transactions — aside from cosmetic upgrades, we believe the vast majority of players would not be happy with micro-transactions for this game after paying for the core title and season pass.

# 2) FY19 Target Op Margin of 20% Seems Possible, But Too Challenging?

Ubisoft ended FY16 with €1.4b in revenue and non-IFRS operating margin of 12.1%, up from 11.7% last year, and the guide for FY17 implies 13.5% op margins – which requires a significant ramp in margin expansion in FY18 and FY19. Looking at the top line alone, the FY19 target of €2.3b implies roughly a \$1b in incremental revenue in three years' time which is possible, but challenging in our view, particularly as it will be so heavily dependent on several unproven properties such as *For Honor* and *Ghost Recon: Wildlands*.

# 3) What is the Unannounced Title for FY2017?

We expect FY2017 will be driven by five key titles – For Honor, South Park, Ghost Recon: Wildlands, WatchDogs, and a fifth unannounced AAA title. We expect that title to be revealed at the Ubisoft Press Conference next week. We plan on taking a closer, hands-on look at the five upcoming titles during E3 and if we think these new titles can generate significant demand, we could get more positive on the stock.

# 4) What is the Strategy with Vivendi?

Vivendi has increased its stake in Ubisoft to 18% and we believe its recent takeover of Gameloft is indicative of the media conglomerate's plans for the publisher. We would like to hear more about plans to handle Vivendi as it appears to be a major distraction to management and weighing on morale.

#### 5) Lessons Learned with Assassin's Creed?

Ubisoft opted to not release a new *Assassin's Creed* game in 2016. Given each title is on a 2-3 year development cycle, we would like to hear how the company has adjusted the series' titles and the company's overall strategy in bringing back its biggest property in 2017.



# **Microsoft Key Questions (MSFT, Not Rated)**

We are meeting with Tim Stuart, Senior Finance Director of Xbox Division at Microsoft. Here are the key questions we'd like to ask Mr. Stuart.

#### 1) How Does Microsoft Think About This Console Cycle?

We are now 2.5 years into the current console cycle. Does Microsoft believe that we should extend this cycle similar to the last one, which lasted nearly 7 years? Or could we see another entirely new console out by year 5? Are publishers harnessing the full potential of the existing boxes?

# 2) What Would be the Rationale for a Mid-Console Cycle Upgrade?

Could we see a mid-cycle update with a new box with modestly improved specs for around \$400? Would games be backward compatible?

# 3) Given The Strong Uptake in Digital Downloads, Would it Make Sense to Increase Take Rate?

Full game digital downloads are now in the rage of 25-30% of total units sold. This is up from low double digits a few years ago. Given that the market is moving towards this model, could we see Microsoft possibly increase the take-rate on digital transactions that are taking place on the platform?

## 4) Would Microsoft Consider Buying Other Publishers?

Would it make sense for Microsoft to bring more content in-house? Bethesda, TakeTwo, or Ubisoft could all be potential acquisition targets. How does Microsoft think about IP and content acquisition with smaller publishers vs. larger ones?

# 5) How Are People Using the Xbox When Not Gaming?

How are people are using their Xbox when not gaming? Are they watching Netflix? YouTube? Twitch? Are they renting or buying movies or TV shows through the Xbox Live platform? Are people using Bing-activated search on their Xbox/TVs?

# 6) Any Learnings From Selling Consoles In China?

China is now allowing consoles into the market. We'd like to know what Microsoft has learned from this? Can this be a material driver of growth?

# 7) What Is Microsoft's Viewpoint On VR?

We've heard that most major companies are working on a VR solution, including Apple and Google. But we have not heard much from Microsoft. Given that Microsoft and Facebook seem to have a good relationship, is it possible that Oculus could be working to develop a headset that works specifically for the Xbox and compete with the Sony PS VR?



#### 8) When Can We Expect A 100% Cloud-Based Console?

Many thin laptops no longer accept CDs. Why should consoles? Given the uptake of digital, and the low price for storage, why support physical discs? Are broadband issues still a major factor for developing a 100% cloud based console? What are other factors? When would Microsoft expect to see a cloud-based system?

9) What Type Of Integration Could We See Between Cloud Solutions (Like Azure), Consumer Software and Xbox going forward?

# 10) Any Update on Minecraft?

Microsoft bought Mojang, the maker of Minecraft, for \$2.5 billion. How has this game been monetizing? Any color on the revenue break-out between PC, Console and Mobile? Could we see more mobile acquisitions? Given that Microsoft is scaling back its mobile hardware business, how should we think about Xbox and Microsoft's ambitions on Mobile games?



# **Video Game Comps & Valuation**

#### **ATVI Valuation**

Our price target of \$42 is based on a combination of EV/EBTIDA and non-GAAP P/E valuation methodologies. Using EV/EBTIDA, we apply a target multiple of 15x to our 2017 EBITDA estimate of \$2.3 billion to reach an enterprise value of \$34.9 billion. Adjusting for 2016 end of year net debt of \$2.0 billion, we arrive at a market cap of \$32.9 billion, or \$42 per share. Using P/E, we apply a target multiple of 20x our 2017 non-GAAP EPS of \$2.05 to reach a price target of \$41.

Using the average of the three methodologies, we arrive at a target price of \$42.

Exhibit 5: ATVI Valuation	
EV/EBITDA Analysis	
2017E Adj. EBITDA (\$M)	\$2,324
x Target Multiple	15.0x
= Enterprise Value (\$M)	\$34,855
Plus: Cash (YE16E) (\$M)	\$2,304
Minus: Debt (YE16E) (\$M)	\$4,277
= Implied Equity Value (\$M)	\$32,882
/ Shares Outstanding (YE16E) (M)	780
Equity Value per Share	\$42
P/E Analysis	
2017E Non-GAAP EPS	\$2.05
x Target Multiple	20x
Equity Value per Share	\$41
Blended Valuation Estimate Per Share	\$42



#### EA Valuation

Our price target of \$84 is based on a combination of valuation methodologies, including F2017 EV/EBTIDA and F2017 Non-GAAP P/E.

Using EV/EBTIDA, we apply a target multiple of 15x to our F2017 EBITDA estimate of \$1.6 billion to reach an enterprise value of \$23.8 billion. Adjusting for F2016 end of year net cash of \$2.7 billion (we are not assuming further share repurchases), we arrive at a market cap of \$26.5 billion, or \$83 per share. Using P/E, we apply a target multiple of 24x our F2017 Non-GAAP EPS of \$3.52 to reach a price target of \$85. Adjusting for F2016 end of year net cash of \$2.7 billion, results in a more reasonable P/E target multiple of approximately 21.5x excluding net cash of approximately ~\$8.40 per share.

Using the average of the three methodologies, we arrive at a target price of \$84.

Exhibit 6: EA Valuation	
EV/EBITDA Analysis	
F2017E Adj. EBITDA (\$M)	1,589
x Target Multiple	15x
= Enterprise Value (\$M)	23,832
Plus: Net cash (YEF16E) (\$M)	2,682
= Implied Equity Value (\$M)	26,514
/ Shares Outstanding (YEF16E) (M)	319.0
Equity Value per Share	\$83
P/E Analysis	
F2017E Non-GAAP P/E	\$3.52
x Target Multiple	24x
Equity Value per Share	\$85
P/E Analysis, exluding net cash	
F2017E Non-GAAP P/E	\$3.52
x Target Multiple	21.5x
Plus: Net cash (YEF16E) (\$/share)	\$8.41
Equity Value per Share	\$84
Blended Valuation Estimate Per Share	\$84



#### TTWO Valuation

Our price target of \$40 is based on a combination of valuation methodologies – a four-year average of F2014-F2017E EV/EBTIDA and F2014-F2017E Non-GAAP P/E. We believe a 4-year average is sensible given the variance in revenues and earnings between years with *GTA* releases.

Using EV/EBTIDA, we apply a target multiple of 9x to our average F2014-F2017E EBITDA estimate of \$352 million to reach an enterprise value of \$3.2 billion. Adjusting for F2016 end of year net cash of \$1.3 billion (we are assuming the company's convertible debt will be satisfied by equity), we arrive at an equity value of \$4.4 billion, or \$40 per share. Using P/E, we apply a target multiple of 16x our average F2014-F2017E Non-GAAP EPS of \$2.44 to reach a price target of \$39.

Using P/E adjusting for net cash per share, we apply a target multiple of 12x our average F2014-F2017E Non-GAAP EPS of \$2.44, while adjusting for \$11.50 in net cash per share to get to a target valuation of \$41.

Using the average of the two methodologies, we arrive at a target price of \$40.

#### **Exhibit 7: TTWO Valuation**

Blended Valuation Estimate Per Share	\$40
Equity Value per Share	\$41
Plus: Net cash (FYE16E) (\$/share)	\$11.50
x Target Multiple	12x
F2014-F2017E Average Non-GAAP EPS	\$2.44
P/E Analysis, excluding net cash	
Equity Value per Share	\$39
x Target Multiple	16x
F2014-F2017E Average Non-GAAP EPS	\$2.44
P/E Analysis	
Equity Value per Share	\$40
/ Shares Outstanding (YE16E) (M)	110,424
= Implied Equity Value (\$M)	4,439,184
Plus: Net cash (FYE16E) (\$M)	1,269,562
= Enterprise Value (\$M)	3,169,622
x Target Multiple	9x
F2014-F2017E Average Adj. EBITDA (\$M)	352,180
EV/EBITDA Analysis	



#### **UBI** Valuation

Our price target of  $\mbox{\ensuremath{\mathfrak{C}}28}$  is based on a combination of valuation methodologies - F2017E EV/EBTIDA and Non-IFRS P/E.

Using EV/EBTIDA, we apply a target multiple of 12x our F2017E EBITDA estimate of  $\in$ 281 million to reach an enterprise value of  $\in$ 3.4 billion. Adjusting for F2016 end of year net debt of  $\in$ 42 million, we arrive at a market cap of  $\in$ 3.3 billion, or  $\in$ 29 per share. Using P/E, we apply a target multiple of 20x our F2017E Non-IFRS EPS of  $\in$ 1.40 to reach a price target of  $\in$ 28.

Using the average of these methodologies, we arrive at a price target of €28.

Comparable Companies Analysis	
F2017E Adj. EBITDA (€M)	281
x Target Multiple	12x
= Enterprise Value (€M)	3,367
Plus: Net cash (FYE16E) (€M)	(42)
= Implied Equity Value (€M)	3,325
/ Shares Outstanding (FYE16E) (M)	115.2
Equity Value per Share	€29
P/E Analysis	
F2017E Non-GAAP P/E	€1.40
x Target Multiple	20x
Equity Value per Share	€28
Blended Valuation Estimate Per Share	€28



# **Exhibit 9: Video Game Comps**

6/08/16		Last	Price		Market	Ent.	NetCash%	EV/Sa	iles	EBITDA I	Margin	EV/EB	ITDA	P/I	E	PEG
Company Name	Ticker	Price	Target	Rating	Сар	Value	of Mcap	2015A	2016E	2015A	2016E	2015A	2016E	2015A	2016E	2016E
Activision Blizzard	ATVI	\$38.12	\$42	Buy	\$28.6	\$31.6	(10%)	6.8x	5.0x	33.6%	32.0%	20.3x	15.7x	28.7x	21.1x	0.6x
Electronic Arts	EA	\$76.28	\$84	Buy	\$24.3	\$20.5	16%	4.5x	4.2x	31.0%	32.2%	14.5x	12.9x	24.3x	21.7x	1.8x
Take-Two	TTWO	\$39.66	\$40	Buy	\$4.6	\$3.0	34%	1.9x	1.8x	17.1%	15.5%	11.3x	11.5x	20.2x	25.3x	(1.3x)
Ubisoft	UBI	€ 33.10	€28	Neutral	\$3.5	\$3.6	(1%)	2.6x	2.1x	16.4%	16.5%	15.5x	12.7x	29.3x	23.6x	1.0x



# **Exhibit 10: ATVI Model**

ATVI Non-GAAP Income Statement (\$Mexcept share and per-share amounts)	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	2013	2014	2015	2016E	2017
Non-GAAP Net Revenue	\$772	\$658	\$1,170	\$2,213	\$703	\$759	\$1.040	\$2,118	\$908	\$1,400	\$1,478	\$2,504	\$4.341	\$4,813	\$4,620	\$6,290	\$6,8
NOTI-GAAF NET REVEITUE	\$112	\$000	\$1,170	\$2,213	\$103	\$109	\$1,040	<b>Φ2,110</b>	\$300	\$1, <del>4</del> 00	<b>Φ1,470</b>	\$2,304	\$4,341	<b>\$4,013</b>	\$ <del>4</del> ,020	<b>\$6,290</b>	\$0,0
Total Cost of Sales	213	203	487	781	195	189	355	737	257	360	493	849	1,479	1,684	1,476	1,958	2,0
Cost of sales - product costs	130	118	236	544	96	97	202	494	158	203	281	571	1,042	1,028	889	1,213	1,2
Cost of sales - online	58	56	56	61	53	53	55	63	64	112	75	75	204	231	224	326	
Cost of sales - software royalties and amortization	25	18	190	171	44	37	94	167	32	39	131	192	173	404	342	394	
Cost of sales - intellectual property licenses	0	11	5	5	2	2	4	13	3	6	6	10	60	21	21	25	
Gross Profit	559	455	683	1,432	508	570	685	1,381	651	1,040	986	1,655	2,862	3,129	3,144	4,332	4,
Outputing Francisco	240	242	400	540	204	397	424	543	200	500	642	674	4.500	4.000	4.670	2 204	2
Operating Expenses	319 135	<b>342</b> 109	<b>423</b> 126	<b>518</b> 179	304 138	143	<b>434</b> 153	188	<b>399</b> 165	<b>588</b> 238	<b>643</b> 251	208	<b>1,508</b> 552	<b>1,602</b> 549	1,678 622	<b>2,301</b> 862	
Product Development																	
Sales and Marketing	102	139	218 79	245	90	162	187	287	132	252 98	274	326	598	704	726	983	1
General and administrative	82	94	79	94	76	92	94	68	102	98	118	138	358	349	330	456	
Operating Income	240	113	260	914	204	173	251	838	252	452	343	984	1,354	1,527	1,466	2,031	2
nterest and other investment income	(51)	(50)	(51)	(50)	(50)	(50)	(51)	(49)	(52)	(60)	(62)	(62)	(53)	(202)	(200)	(236)	
ncome before taxes	189	63	209	864	154	123	200	789	200	392	281	922	1,301	1,325	1,266	1,795	2
ncome tax expense	48	18	36	166	38	30	42	167	27	90	70	231	301	268	277	418	
Net Income	\$141	\$45	\$173	\$698	\$116	\$93	\$158	\$622	\$173	\$302	\$210	\$692	\$1,000	\$1,057	\$989	\$1,377	\$1
Non-GAAP EPS, Fully Diluted	\$0.19	\$0.06	\$0.23	\$0.94	\$0.16	\$0.13	\$0.21	\$0.83	\$0.23	\$0.40	\$0.27	\$0.89	\$0.94	\$1.42	\$1.33	\$1.80	\$
Diluted Shares Outstanding	745	725	742	741	741	744	747	750	750	755	770	780	1,060	745	746	764	
Adjusted EBITDA	\$257	\$131	\$280	\$936	\$223	\$193	\$275	\$861	\$310	\$397	\$333	\$974	\$1,439	\$1,604	\$1,552	\$2,014	\$2,
YoY Growth																	
Revenue	(4%)	8%	78%	(3%)	(9%)	15%	(11%)	(4%)	29%	84%	42%	18%	(13%)	11%	(4%)	36%	
Operating Expenses	6%	9%	18%	(3%)	(5%)	16%	3%	5%	31%	48%	48%	24%	(7%)	6%	5%	37%	
Adjusted EBITDA	(4%)	(6%)	92%	6%	(13%)	47%	(2%)	(8%)	39%	106%	21%	13%	(20%)	11%	(3%)	30%	
Operating Income	(3%)	(5%)	103%	6%	(15%)	53%	(3%)	(8%)	24%	161%	36%	17%	(20%)	13%	(4%)	39%	
EPS	9%	(21%)	200%	18%	(17%)	101%	(9%)	(12%)	47%	220%	29%	7%	(20%)	50%	(6%)	36%	
Margin Analysis														1.7%	3.0%		
Gross Margin	72.4%	69.1%	58.4%	64.7%	72.3%	75.1%	65.9%	65.2%	71.7%	74.3%	66.7%	66.1%	65.9%	65.0%	68.1%	68.9%	6
Adjusted EBITDA Margin	33.3%	19.9%	23.9%	42.3%	31.7%	25.4%	26.4%	40.7%	34.1%	28.4%	22.5%	38.9%	33.1%	33.3%	33.6%	32.0%	3
Operating Margin	31.1%	17.2%	22.2%	41.3%	29.0%	22.8%	24.1%	39.6%	27.8%	32.3%	23.2%	39.3%	31.2%	31.7%	31.7%	32.3%	
Fax Rate	25.4%	28.6%	17.2%	19.2%	24.7%	24.4%	21.0%	21.2%	13.5%	23.0%	25.0%	25.0%	23.1%	20.2%	21.9%	23.3%	2
Cost Analysis																	
Cost Analysis Cost of sales - product costs	16.8%	17.9%	20.2%	24.6%	13.7%	12.8%	19.4%	23.3%	17.4%	14.5%	19.0%	22.8%	24.0%	21.4%	19.2%	19.3%	
Cost of sales - product costs	7.5%	8.5%	4.8%	24.6%	7.5%	7.0%	5.3%	3.0%	7.0%	8.0%	5.1%	3.0%	4.7%	4.8%	4.8%	5.2%	1
COGS (Prod/Online)	24.4%	26.4%	25.0%	27.3%	21.2%	19.8%	24.7%	26.3%	24.4%	22.5%	24.1%	25.8%	28.7%	26.2%	24.1%	24.5%	2
Cost of sales - software royalties and amortization	3.2%	20.4%	16.2%	7.7%	6.3%	4.9%	9.0%	7.9%	3.5%	2.8%	8.8%	7.7%	4.0%	8.4%	7.4%	6.3%	
•	0.0%	1.7%	0.4%	0.2%	0.3%	0.3%	0.4%	0.6%	0.3%	0.4%	0.4%	0.4%	1.4%	0.4%	0.5%	0.4%	
Cost of sales - intellectual property licenses	0.0%								18.2%	17.0%	17.0%	0.4% 8.3%				13.7%	
	17 F0/	16 69/	10 80/	Ω 10/													
Cost of sales - intellectual property licenses  Product development	17.5%	16.6%	10.8%	8.1%	19.6%	18.8%	14.7%	8.9%					12.7%	11.4%	13.5%		
	17.5% 13.2% 10.6%	16.6% 21.1% 14.3%	10.8% 18.6% 6.8%	8.1% 11.1% 4.2%	19.6% 12.8% 10.8%	18.8% 21.3% 12.1%	14.7% 18.0% 9.0%	8.9% 13.6% 3.2%	14.5% 11.2%	18.0% 7.0%	18.5% 8.0%	13.0% 5.5%	12.7% 13.8% 8.2%	11.4% 14.6% 7.3%	13.5% 15.7% 7.1%	15.6% 7.2%	1



# **Exhibit 11: EA Income Statement**

(FY Ends March 31, \$Ms Except EPS)	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16		Sep-16	Dec-16	Mar-17	F2013	F2014	F2015	F2016	F2017E	F2018E
Total Revenue (Non-GAAP)	Jun-14 \$775	\$1,220	\$1.428	Mar-15 \$896	Jun-15 \$693	\$1,146	\$1.803	Mar-16 \$924	\$650	\$1.085	\$2.153	\$1.042	\$3,793	\$4.021	\$4,319	\$4.566	\$4,930	\$5,145
Costs of Goods Sold	231	\$1,220 414	388	220	161	397	534	213	166	369	\$2,1 <b>33</b> 592	234	1,293	1,285	1,253	1,305	1,361	1,370
Gross Profit	544	806	1.040	676	532	749	1.269	711	484	716	1.561	807	2,500	2.736	3.066	3.261	3,569	3.775
	249	238	1, <b>040</b> 261	264	270		1,269 240	256	270	250						1,006	1,073	
Research and Development						240					291	263	1,081	1,035	1,012			1,086
Marketing and Sales	126	177	163	160	118	149	185	146	127	163	189	165	740	654	626	598	644	651
General and Administrative	84	82	97	89	84	90	86	97	85	91	99	104	312	330	352	357	379	387
Total Operating Expenses	459	497	521	513	472	479	511	499	481	503	579	531	2,133	2,019	1,990	1,961	2,095	2,125
Operating Income	\$85	\$309	\$519	\$163	\$60	\$270	\$758	\$212	\$3	\$213	\$982	\$276	\$367	\$717	\$1,076	\$1,300	\$1,474	\$1,650
Adjusted EBITDA	\$116	\$342	\$551	\$193	\$87	\$300	\$788	\$241	\$32	\$241	\$1,010	\$305	\$485	\$843	\$1,202	\$1,416	\$1,589	\$1,765
Interest and other income (expense), net	(3)	0	(1)	3	3	2	6	(5)	(10)	(10)	(10)	(10)	(1)	(5)	(1)	6	(40)	(40
Income (loss) before provision for (benefit from) income	82	309	518	166	63	272	764	207	(7)	203	972	266	366	712	1,075	1,306	1,434	1,610
Provision for income taxes	21	77	130	41	14	60	168	46	(1)	43	204	56	102	178	269	288	302	338
Net Income	\$61	\$232	\$388	\$125	\$49	\$212	\$596	\$161	(\$6)	\$160	\$768	\$210	\$264	\$534	\$806	\$1,018	\$1,132	\$1,272
EPS (Non-GAAP)	\$0.19	\$0.73	\$1.22	\$0.39	\$0.15	\$0.65	\$1.83	\$0.50	(\$0.02)	\$0.50	\$2.39	\$0.65	\$0.84	\$1.70	\$2.51	\$3.14	\$3.52	\$3.92
Basic shares	313	313	311	310	311	312	311	307	303	304	305	306	310	308	312	310	305	309
Diluted shares	321	319	319	324	325	326	325	319	321	321	322	322	313	314	321	324	321	325
Margin Analysis (Non-GAAP)																		
Gross Margin	70.2%	66.1%	72.8%	75.4%	76.8%	65.4%	70.4%	76.9%	74.5%	66.0%	72.5%	77.5%	65.9%	68.0%	71.0%	71.4%	72.4%	73.49
Research and Development	32.1%	19.5%	18.3%	29.5%	39.0%	20.9%	13.3%	27.7%	41.5%	23.0%	13.5%	25.2%	28.5%	25.7%	23.4%	22.0%	21.8%	21.19
Marketing and Sales	16.3%	14.5%	11.4%	17.9%	17.0%	13.0%		15.8%	19.5%	15.0%	8.8%	15.8%	19.5%	16.3%	14.5%	13.1%	13.1%	12.79
General and Administrative	10.8%	6.7%	6.8%	9.9%	12.1%	7.9%	4.8%	10.5%	13.0%	8.4%	4.6%	10.0%	8.2%	8.2%	8.2%	7.8%	7.7%	7.59
Op Income Margin	11.0%	25.3%	36.3%	18.2%	8.7%	23.6%	42.0%	22.9%	0.5%	19.6%	45.6%	26.5%	9.7%	17.8%	24.9%	28.5%	29.9%	32.19
EBITDA Margin	15.0%	28.0%	38.6%	21.5%	12.5%	26.2%	43.7%	26.1%	4.9%	22.3%	46.9%	29.3%	12.8%	21.0%	27.8%	31.0%	32.2%	34.39
Effective income tax rate	25.6%	24.9%	25.1%	24.7%	22.2%	22.1%	22.0%	22.2%	14.8%	21.2%	21.0%	21.0%	27.9%	25.0%	25.0%	22.1%	21.1%	21.09
Net Income Margin	7.9%	19.0%	27.2%	14.0%	7.1%	18.5%	33.1%	17.4%	(0.9%)	14.7%	35.7%	20.2%	7.0%	13.3%	18.7%	22.3%	23.0%	24.79
Op Income (Non-GAAP) Margin, TTM	22.4%	25.2%	25.8%	24.9%	24.8%	24.3%	27.6%	28.5%	27.5%	26.6%	29.3%	29.9%	9.7%	17.8%	24.9%	28.5%	29.9%	32.19
Growth Rate Y/Y (non-GAAP)																		
Revenue	56.6%	17.3%	(9.2%)	(2.0%)	(10.6%)	(6.1%)	26.3%	3.1%	(6.2%)	(5.3%)	19.4%	12.8%	(9.4%)	6.0%	7.4%	5.7%	8.0%	4.49
Gross Profit	72.2%	25.5%	(2.9%)	(4.4%)	(2.2%)	(7.1%)	22.0%	5.2%	(8.9%)	(4.4%)	23.0%	13.6%	(5.4%)	9.4%	12.1%	6.4%	9.4%	
Research and Development	(3.5%)	(8.5%)	4.4%	(1.1%)	8.4%	0.8%	(8.0%)	(3.0%)	(0.1%)	4.0%	21.1%	2.6%	(1.5%)	(4.3%)	(2.2%)	(0.6%)	6.6%	1.39
Marketing and Sales	(10.0%)	12.0%	(21.3%)	7.4%	(6.3%)	(15.8%)	13.5%	(8.8%)	7.5%	9.2%	2.4%	12.8%	(11.3%)	(11.6%)	(4.3%)	(4.5%)	7.6%	1.29
General and Administrative	6.3%		16.9%	2.3%	0.0%	9.8%		9.0%	0.6%	1.3%	15.1%	7.4%	(0.6%)	5.8%	6.7%	1.4%	6.1%	2.3
		1.2%					(11.3%)				15.1% 29.5%	7.4% 30.2%		5.8% 95.4%		20.8%	13.4%	12.0
Operating Income	(152.8%)	116.1%	(2.3%)	(20.1%)	(29.4%)	(12.6%)	46.1%	30.1%	(94.6%)	(21.2%)			(7.6%)		50.1%			
Provision for tax	(152.5%)	120.0%	(2.3%)	(18.0%)	(33.3%)	(22.1%)	29.2%	12.2%	(107.1%)	(28.3%)	21.4%	21.7%	(7.3%)	74.5%	51.1%	7.1%	4.9%	11.9
Net Income	(150.4%)	121.0%	(2.5%)	(17.8%)	(19.7%)	(8.6%)	53.6%	28.8%	(111.7%)	(24.7%)	28.8%	30.5%	(7.0%)	102.3%	50.9%	26.3%	11.2%	12.4
EPS (Non-GAAP)	(147.7%)	118.9%	(3.1%)	(19.0%)	(20.7%)	(10.6%)	50.8%	30.8%	(112.6%)	(23.5%)	30.2%	29.3%	(0.5%)	101.3%	47.8%	25.1%	12.0%	11.3



# **Exhibit 12: TTWO Income Statement**

TTWO Non-GAAP Income State	nent															
(\$000 except share and per-share amount:	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	F2014	F2015	F2016	F2017E
Net Revenue	\$151,611	\$135,442	\$953,976	\$427,736	\$366,392	\$364,930	\$486,791	\$342,512	\$266,220	\$378,349	\$695,807	\$359,638	\$2,413,720	\$1,668,765	\$1,560,625	\$1,700,01
Cost of Goods Sold	63,553	56,082	518,129	223,244	198,051	188,862	268,616	183,418	138,817	191,400	360,687	161,837	1,411,176	861,008	838,947	852,74
Product costs	22,323	20,685	193,278	21,993	39,967	56,987	81,120	35,874	27,953	55,239	104,371	39,560	526,299	258,279	213,948	227,12
Software development costs and royalties	22,910	16,751	196,594	42,379	45,831	44,897	55,658	59,363	33,035	46,170	78,860	43,157	540,774	278,633	205,749	201,22
Internal royalties	9,963	13,686	26,698	151,818	105,897	54,918	95,311	72,552	73,211	56,752	125,245	71,928	281,486	202,166	328,678	327,13
Licenses	8,357	4,960		7.054						33,239				121,930	90.572	
Licenses	8,357	4,960	101,559	7,054	6,356	32,060	36,527	15,629	4,618	33,239	52,211	7,193	62,616	121,930	90,572	97,26
Gross Profit	88,058	79,360	435,847	204,492	168,341	176,069	218,175	159,094	127,403	186,949	335,120	197,801	1,002,544	807,757	721,678	847,27
Operating Expenses	95,775	110,175	167,217	125,047	119,699	124,392	129,778	109,597	156,449	149,031	171,231	137,307	468,501	498,214	483,466	614,01
Selling and marketing	34,846	46,887	94,481	50,329	42,184	52,763	57,482	35,454	75,873	75,670	83,497	46,753	222,119	226,543	187,883	281,79
G&A	34,196	34,880	37,127	35,059	39,415	40,891	37,300	35,397	39,645	41,230	42,880	44,595	136,634	141,262	153,003	168,35
R&D	22,585	23,278	29,764	33,725	31,525	23,385	27,462	31,408	33,544	24,593	37,166	38,122	96,389	109,352	113,780	133,42
D&A	4,148	5,130	5,845	5,934	6,575	7,353	7,534	7,338	7,388	7,538	7,688	7,838	13,359	21,057	28,800	30,45
Operating Income	(\$7,717)	(\$30,815)	\$268.630	\$79.445	\$48,642	\$51,677	\$88,397	\$49,497	(\$29,046)	\$37,918	\$163,889	\$60,493	\$534,043	\$309,543	\$238,212	\$233,25
Operating income	(\$7,717)	(\$30,613)	\$200,030	\$79,445	\$40,042	\$51,677	\$00,397	\$49,497	(\$29,046)	\$37,910	\$103,009	\$60,493	\$554,045	\$309,543	\$230,212	\$233,25
Interest and other, net	(3,592)	(3,574)	(4,396)	(1,398)	(3,931)	(4,736)	(4,299)	(2,196)	(2,196)	(1,196)	(196)	804	(12,663)	(12,960)	(15,162)	(2,78
Gain on sale of long-term investment	0	8,036	(559)	0	0	0	0	2,683	0	0	0	0	0	7,477	2,683	
Loss on extinguishment of debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gain on convertible note hedge and warrar	0	0	0	0	0	0	0	0	0	0	0	0	1,911	0	0	
Income Before Taxes	(11,309)	(26,353)	263,675	78,047	44,711	46,941	84,098	49,984	(31,242)	36,722	163,693	61,297	523,291	304,060	225,733	230,47
Provision for (benefit from) income taxes	(78)	9,056	52,075	23,763	10,503	14,241	(15,122)	(1,731)	(7,186)	8,446	37,649	14,098	12,569	84,816	7,891	53,00
Tronson or (ponent nom) moonie taxoe		0,000		20,100	10,000		(10,122)	(1,101)	(1,100)							
Net Income	(\$11,231)	(\$35,409)	\$211,600	\$54,284	\$34,208	\$32,700	\$99,220	\$51,715	(\$24,056)	\$28,276	\$126,044	\$47,199	\$510,722	\$219,244	\$217,842	\$177,46
Non-GAAP EPS	(\$0.14)	(\$0.44)	\$1.87	\$0.49	\$0.31	\$0.30	\$0.89	\$0.46	(\$0.28)	\$0.24	\$1.08	\$0.40	\$4.26	\$1.98	\$1.96	\$1.5
Weighted Average Shares Outstanding (00	79,369	80,355	107,114	107,540	109,288	110,304	109,881	111,802	86,500	117,000	117,000	117,000	111,780	114,000	110,424	117,00
Growth - YoY																
Revenue	5.1%	(89.3%)	24.3%	83.5%	141.7%	169.4%	(49.0%)	(19.9%)	(27.3%)	3.7%	42.9%	5.0%	97.5%	(30.9%)	(6.5%)	8.9
Selling and marketing	11.4%	(52.3%)	40.9%	97.7%	21.1%	12.5%	(39.2%)	(29.6%)	79.9%	43.4%	45.3%	31.9%	(11.8%)	2.0%	(17.1%)	50.0
G&A	(11.3%)	3.5%	18.8%	5.9%	15.3%	17.2%	0.5%	1.0%	0.6%	0.8%	15.0%	26.0%	6.3%	3.4%	8.3%	10.0
R&D	9.5%	(3.8%)	17.8%	28.3%	39.6%	0.5%	(7.7%)	(6.9%)	6.4%	5.2%	35.3%	21.4%	27.1%	13.4%	4.0%	17.3
													0.4%	6.3%	(3.0%)	27.0
Operating Expenses	2.4%	(31.0%)	31.7%	41.5%	25.0%	12.9%	(22.4%)	(12.4%)	30.7%	19.8%	31.9%	25.3%		0.3%	(3.076)	
		. ,	31.7%	41.5%	25.0%	12.9%	(22.4%)	(12.4%)	30.7%	19.8%	31.9%	25.3%			, ,	
Operating Expenses  Margins Gross Margin	2.4%	(31.0%)											41 5%	6.87%	-3.29%	49.8
Margins Gross Margin	2.4% 58.1%	(31.0%)	45.7%	47.8%	45.9%	48.2%	44.8%	46.4%	47.9%	49.4%	48.2%	55.0%	41.5%	6.87% 48.4%	-3.29% 46.2%	49.8
Margins Gross Margin Operating Margin	2.4% 58.1% (5.1%)	(31.0%) 58.6% (22.8%)	45.7% 28.2%	47.8% 18.6%	45.9% 13.3%	48.2% 14.2%	44.8% 18.2%	46.4% 14.5%	47.9% (10.9%)	49.4% 10.0%	48.2% 23.6%	55.0% 16.8%	22.1%	6.87% 48.4% 18.5%	-3.29% 46.2% 15.3%	13.7
Margins Gross Margin Operating Margin EBITDA Margin	58.1% (5.1%) (2.4%)	(31.0%) 58.6% (22.8%) (19.0%)	45.7% 28.2% 28.8%	47.8% 18.6% 20.0%	45.9% 13.3% 15.1%	48.2% 14.2% 16.2%	44.8% 18.2% 19.7%	46.4% 14.5% 16.6%	47.9% (10.9%) (8.1%)	49.4% 10.0% 12.0%	48.2% 23.6% 24.7%	55.0% 16.8% 19.0%	22.1% 22.7%	6.87% 48.4% 18.5% 19.8%	-3.29% 46.2% 15.3% 17.1%	13.7 15.5
Margins Gross Margin Operating Margin EBITDA Margin Tax Rate	2.4% 58.1% (5.1%)	(31.0%) 58.6% (22.8%)	45.7% 28.2%	47.8% 18.6%	45.9% 13.3%	48.2% 14.2%	44.8% 18.2%	46.4% 14.5%	47.9% (10.9%)	49.4% 10.0%	48.2% 23.6%	55.0% 16.8%	22.1%	6.87% 48.4% 18.5%	-3.29% 46.2% 15.3%	13.7 15.5
Margins Gross Margin Operating Margin EBITDA Margin Tax Rate Cost Analysis	2.4% 58.1% (5.1%) (2.4%) NM	(31.0%) 58.6% (22.8%) (19.0%) NM	45.7% 28.2% 28.8% 19.7%	47.8% 18.6% 20.0% 30.4%	45.9% 13.3% 15.1% 23.5%	48.2% 14.2% 16.2% 30.3%	44.8% 18.2% 19.7% (18.0%)	46.4% 14.5% 16.6% (3.5%)	47.9% (10.9%) (8.1%) 23.0%	49.4% 10.0% 12.0% 23.0%	48.2% 23.6% 24.7% 23.0%	55.0% 16.8% 19.0% 23.0%	22.1% 22.7% 2.4%	6.87% 48.4% 18.5% 19.8% 27.9%	-3.29% 46.2% 15.3% 17.1% 3.5%	13.7 15.5 23.0
Margins Gross Margin Operating Margin EBITDA Margin Tax Rate  Cost Analysis Cost of Goods - Product Costs	2.4% 58.1% (5.1%) (2.4%) NM	(31.0%) 58.6% (22.8%) (19.0%) NM	45.7% 28.2% 28.8% 19.7%	47.8% 18.6% 20.0% 30.4%	45.9% 13.3% 15.1% 23.5%	48.2% 14.2% 16.2% 30.3%	44.8% 18.2% 19.7% (18.0%)	46.4% 14.5% 16.6% (3.5%)	47.9% (10.9%) (8.1%) 23.0%	49.4% 10.0% 12.0% 23.0%	48.2% 23.6% 24.7% 23.0%	55.0% 16.8% 19.0% 23.0%	22.1% 22.7% 2.4%	6.87% 48.4% 18.5% 19.8% 27.9%	-3.29% 46.2% 15.3% 17.1% 3.5%	13.7 15.5 23.0
Margins Gross Margin Operating Margin EBITDA Margin Tax Rate  Cost Analysis Cost of Goods - Product Costs Cost of Goods - Software Development & R	2.4% 58.1% (5.1%) (2.4%) NM 14.7% 15.1%	(31.0%) 58.6% (22.8%) (19.0%) NM 15.3% 12.4%	45.7% 28.2% 28.8% 19.7% 20.3% 20.6%	47.8% 18.6% 20.0% 30.4% 5.1% 9.9%	45.9% 13.3% 15.1% 23.5%	48.2% 14.2% 16.2% 30.3% 15.6% 12.3%	44.8% 18.2% 19.7% (18.0%)	46.4% 14.5% 16.6% (3.5%)	47.9% (10.9%) (8.1%) 23.0%	49.4% 10.0% 12.0% 23.0%	48.2% 23.6% 24.7% 23.0%	55.0% 16.8% 19.0% 23.0%	22.1% 22.7% 2.4% 21.8% 22.4%	6.87% 48.4% 18.5% 19.8% 27.9%	-3.29% 46.2% 15.3% 17.1% 3.5%	13.7 15.5 23.0 13.4 11.8
Margins Gross Margin Operating Margin EBITDA Margin Tax Rate  Cost Analysis Cost of Goods - Product Costs Cost of Goods - Software Development & R Cost of Goods - Internal Royalties	2.4% 58.1% (5.1%) (2.4%) NM 14.7% 15.1% 6.6%	(31.0%) 58.6% (22.8%) (19.0%) NM 15.3% 12.4% 10.1%	45.7% 28.2% 28.8% 19.7% 20.3% 20.6% 2.8%	47.8% 18.6% 20.0% 30.4% 5.1% 9.9% 35.5%	45.9% 13.3% 15.1% 23.5% 10.9% 12.5% 28.9%	48.2% 14.2% 16.2% 30.3% 15.6% 12.3% 15.0%	44.8% 18.2% 19.7% (18.0%) 16.7% 11.4% 19.6%	46.4% 14.5% 16.6% (3.5%) 10.5% 17.3% 21.2%	47.9% (10.9%) (8.1%) 23.0% 10.5% 12.4% 27.5%	49.4% 10.0% 12.0% 23.0% 14.6% 12.2% 15.0%	48.2% 23.6% 24.7% 23.0% 15.0% 11.3% 18.0%	55.0% 16.8% 19.0% 23.0% 11.0% 12.0% 20.0%	22.1% 22.7% 2.4% 21.8% 22.4% 11.7%	6.87% 48.4% 18.5% 19.8% 27.9% 15.5% 16.7% 12.1%	-3.29% 46.2% 15.3% 17.1% 3.5% 13.7% 13.2% 21.1%	13.7 15.8 23.0 13.4 11.8 19.2
Margins Gross Margin Operating Margin EBITDA Margin Tax Rate  Cost Analysis Cost of Goods - Product Costs Cost of Goods - Software Development & R Cost of Goods - Internal Royalties Cost of Goods - Licenses	2.4% 58.1% (5.1%) (2.4%) NM 14.7% 15.1% 6.6% 5.5%	(31.0%)  58.6% (22.8%) (19.0%) NM  15.3% 12.4% 10.1% 3.7%	45.7% 28.2% 28.8% 19.7% 20.3% 20.6% 2.8% 10.6%	47.8% 18.6% 20.0% 30.4% 5.1% 9.9% 35.5% 1.6%	45.9% 13.3% 15.1% 23.5% 10.9% 12.5% 28.9% 1.7%	48.2% 14.2% 16.2% 30.3% 15.6% 12.3% 15.0% 8.8%	44.8% 18.2% 19.7% (18.0%) 16.7% 11.4% 19.6% 7.5%	46.4% 14.5% 16.6% (3.5%) 10.5% 17.3% 21.2% 4.6%	47.9% (10.9%) (8.1%) 23.0% 10.5% 12.4% 27.5% 1.7%	49.4% 10.0% 12.0% 23.0% 14.6% 12.2% 15.0% 8.8%	48.2% 23.6% 24.7% 23.0% 15.0% 11.3% 18.0% 7.5%	55.0% 16.8% 19.0% 23.0% 11.0% 12.0% 20.0% 2.0%	22.1% 22.7% 2.4% 21.8% 22.4% 11.7% 2.6%	6.87% 48.4% 18.5% 19.8% 27.9% 15.5% 16.7% 12.1% 7.3%	-3.29% 46.2% 15.3% 17.1% 3.5% 13.2% 21.1% 5.8%	13.1 15.5 23.0 13.4 11.8 19.2
Margins Gross Margin Operating Margin EBITDA Margin Tax Rate  Cost Analysis Cost of Goods - Product Costs Cost of Goods - Software Development & R Cost of Goods - Internal Royalties Cost of Goods - Licenses	2.4% 58.1% (5.1%) (2.4%) NM 14.7% 15.1% 6.6%	(31.0%)  58.6% (22.8%) (19.0%)  NM  15.3% 12.4% 10.1% 3.7% 41.4%	45.7% 28.2% 28.8% 19.7% 20.3% 20.6% 2.8% 10.6% 54.3%	47.8% 18.6% 20.0% 30.4% 5.1% 9.9% 35.5%	45.9% 13.3% 15.1% 23.5% 10.9% 12.5% 28.9%	48.2% 14.2% 16.2% 30.3% 15.6% 12.3% 15.0%	44.8% 18.2% 19.7% (18.0%) 16.7% 11.4% 19.6%	46.4% 14.5% 16.6% (3.5%) 10.5% 17.3% 21.2%	47.9% (10.9%) (8.1%) 23.0% 10.5% 12.4% 27.5%	49.4% 10.0% 12.0% 23.0% 14.6% 12.2% 15.0%	48.2% 23.6% 24.7% 23.0% 15.0% 11.3% 18.0%	55.0% 16.8% 19.0% 23.0% 11.0% 12.0% 20.0%	22.1% 22.7% 2.4% 21.8% 22.4% 11.7%	6.87% 48.4% 18.5% 19.8% 27.9% 15.5% 16.7% 12.1%	-3.29% 46.2% 15.3% 17.1% 3.5% 13.7% 13.2% 21.1%	13.1 15.5 23.0 13.4 11.8 19.2
Margins Gross Margin Operating Margin EBITDA Margin Tax Rate  Cost Analysis Cost of Goods - Product Costs Cost of Goods - Software Development & R Cost of Goods - Internal Royalties Cost of Goods - Licenses	2.4% 58.1% (5.1%) (2.4%) NM 14.7% 15.1% 6.6% 5.5%	(31.0%)  58.6% (22.8%) (19.0%) NM  15.3% 12.4% 10.1% 3.7%	45.7% 28.2% 28.8% 19.7% 20.3% 20.6% 2.8% 10.6%	47.8% 18.6% 20.0% 30.4% 5.1% 9.9% 35.5% 1.6%	45.9% 13.3% 15.1% 23.5% 10.9% 12.5% 28.9% 1.7%	48.2% 14.2% 16.2% 30.3% 15.6% 12.3% 15.0% 8.8%	44.8% 18.2% 19.7% (18.0%) 16.7% 11.4% 19.6% 7.5%	46.4% 14.5% 16.6% (3.5%) 10.5% 17.3% 21.2% 4.6%	47.9% (10.9%) (8.1%) 23.0% 10.5% 12.4% 27.5% 1.7%	49.4% 10.0% 12.0% 23.0% 14.6% 12.2% 15.0% 8.8%	48.2% 23.6% 24.7% 23.0% 15.0% 11.3% 18.0% 7.5%	55.0% 16.8% 19.0% 23.0% 11.0% 12.0% 20.0% 2.0%	22.1% 22.7% 2.4% 21.8% 22.4% 11.7% 2.6%	6.87% 48.4% 18.5% 19.8% 27.9% 15.5% 16.7% 12.1% 7.3%	-3.29% 46.2% 15.3% 17.1% 3.5% 13.2% 21.1% 5.8%	13.7 15.5 23.0
Margins Gross Margin Operating Margin EBITDA Margin Tax Rate  Cost of Goods - Product Costs Cost of Goods - Software Development & R Cost of Goods - Licenses Total COGS	2.4% 58.1% (5.1%) (2.4%) NM 14.7% 15.1% 6.6% 5.5% 41.9%	(31.0%)  58.6% (22.8%) (19.0%)  NM  15.3% 12.4% 10.1% 3.7% 41.4%	45.7% 28.2% 28.8% 19.7% 20.3% 20.6% 2.8% 10.6% 54.3%	47.8% 18.6% 20.0% 30.4% 5.1% 9.9% 35.5% 1.6% 52.2%	45.9% 13.3% 15.1% 23.5% 10.9% 12.5% 28.9% 1.7% 54.1%	48.2% 14.2% 16.2% 30.3% 15.6% 12.3% 15.0% 8.8% 51.8%	44.8% 18.2% 19.7% (18.0%) 16.7% 11.4% 19.6% 7.5% 55.2%	46.4% 14.5% 16.6% (3.5%) 10.5% 17.3% 21.2% 4.6% 53.6%	47.9% (10.9%) (8.1%) 23.0% 10.5% 12.4% 27.5% 1.7% 52.1%	49.4% 10.0% 12.0% 23.0% 14.6% 12.2% 15.0% 8.8% 50.6%	48.2% 23.6% 24.7% 23.0% 15.0% 11.3% 18.0% 7.5% 51.8%	55.0% 16.8% 19.0% 23.0% 11.0% 20.0% 20.0% 45.0%	22.1% 22.7% 2.4% 21.8% 22.4% 11.7% 2.6% 58.5%	6.87% 48.4% 18.5% 19.8% 27.9% 15.5% 16.7% 12.1% 7.3% 51.6%	-3.29% 46.2% 15.3% 17.1% 3.5% 13.7% 13.2% 21.1% 5.8%	13.7 15.5 23.0 13.4 11.8 19.2 5.7



# **Exhibit 13: Ubisoft Income Statement**

UBI Income Statement In millions of euros	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16		Mar-17	F2014	F2015	F2016	F2017E
Sales	€293.3	€713.8	€484.2	€979.6	€207.3	€1,186.7	€309.4	€1,386.8	€1,007.1	€1,463.8	€1,394.0	€1,696.2
						,						,
Cost of sales	91.1	376.4	106.1	231.0	53.0	252.1	66.5	298.2	285.3	337.1	305.1	364.7
Gross Profit	202.2	519.6	378.1	748.6	154.3	934.6	242.9	1,088.6	721.8	1,126.7	1,088.9	1,331.5
R&D expenses	138.9	287.2	181.2	392.3	99.5	400.8	130.0	485.4	426.1	573.5	500.3	615.3
SG&A expenses	161.3	200.0	172.1	210.4	162.6	257.0	216.6	269.0	361.3	382.5	419.6	485.6
Selling expenses	123.5	155.8	127.2	156.9	111.1	193.4	158.1	196.4	279.3	284.1	304.5	354.5
General & Administrative expenses	37.8	44.2	44.9	53.7	51.5	63.6	58.5	72.6	82.0	98.6	115.1	131.1
Non-IFRS Operating Income (Loss)	(€98.0)	€32.4	€24.9	€145.9	(€107.8)	€276.8	(€103.7)	€334.2	(€65.6)	€170.7	€169.0	€230.6
Stock based comp.	(4.3)	(5.4)	(5.0)	(4.6)	(6.0)	(6.9)	(8.0)	(8.0)	(9.7)	(9.6)	(12.9)	(16.0
Other operating revenues and expenses	(11.7)	(10.9)	(5.7)	(16.0)	(3.5)	(15.8)	(9.0)	(9.0)	(22.6)	(21.7)	(19.3)	(18.0
IFRS Operating income/(loss)	(€114.0)	€16.1	€14.2	€125.3	(€117.3)	€254.1	(€120.7)	€317.2	(€97.9)	€139.5	€136.8	€196.6
Net financial income (expense)	13.4	(3.1)	2.7	(2.0)	(6.9)	(6.8)	(4.0)	(4.0)	10.3	0.7	(13.7)	(8.0
Adjustment - net financial income		(41.)	(5.3)	0.1	1.1	2.2	(,	()		(5.2)	3.3	0.0
Non-IFRS net financial income			(2.5)	(2.0)	(5.9)	(4.5)	(3.0)	(3.0)		(4.5)	(10.4)	(6.0
Non-IFRS income before taxes	(23.9)	(3.3)	12.7	143.9	(113.7)	272.3	(106.7)	331.2	(71.4)	166.2	158.6	224.6
IFDC and income tour (beautiful)			4.8	48.6	(48.1)	77.8						
IFRS net income tax (benefit) Non-IFRS net income tax (benefit)	(38.2)	16.1	4.8	48.7	(48.1)	77.8	(29.9)	92.7	22.1	53.5	29.7	62.9
Non-ii No net income tax (benelit)	(30.2)	10.1	4.0	40.7	(40.1)	77.0	(23.3)	32.1	22.1	33.3	23.7	02.3
IFRS Net income (loss)	(€62.3)	(€3.2)	€21.1	€74.7	(€75.2)	€169.6	(€94.8)	€220.5	(€65.5)	€86.7	€93.4	€125.7
Non-IFRS Net income (loss)	(€62.1)	€12.8	€17.5	€95.2	(€65.7)	€194.6	(€76.8)	€238.5	(€49.3)	€112.7	€128.9	€161.7
Shares Outstanding	99.6	99.6	106.5	106.5	110.0	106.2	108.7	108.7	99.6	106.5	108.1	108.7
Diluted Shares Outstanding	104.5	110.2	112.9	113.3	115.9	112.5	115.2	115.2	107.3	113.1	114.2	115.2
IFRS Diluted EPS	(€0.60)	(€0.03)	€0.10	€0.66	(€0.65)	€1.51	(€0.82)	€1.91	(€0.61)	€0.77	€0.82	€1.09
Non-IFRS Diluted EPS	(€0.59)	€0.12	€0.15	€0.84	(€0.57)	€1.73	(€0.67)	€2.07	(€0.46)	€1.00	€1.13	€1.40
Margins (Non-IFRS)												
Gross Margin	68.9%	72.8%	78.1%	76.4%	74.4%	78.8%	78.5%	78.5%	71.7%	77.0%	78.1%	78.59
R&D	47.4%	40.2%	37.4%	40.0%	48.0%	33.8%	42.0%	35.0%	42.3%	39.2%	35.9%	36.39
SG&A	55.0%	28.0%	35.5%	21.5%	78.4%	21.7%	70.0%	19.4%	35.9%	26.1%	30.1%	28.69
Selling expenses	42.1%	21.8%	26.3%	16.0%	53.6%	16.3%	51.1%	14.2%	27.7%	19.4%	21.8%	20.99
General & Administrative expenses	12.9%	6.2%	9.3%	5.5%	24.8%	5.4%	18.9%	5.2%	8.1%	6.7%	8.3%	7.79
Operating Margin	(33.4%)	4.5%	5.1%	14.9%	(52.0%)	23.3%	(33.5%)	24.1%	(6.5%)	11.7%	12.1%	13.69
Tax Rate	159.8%	(487.9%)	37.8%	33.8%	42.3%	28.6%	28.0%	28.0%	(31.0%)	32.2%	18.7%	28.09
Net margin	(21.2%)	1.8%	3.6%	9.7%	(31.7%)	16.4%	(24.8%)	17.2%	(4.9%)	7.7%	9.2%	9.5%
Growth - YoY (Non-IFRS)												
Sales	5.1%	(26.9%)	65.1%	37.2%	(57.2%)	21.1%	49.2%	16.9%	(19.8%)	45.4%	(4.8%)	21.79
Gross Proft	4.9%	(27.9%)	87.0%	44.1%	(59.2%)	24.8%	57.4%	16.5%	(21.0%)	56.1%	(3.4%)	22.39
R&D	43.5%	(13.3%)	30.5%	36.6%	(45.1%)	2.2%	30.6%	21.1%	(0.5%)	34.6%	(12.8%)	23.09
SG&A	4.7%	(13.4%)	6.7%	5.2%	(5.5%)	22.1%	33.2%	4.7%	(6.2%)	5.9%	9.7%	15.79
Selling expenses	5.7%	(16.8%)	3.0%	0.7%	(12.7%)	23.3%	42.3%	1.6%	(8.1%)	1.7%	7.2%	16.49
General & Administrative expenses	1.6%	0.9%	18.8%	21.5%	14.7%	18.4%	13.6%	14.2%	1.2%	20.2%	16.7%	13.99
Operating Income Net margin	68.7% 63.0%	(79.5%) (88.1%)	(125.4%)	350.3% 643.8%	(533.0%) (475.2%)	89.7% 104.4%	(3.9%) 17.0%	20.7% 22.6%	(165.4%)	(360.2%)	(1.0%) 14.4%	36.49 25.49

Source: Company reports and MSUSA estimates



# **Price Target Calculation and Key Risks**

#### Activision Blizzard Inc

#### Valuation

Our price target of \$42 is based on a combination of EV/EBTIDA and non-GAAP P/E valuation methodologies.

Using EV/EBTIDA, we apply a target multiple of 15x to our 2017 EBITDA estimate of \$2.3 billion to reach an enterprise value of \$34.9 billion. Adjusting for 2016 end of year net debt of \$2.0 billion, we arrive at a market cap of \$32.9 billion, or \$42 per share.

Using P/E, we apply a target multiple of 20x our 2017 non-GAAP EPS of \$2.05 to reach a price target of \$41.

Using the average of the three methodologies, we arrive at a target price of \$42.

#### Risks

- 1) Competition ATVI faces heavy competition from other game publishers, including EA, TTWO, and UBI. Furthermore, ATVI faces competition from first party studios, online/mobile game companies like Zynga and King, as well as from thousands of smaller developers.
- 2) King acquisition could come with some integration risk as well as add lower visibility into future guidance due to the fleeting nature of mobile casual gamers.
- 3) Destiny's success is questionable. Investors were expecting Destiny to be ATVI's next billion dollar franchise, but the game fell well below expectations. We believe that recent DLC releases have been well received, and Destiny is on its way to becoming another \$B franchise for ATVI, but it will take longer than investors expected.
- 4) Margin cap? ATVI has the best margin structure of any of the publishers, but at 32%, we are expecting modest margin improvement of the next three years. It is possible that margins move faster and higher than we are modeling, but it will depend on the success of new FTP and digital content that ATVI releases.

#### Electronic Arts Inc.

#### Valuation:

Our price target of \$84 is based on a combination of valuation methodologies, including F2017 EV/EBTIDA and F2017 Non-GAAP P/E.

Using EV/EBTIDA, we apply a target multiple of 15x to our F2017 EBITDA estimate of \$1.6 billion to reach an enterprise value of \$23.8 billion. Adjusting for F2016 end of year net cash of \$2.7 billion (we are not assuming further share repurchases), we arrive at a market cap of \$26.5 billion, or \$83 per share.

Using P/E, we apply a target multiple of 24x our F2017 Non-GAAP EPS of \$3.52 to reach a price target of \$85. Adjusting for F2016 end of year net cash of \$2.7 billion, results in a more reasonable P/E target multiple of approximately 21.5x excluding net



cash of approximately ~\$8.40 per share. Using the average of the three methodologies, we arrive at a target price of \$84.

#### **Risks:**

- 1) Competition EA competes heavily with other publishers like ATVI, TTWO, Nintendo, and first party platform studios from Sony and Microsoft. New game development can be very costly, and stakes are high if a game fails.
- 2) Online Woes EA has had issues in the past regarding large scale multi-player, and this has resulted in weak sales of particular games, loud complaints from players, and selling pressure on the stock.
- 3) Possible margin expansion ceiling. Given EA's reliance on licensed IP vs. its own IP, EA has a structural disadvantage on margin expansion potential as it must pay 20-30% of its revenue to the IP owners.

#### Take-Two Interactive Software, Inc.

#### Valuation:

Our price target of \$40 is based on a combination of valuation methodologies – a four-year average of F2014-F2017E EV/EBTIDA and F2014-F2017E Non-GAAP P/E. We believe a 4-year average is sensible given the variance in revenues and earnings between years with GTA releases.

Using EV/EBTIDA, we apply a target multiple of 9x to our average F2014-F2017E EBITDA estimate of \$352 million to reach an enterprise value of \$3.2 billion. Adjusting for F2016 end of year net cash of \$1.3 billion (we are assuming the company's convertible debt will be satisfied by equity), we arrive at an equity value of \$4.4 billion, or \$40 per share.

Using P/E, we apply a target multiple of 16x our average F2014-F2017E Non-GAAP EPS of \$2.44 to reach a price target of \$39.

Using the average of the two methodologies, we arrive at a target price of \$40.

#### **Risks:**

- 1) Competition Take-Two faces heavy competition from other publishers like Activision Blizzard, EA, Ubisoft, Nintendo, and first party platform studios from Sony and Microsoft.
- 2) Game delays Making blockbuster AAA titles can be a herculean effort subject to numerous delays. Game delays are generally common in the industry, but Take-Two has had more than its share of delays in the past. Game delays result in higher development costs and defer earnings streams expected by investors.
- 3) We believe the company's success is highly dependent on its Rockstar Games subsidiary, particularly creative leads Sam and Dan Houser. Rockstar generally tends to spend more time, and correspondingly, more development dollars relative to peers in creating games.



#### Ubisoft Entertainment SA

#### Valuation:

Our price target of €28 is based on a combination of valuation methodologies - F2017E EV/EBTIDA and Non-IFRS P/E.

Using EV/EBTIDA, we apply a target multiple of 12x our F2017E EBITDA estimate of €256 million to reach an enterprise value of €3.1 billion. Adjusting for F2016 end of year net cash of €200 million, we arrive at a market cap of €3.3 billion, or €29 per share.

Using P/E, we apply a target multiple of 20x our F2017E Non-IFRS EPS of €1.33 to reach a price target of €27.

Using the average of these methodologies, we arrive at a price target of €28.

#### **Risks:**

- 1) Competition Ubisoft faces heavy competition from other publishers like Activision Blizzard, EA, Take-Two, Nintendo, and first party platform studios from Sony and Microsoft.
- 2) Game delays Making blockbuster AAA titles can be a herculean effort subject to numerous delays. Game delays result in higher development costs and defer earnings streams expected by investors.
- 3) Ubisoft is unique in the industry for operating an integrated mini-studio. We are skeptical when video game companies try to move beyond their core competencies and start investing in movies, television, etc.
- 4) Vivendi has taken a 15% stake in Ubisoft which management is vocally unhappy about. This could disrupt the board and decision making process at Ubisoft.



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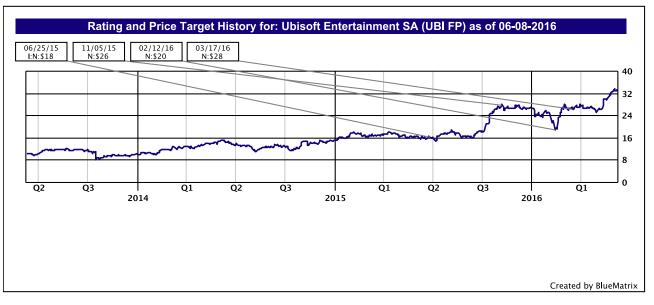
(As of 6/09)	% of coverage	IB service past 12 mo
Buy (Buy)	47.06%	36.46%
Hold (Neutral)	50.98%	25.00%
Sell (Underperform)	1.96%	25.00%

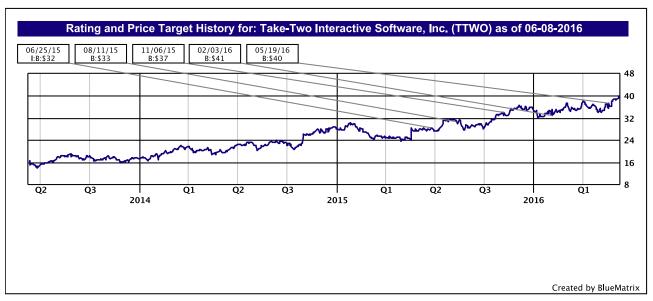
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