

Take-Two Interactive Software, Inc.

Q2 about inline, but FY23 guidance lowered. Zynga acquisition should drive strong long-term growth. Lowering P/T to \$126.

COMPANY UPDATE

Rating: BUY

Ticker: TTWO

Price: \$100.76

Target: \$126.00
(from \$159)

Q2 about inline: Revenue was \$1,505 million (+53% y-o-y), compared to our estimate of \$1,575 million and consensus of \$1,556 million. Pro forma EPS was \$1.30, compared to our estimate of \$1.43 and consensus of \$1.38. Q2 guidance was for revenue of \$1.50 – 1.55 billion, and for EPS of \$1.25 – 1.35.

More solid results: The company reported another solid quarter as it continues to benefit from people playing more video games though it did acknowledge slowdown due to weaker macroeconomic conditions, tough comps against the benefits from the pandemic, and a general slowdown in mobile games (Zynga). Revenue were led by *NBA 2K23* (nearly 5 million sold since its recent launch in Q2), *GTA Online* and *GTA V*; *RDR 2* and *Red Dead Online*; mobile games; and *WWE 2K22*.

GTA and sports games continue to sell well: Take-Two's blockbuster game *GTA V* (released 9/2013) has sold-in 170 million units to date and continues to sell really well. *Red Dead Redemption 2* (released 10/2018) has sold-in 46 million units so far. *GTA Online* and *Red Dead Online* also continues to perform very well.

Next GTA game well under development: Earlier this year, the company confirmed that the next major release of GTA is in development. While there has been no other information disclosed, the company on the earnings call again confirmed that development of the next GTA game is well underway (even with a recent cyber attack that while disappointing has no real impact on its development).

But lowered FY23 guidance: Take-Two lowered FY23 guidance (which included Zynga for both) for revenue to \$5.40 – 5.50 billion, from \$5.80 – 5.90 billion, and for EPS to \$3.85 – 4.10 from \$4.60 – 4.85. The bulk of the shift was due to lowered outlook for mobile games (Zynga) and games shifting out of the FY.

Lowering estimates: We are lowering our FY23 estimates for revenue to \$5.47 billion, from \$6.00 billion, and for EPS to \$4.14 from \$5.00.

Zynga acquisition positive: In January 2022, Take-Two announced that it will acquire Zynga for ~\$9.86 per share (\$3.50 in cash and ~\$6.36 in shares of Take-Two common stock) implying an enterprise value of \$12.7 billion. Zynga is a leading social and mobile game publisher with ~2,200 employees and over ~\$2 billion in annual revenue. This deal closed on May 23, 2022.

FY23 outlook lowered but conservative: We believe that while FY23 guidance was lowered, it is conservative and the company will likely exceed them just like it has the past several years. We believe that the solid momentum for its games will continue through the end of the pandemic and even with uncertain macroeconomics in FY23 and near term challenges in mobile.

Expect share price rebound: With synergies (both revenue and cost savings) from its Zynga acquisition, strong long-term growth expected in digital, key games expected for over the next several years, and continued positive industry growth, we believe a favorable valuation is likely to drive a rebound and growth in share price.

Current valuation attractive: Maintaining our BUY rating, but lowering our 12-month price target to \$126 from \$159, which reflects a target P/E of 21x our FY24 EPS estimate of \$6.00, which is about inline with the peer group median to reflect comparable near term growth rate.

Company Description

Based in New York, Take-Two Interactive Software is a global publisher of interactive entertainment software including the Grand Theft Auto games.

Stock Data

Exchange:	NasdaqGS
52-week Range:	\$90.00–182.25
Shares Outstanding (million):	169
Market cap (\$million):	\$17,028
EV (\$million):	\$18,418
Debt (\$million):	\$3,286
Cash (\$million):	\$1,896
Avg. Daily Trading Vol. (\$million):	\$228
Float (million shares):	156
Short Interest (million shares):	5
Dividend, annual (yield):	\$0 (NA%)

Revenues (US\$ million)

	<u>2023E</u> (Cur.)	<u>2023E</u> (Old)	<u>2024E</u> (Cur.)	<u>2024E</u> (Old)
Q1 Jun	1,003A		1,404E	1,504E
Q2 Sep	1,505A	1,575E	1,434E	1,584E
Q3 Dec	1,441E	1,697E	1,717E	1,867E
Q4 Mar	<u>1,526E</u>	<u>1,726E</u>	<u>1,946E</u>	<u>2,046E</u>
Total	5,474E	6,000E	6,500E	7,000E
EV/Rev	3.4x		2.8x	

Earnings per Share (pro forma)

	<u>2023E</u> (Cur.)	<u>2023E</u> (Old)	<u>2024E</u> (Cur.)	<u>2024E</u> (Old)
Q1 Jun	0.71A		0.79E	0.76E
Q2 Sep	1.30A	1.43E	1.27E	1.32E
Q3 Dec	0.91E	1.55E	1.45E	1.73E
Q4 Mar	<u>1.17E</u>	<u>1.23E</u>	<u>2.50E</u>	<u>2.69E</u>
Total	\$4.14E	\$5.00E	\$6.00E	\$6.50E
P/E	24x		17x	

Important Disclosures

Ascendant Capital Markets LLC seeks to do business with companies covered by its research team. Consequently, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making an investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report, beginning on page 13.

OVERVIEW

- Take-Two recently (on November 7) reported its fiscal Q2 2023 (ending September) results.
- We note that Take-Two completed its major acquisition of Zynga on May 23, 2022 so its Q2 report included all of Zynga's results, but we note y-o-y comparisons do not.
- Revenue was \$1,505 million (+53% y-o-y), compared to our estimate of \$1,575 million and consensus of \$1,556 million.
- Pro forma EPS was \$1.30, compared to our estimate of \$1.43 and consensus of \$1.38.
- Q2 guidance was for revenue of \$1.50 – 1.55 billion, and for EPS of \$1.25 – 1.35.
- Management lowered FY23 guidance (which included Zynga for both) for revenue to \$5.40 – 5.50 billion, from \$5.80 – 5.90 billion, and for EPS to \$3.85 – 4.10 from \$4.60 – 4.85.
- Initial Q3 guidance is for revenue of \$1,410 – 1,460 million, and for EPS of \$0.79 – 0.89.
- This implies Q4 guidance is for revenue of \$1,433 – 1,583 million, and for EPS of \$0.94 – 1.29.
- We are lowering our FY23 estimates for revenue to \$5.47 billion, from \$6.00 billion, and for EPS to \$4.14 from \$5.00.
- We are lowering our FY24 estimates for revenue to \$6.50 billion, from \$7.00 billion, and for EPS to \$6.00 from \$6.50.

ADDITIONAL DETAILS

- Gross profit for the quarter was \$990 million, compared with our estimate of \$869 million.
- Gross margin for the quarter was 66%, versus 55% last year and our estimate of 55%.
- Operating expenses were \$687 million, compared with our estimate of \$577 million.
- Operating income was \$302 million, compared with our estimate of \$292 million.
- Pro forma net income was \$220 million, compared with our estimate of \$240 million.

In January 2022, Take-Two announced that it will acquire Zynga for ~\$9.86 per share (\$3.50 in cash and ~\$6.36 in shares of Take-Two common stock) implying an enterprise value of \$12.7 billion. Zynga is a leading social and mobile game publisher with ~2,200 employees and over ~\$2 billion in annual revenue. The deal closed in May 2022.

The company's balance sheet remains relatively solid (factoring \$3.1 billion in cash used for its Zynga acquisition in Q1) with \$1.9 billion in cash and \$3.3 billion in debt (~\$8/share in net debt), compared with \$1.8 billion in cash and \$3.3 billion in debt as of June. In April, Take-Two raised \$2.7 billion to finance its Zynga acquisition (\$2.7 billion in Senior Notes consisting of \$1.0 billion of its 3.300% Senior Notes due 2024, \$600 million of its 3.550% Senior Notes due 2025, \$600 million of its 3.700% Senior Notes due 2027, and \$500 million of its 4.000% Senior Notes due 2032).

Exhibit 1: Q2 FY23 Results vs. Guidance

**Q2 FY2023 RESULTS SUMMARY:
SELECT MANAGEMENT RESULTS**

SELECT FINANCIAL DATA (\$ in millions)		
	Q2	
	ACTUAL	GUIDANCE
Net Bookings	\$1,505	\$1,500 TO \$1,550
Recurrent Consumer Spending Growth (RCS)	+76%	+85%
Digitally-Delivered Net Bookings Growth	+62%	+70%

- Net Bookings were \$1.5 billion, which was in-line with our guidance
- Movement in foreign currency exchange rates negatively impacted our Net Bookings by approximately 1%
- With consumers navigating ongoing macroeconomic uncertainties, we believe that our financial performance demonstrates the incredible quality of our games and the significant value that our interactive entertainment experiences provide our players
- RCS rose 76%. NBA 2K and Rollic's hyper-casual mobile portfolio outperformed our plans, while we experienced some softness across other parts of our portfolio as the interactive entertainment industry faced continued headwinds
- We ended the quarter with over \$1.3 billion in cash and short-term investments and \$3.3 billion of debt



Note: Results from last year did not include Zynga business.

Source: Company report.

Exhibit 2: Take-Two's Updated FY23 Guidance (as of November 7, 2022)

**FY 2023 GUIDANCE:
SELECT FINANCIAL DATA**

FISCAL YEAR 2023 GUIDANCE (\$ in millions, except EPS)		
	FY 2023	FY 2023
	REVISED GUIDANCE	PRIOR GUIDANCE
	(\$ IN MILLIONS)	(\$ IN MILLIONS)
Net Bookings	\$5,400 TO \$5,500	\$5,800 TO \$5,900
Recurrent Consumer Spending Growth	+90% YOY	+110% YOY
Digitally-Delivered Net Bookings Growth	+70% YOY	+80% YOY
Non-GAAP Adjusted Unrestricted Operating Cash Flow	OVER \$650	OVER \$700

	Twelve Months Ending March 31, 2023					
	Outlook (1)	Change in deferred net revenue and related cost of revenue	Stock-based compensation	Loss on long-term investments, net	Amortization of acquired intangibles	Business acquisition
GAAP						
Total net revenue	\$5,410 to \$5,510	\$(10)	\$14	\$694		
Cost of revenue	\$2,611 to \$2,642	\$10				
Operating expenses	\$3,388 to \$3,418		\$(32)	\$(48)	\$(13)	
Interest and other, net	\$176	\$(5)				
(Loss) income before income taxes	\$(175) to \$(726)	\$(15)	\$39	\$4	\$1,028	\$168
Non-GAAP						
EBITDA	\$465 to \$514	\$(28)	\$39	\$4		\$153

- We expect to deliver Net Bookings of \$5.4 to \$5.5 billion. Approximately 70% of the downward revision reflects lowered expectations for our mobile business and shifts in our release slate, while the balance reflects an updated view for the rest of our portfolio, based on current business trends across the interactive entertainment industry. Our guidance reflects \$50 million of FX headwinds
- Net Bookings by label is expected to be: 45% Zynga (which includes our former T2 mobile titles), 36% 2K, 18% Rockstar Games and 1% Private Division
- In light of the current economic backdrop, we continue to monitor our costs prudently to find potential areas of savings this year, while being mindful of the resources we need to support our strong growth trajectory
- We remain highly confident in our diverse and extensive development pipeline that we expect will deliver us sequential growth and record performance over the next several years



Source: Company report.

Exhibit 3: Take-Two's Acquisition of Zynga (announced January 2022, completed May 2022)

Transaction Unifies Two of the Leading Interactive Entertainment Businesses in the World

T2

Take-Two possesses some of the most successful franchises in interactive entertainment while bringing expertise in console/PC that can be applied to cross-promote content to users in Zynga's ecosystem.



zynga

Zynga is a market-leading, diversified mobile platform. Its leadership team has a proven track record of execution and the ability to drive further scale through M&A, cross-platform gameplay, increased advertising revenue through hyper-casual titles, blockchain integration, and direct payments.

Combination Overview

Combination to form one of the largest and most compelling portfolios of intellectual properties in the sector, while also benefiting from scale, diversification, synergies and new revenue opportunities.

T2

Take-Two + Zynga Form a Leader in Interactive Entertainment

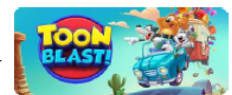


T2

- ✓ Take-Two possesses some of the most successful franchises in interactive entertainment
- ✓ Expertise in console/PC can be applied to Zynga's cross-play ambitions, helping cross-sell users across the combined ecosystem
- ✓ Take-Two's extensive player database can enhance mobile initiatives

zynga

- ✓ Zynga's free-to-play mobile development talent & expertise can be leveraged across Take-Two's blockbuster original IPs
- ✓ Zynga's leading publishing and analytics platform can drive synergies across the combined mobile portfolio
- ✓ Zynga's renowned portfolio of diverse mobile titles significantly increase Take-Two's sources of Recurrent Consumer Spending



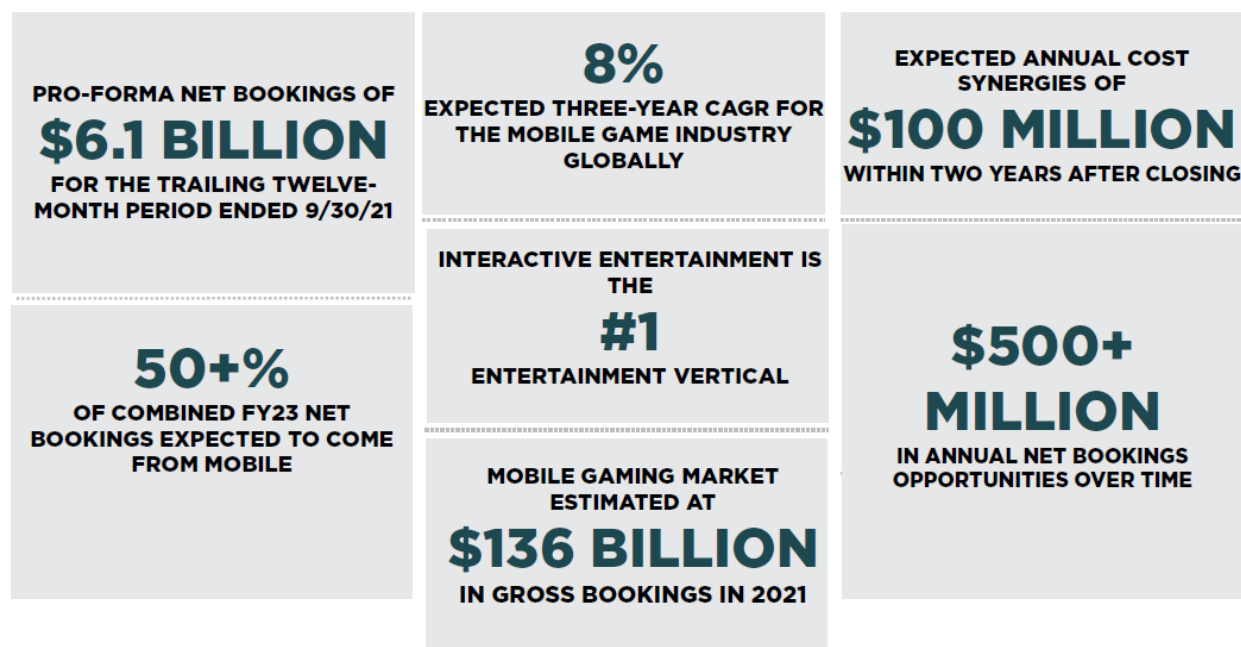
- Combined entity will feature an industry-defining portfolio of IP
- Diversified Net Bookings base, with over half of the combined business coming from mobile in FY23
- Zynga's highly skilled and proven management team, led by CEO Frank Gibeau and Zynga's President of Publishing, Bernard Kim, will drive the strategic direction for Take-Two's mobile efforts

Source: Company report.

Exhibit 4: Take-Two/Zynga Acquisition Details

Benefits of the Transaction

Both groups of stockholders will benefit from the combined company's greater scale, enhanced financial profile, and synergies created through the transaction



Terms of the Acquisition

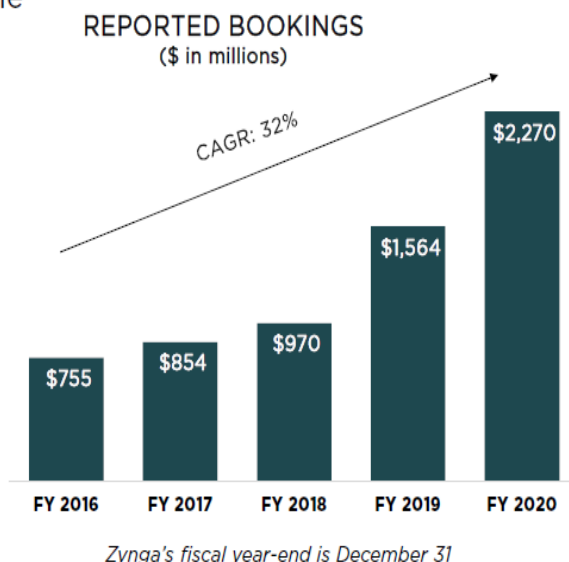
TERMS	<ul style="list-style-type: none"> Take-Two to acquire all outstanding shares of Zynga in a cash and stock transaction valued at \$9.86 per Zynga share¹ Implied total enterprise value of approximately \$12.7 billion Zynga stockholders will receive \$3.50 in cash and \$6.36¹ in shares of Take-Two common stock for each share of Zynga common stock outstanding at the closing of the transaction The purchase price represents a premium of 64% to Zynga's closing share price on January 7th
FINANCING	<ul style="list-style-type: none"> Take-Two has received committed financing of \$2.7 billion Company intends to fund cash component of transaction with cash from its balance sheet and proceeds from new debt issuance
MANAGEMENT & BOARD	<ul style="list-style-type: none"> Zynga's leadership team, including Frank Gibeau, CEO and Bernard Kim, President of Publishing will lead the combined company's mobile studios Take-Two agreed to expand its Board of Directors to 10 members upon closing of the transaction and will add two members from Zynga's Board of Directors
CLOSING/ APPROVALS	<ul style="list-style-type: none"> Expected to be completed in Take-Two's 1QFY2023, ending 6/30/22 Subject to the approval of both Take-Two and Zynga shareholders and the satisfaction of customary closing conditions Terms of the agreement include a 45-day "go-shop" provision

Source: Company report.

Exhibit 5: Zynga Overview

Zynga Company Overview

- Pioneer in social gaming and a leading mobile game publisher
- Highly creative and deeply experienced management team
- Approximately 2,200 of the industry's top creative talent in free-to-play mobile games
- Diverse portfolio of highly-engaging, top-grossing games
- Approximately 183 million mobile MAU
- Successful execution of M&A



ESTABLISHED PORTFOLIO ON A GROWING PLATFORM



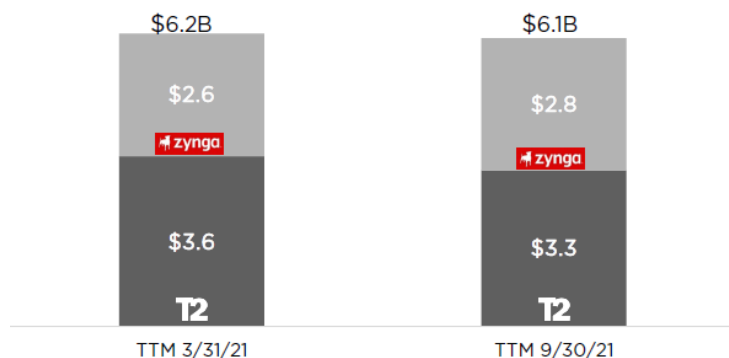
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Source: Company report.

Exhibit 6: Take-Two/Zynga Pro Forma Financial Projections (as of January 2022)

Pro Forma Financials and Expected Growth Rates

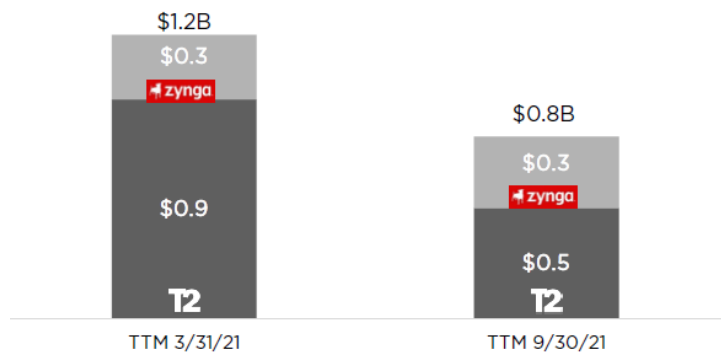
NET BOOKINGS



COMBINED COMPANY EXPECTED GROWTH CAGR*

+14%
FY21A - FY24E
(excluding any Net Bookings opportunities and any future acquisitions)

ADJUSTED UNRESTRICTED OPERATING CASH FLOW*



+13%
FY21A - FY24E
(excluding any Net Bookings opportunities and any future acquisitions; including cost synergies)

Adjusted Unrestricted Operating Cash Flow is defined as GAAP net cash from operating activities, adjusted for changes in restricted cash

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Source: Company report.

Exhibit 7: Take-Two Game Development Pipeline (as of November 2022)

FY23-FY25 PIPELINE DETAILS

	FY 2023 – FY 2025*	TITLES ANNOUNCED TO-DATE
Immersive Core	24	<ul style="list-style-type: none"> • <i>The Quarry</i> (2K) – Launched June 10, 2022 (Fiscal 2023) • <i>NBA 2K23</i> (2K) – Launched September 9, 2022 (Fiscal 2023) • <i>PGA TOUR2K23</i> (2K) – Launched October 14, 2022 (Fiscal 2023) • <i>Marvel's Midnight Suns</i> (2K) – Launching December 2, 2022 (Fiscal 2023) (PS5, Xbox Series X/S, PC); TBA (PS4, Xbox One, Switch) • <i>Kerbal Space Program 2</i> (Private Division) – Early Access Launching February 24, 2023 for PC (Fiscal 2023) • <i>WWE 2K23</i> (2K) – Launching Fiscal 2023
Independent	10	<ul style="list-style-type: none"> • <i>Rollerdrome</i> (Private Division) – Launched August 16, 2022 (Fiscal 2023)
Mobile** (Titles in development & soft launch)	38	<ul style="list-style-type: none"> • <i>Grand Theft Auto: The Trilogy – The Definitive Edition</i> (Rockstar Games) • Several Zynga titles in soft-launch, including <i>Star Wars Hunters</i>
Mid-Core	7	<ul style="list-style-type: none"> • <i>New Tales from the Borderlands</i> (2K) – Launched October 21, 2022 (Fiscal 2023)
New Iterations of Previously Released Titles	8	

Source: Company report.

Exhibit 8: Take-Two Interactive Software Stock Price (Five Years)



Source: <https://bigcharts.marketwatch.com/>

Exhibit 9: Consensus Expectations (as of November 7, 2022)

	Revenue (millions)			EPS	
	2023E	2024E		2023E	2024E
Q1 Jun	\$1,003A		Q1 Jun	\$0.71A	
Q2 Sep	\$1,556E		Q2 Sep	\$1.38E	
Q3 Dec	\$1,699E		Q3 Dec	\$1.46E	
Q4 Mar			Q4 Mar		
Total	\$5,910E	\$7,810E	Total	\$4.88E	\$7.48E

*Quarterly estimates may not add to annual estimates due to variations in contributing estimates and rounding.

Source: Company report, Refinitiv, and Ascendant Capital Markets estimates

FINANCIAL MODEL

Take-Two Interactive Software Inc.

Income Statement (\$ millions)	Jun-20	Sep-20	Dec-20	Mar-21	2021	Jun-21	Sep-21	Dec-21	Mar-22	2022	Jun-22	Sep-22	Dec-22	Mar-23	2023	Jun-23	Sep-23	Dec-23	Mar-24	2024
Fiscal Year End: March 31	1QA	2QA	3QA	4QA	FY-A	1QA	2QA	3QA	4QA	FY-A	1QA	2QA	3QE	4QE	FY-E	1QE	2QE	3QE	4QE	FY-E
Net Sales	996	958	814	785	3,553	711	985	866	846	3,408	1,003	1,505	1,441	1,526	5,474	1,404	1,434	1,717	1,946	6,500
Product costs	54	70	71	41	236	42	68	76	55	240	114	205	242	322	882	70	38	339	171	618
Royalties & Licenses	241	217	200	212	870	196	246	234	197	873	154	221	233	200	808	342	305	300	350	1,297
Software development costs	148	135	65	63	411	61	127	24	100	312	104	89	200	200	593	200	250	200	300	950
Total Cost of Sales	443	422	337	315	1,517	299	441	334	352	1,425	371	515	675	722	2,282	612	593	839	821	2,865
Gross Profits	553	535	478	469	2,036	413	544	533	494	1,984	632	990	766	804	3,192	791	841	878	1,124	3,635
Research and development costs	65	65	76	78	284	79	87	102	95	363	142	194	160	160	656	160	160	160	203	683
Selling and marketing	80	109	134	100	423	94	127	127	133	481	222	325	220	200	966	250	220	220	200	890
General and administrative	89	75	80	83	327	85	87	100	99	372	109	148	180	185	622	200	180	180	185	745
Depreciation and amortization	12	14	14	15	55	12	16	16	16	60	17	21	17	17	72	17	17	17	17	68
Stock options and others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Restructuring and other charges	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Operating Expenses	246	262	304	276	1,088	270	317	345	343	1,275	490	687	577	562	2,316	627	577	577	605	2,386
Income (loss) from operations	307	273	174	194	947	143	227	188	151	708	142	302	189	242	875	164	264	301	519	1,249
Interest expense (income), net	(7)	(1)	2	0	(6)	2	(0)	5	(1)	5	19	34	2	2	58	2	2	2	2	8
Income (loss) before equity in loss of affiliate and income taxes	314	274	172	193	953	141	227	183	152	703	123	268	187	240	818	162	262	299	517	1,241
Equity in loss of affiliate and other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Income (loss) before income taxes	314	274	172	193	953	141	227	183	152	703	123	268	187	240	818	162	262	299	517	1,241
Provision (benefit) for income taxes	50	44	28	31	153	23	36	29	24	112	22	48	34	43	147	29	47	54	93	223
Net income (loss) before extraordinary ite	264	230	144	162	801	119	191	154	127	591	101	220	153	197	670	133	215	245	424	1,017
Net income (loss)	264	230	144	162	801	119	191	154	127	591	101	220	153	197	670	133	215	245	424	1,017
EBITDA	319	287	187	209	1,002	197	243	203	167	810	52	323	206	259	841	181	281	318	536	1,317
Basic Shares	114	114	115	115	115	116	116	115	115	115	141	167	167	167	161	168	168	168	168	168
Diluted Shares	115	115	116	116	116	117	117	117	117	117	141	169	169	169	162	169	169	170	170	170
EPS Basic (pro forma)	\$ 2.32	\$ 2.01	\$ 1.26	\$ 1.41	\$ 6.99	\$ 1.03	\$ 1.65	\$ 1.33	\$ 1.10	\$ 5.11	\$ 0.71	\$ 1.32	\$ 0.92	\$ 1.18	\$ 4.18	\$ 0.79	\$ 1.28	\$ 1.46	\$ 2.52	\$ 6.06
EPS Diluted (pro forma)	\$ 2.30	\$ 2.00	\$ 1.24	\$ 1.40	\$ 6.92	\$ 1.01	\$ 1.63	\$ 1.32	\$ 1.09	\$ 5.06	\$ 0.71	\$ 1.30	\$ 0.91	\$ 1.17	\$ 4.14	\$ 0.79	\$ 1.27	\$ 1.45	\$ 2.50	\$ 6.00

Income Statement Ratios

Gross Margin	56%	56%	59%	60%	57%	58%	55%	61%	58%	58%	63%	66%	53%	53%	58%	56%	59%	51%	58%	56%
Research & Development	7%	7%	9%	10%	8%	11%	9%	12%	11%	11%	14%	13%	11%	10%	12%	11%	11%	9%	10%	11%
Selling and marketing	8%	11%	16%	13%	12%	13%	13%	15%	16%	14%	22%	22%	15%	13%	18%	18%	15%	13%	10%	14%
General and administrative	9%	8%	10%	11%	9%	12%	9%	12%	12%	11%	11%	10%	12%	12%	11%	14%	13%	10%	10%	11%
Operating Profit	31%	29%	21%	25%	27%	20%	23%	22%	18%	21%	14%	20%	13%	16%	16%	12%	18%	18%	27%	19%
Net Income	26%	24%	18%	21%	23%	17%	19%	18%	15%	17%	10%	15%	11%	13%	12%	9%	15%	14%	22%	16%

Y/Y % Change

Revenue	136%	1%	-8%	8%	19%	-29%	3%	6%	8%	-4%	41%	53%	66%	80%	61%	40%	-5%	19%	28%	19%
Gross Margin	126%	-1%	-4%	12%	19%	-25%	2%	11%	5%	-3%	53%	82%	44%	63%	61%	25%	-15%	15%	40%	14%
Research & Development	7%	1%	10%	21%	10%	21%	34%	33%	23%	28%	80%	123%	57%	68%	81%	13%	-18%	0%	27%	4%
Selling and marketing	-6%	-25%	1%	32%	-4%	17%	17%	-5%	33%	14%	136%	156%	73%	51%	101%	13%	-32%	0%	0%	-8%
General and administrative	46%	19%	14%	17%	24%	-4%	16%	26%	20%	14%	28%	69%	80%	87%	67%	83%	22%	0%	0%	20%
Operating Profit	1051%	6%	-18%	-2%	36%	-53%	-17%	8%	-22%	-25%	-1%	33%	1%	61%	24%	16%	-13%	60%	114%	43%
Net Income	746%	4%	-22%	-5%	32%	-55%	-17%	6%	-22%	-26%	-15%	15%	0%	55%	14%	32%	-2%	60%	115%	52%

Source: Company reports and Ascendant Capital Markets estimates

Take-Two Interactive Software Inc.

Balance Sheet (\$ millions)	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Fiscal Year End: March 31	1QA	2QA	3QA	4QA	1QA	2QA	3QA	4QA	1QA	2QA	3QE	4QE	1QE	2QE	3QE	4QE
ASSETS																
Cash	1,404	1,345	1,650	1,423	1,401	857	987	1,732	847	956	1,277	1,643	1,699	2,086	2,019	2,612
Short term investments	881	1,041	773	1,309	1,135	1,441	1,479	820	459	348	348	348	348	348	348	348
Restricted cash	468	450	764	539	653	754	267	360	535	592	592	592	592	592	592	592
A/R - net	685	788	581	553	487	804	648	579	634	831	640	509	624	478	763	649
Inventories	19	27	27	18	11	13	12	13			135	144	122	119	168	164
Software development	32	74	49	43	15	55	48	81	64	89	89	89	89	89	89	89
Prepaid royalties / licenses / COGS	14	15	20	16	11	13	15	12			-	-	-	-	-	-
Prepaid expenses and other current assets	184	192	297	321	300	307	250	273	497	435	435	435	435	435	435	435
Investments											-	-	-	-	-	-
Deferred tax asset											-	-	-	-	-	-
Total Current Assets	3,687	3,932	4,160	4,221	4,014	4,243	3,705	3,871	3,036	3,251	3,516	3,759	3,909	4,145	4,413	4,888
Fixed assets, net	129	133	135	149	225	231	236	242	300	334	334	334	334	334	334	334
Prepaid Royalties / licenses											-	-	-	-	-	-
Capitalized software development costs, net	410	403	437	491	607	621	738	756	828	908	908	908	908	908	908	908
Investments		290	99	99	103	103	103	103	109		-	-	-	-	-	-
Intangibles	47	126	118	122	306	288	274	266	5,455	5,363	5,363	5,363	5,363	5,363	5,363	5,363
Goodwill	390	521	535	535	646	663	680	675	7,227	6,872	6,872	6,872	6,872	6,872	6,872	6,872
Deferred tax asset	121	118	127	90	78	75	78	74	107	116	116	116	116	116	116	116
Other assets, net	586	313	356	322	335	394	544	559	683	650	650	650	650	650	650	650
TOTAL ASSETS	\$5,369	\$5,836	\$5,966	\$6,028	\$6,314	\$6,619	\$6,358	\$6,546	\$ 17,745	\$ 17,493	\$ 17,758	\$ 18,001	\$ 18,151	\$ 18,387	\$ 18,655	\$ 19,130
LIABILITIES AND SHAREHOLDERS' EQUITY																
Accounts payable	56	85	100	71	67	83	101	126	200	163	11	57	74	96	118	168
Accrued expenses	1,137	1,149	1,220	1,204	1,242	1,500	1,026	1,075	1,602	1,734	1,734	1,734	1,734	1,734	1,734	1,734
Lines of credit/short term debt									350	350	350	350	350	350	350	350
Deferred revenue	928	1,063	991	928	825	952	911	865	1,080	1,165	1,165	1,165	1,165	1,165	1,165	1,165
Other current liabilities (taxes payable and other)	28	29	31	32	31	32	34	39	55	56	56	56	56	56	56	56
Total Current Liabilities	2,149	2,326	2,342	2,235	2,165	2,567	2,072	2,105	3,287	3,467	3,315	3,361	3,378	3,400	3,422	3,473
Note payable, net of current portion									2,936	2,936	2,936	2,936	2,936	2,936	2,936	2,936
Deferred revenue	33	33	32	37	51	52	68	71	22	29	29	29	29	29	29	29
Other liabilities	537	576	437	424	466	531	552	561	1,839	1,628	1,628	1,628	1,628	1,628	1,628	1,628
Total Liabilities	2,718	2,935	2,811	2,696	2,683	3,149	2,692	2,737	8,083	8,059	7,907	7,954	7,970	7,992	8,015	8,065
Preferred Stock																
Common stock	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
Additional paid-in capital	2,152	2,285	2,328	2,289	2,418	2,475	2,541	2,597	8,617	8,761	8,761	8,761	8,761	8,761	8,761	8,761
Accumulated other comprehensive loss	(52)	(35)	(6)	(9)	(3)	(20)	(35)	(57)	(121)	(236)	(236)	(236)	(236)	(236)	(236)	(236)
Retained earnings	1,371	1,470	1,652	1,871	2,023	2,034	2,178	2,289	2,185	1,928	2,081	2,278	2,411	2,626	2,871	3,295
Treasury stock	(821)	(821)	(821)	(821)	(821)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)
Other					12					264	264	264	264	264	264	264
Total Shareholders' Equity	2,651	2,901	3,155	3,332	3,631	3,470	3,666	3,810	9,662	9,434	9,850	10,047	10,180	10,395	10,640	11,065
TOTAL LIABILITIES AND EQUITY	\$5,369	\$5,836	\$5,966	\$6,028	\$6,314	\$6,619	\$6,358	\$6,546	\$ 17,745	\$ 17,493	\$ 17,758	\$ 18,001	\$ 18,151	\$ 18,387	\$ 18,655	\$ 19,130
Activity Ratios																
A/R Days Sales Outstanding	62	74	64	63	62	74	67	62	57	50	40	30	40	30	40	30
Reserves as a % of Gross A/R									#DIV/0!	#DIV/0!	20.0x	20.0x	20.0x	20.0x	20.0x	20.0x
Inventory turnover	91.0x	62.7x	50.4x	71.1x	103.9x	140.2x	114.2x	106.3x			20.0x	20.0x	20.0x	20.0x	20.0x	20.0x
A/P Days Payable	11	18	27	20	20	17	27	32	49	28	45	50	45	40	45	50
Book & Cash Value (per share)																
Book Value per Share (diluted)	\$23.06	\$25.14	\$27.17	\$28.65	\$31.00	\$29.71	\$31.41	\$32.62	\$ 68.53	\$ 55.95	\$ 58.36	\$ 59.45	\$ 60.17	\$ 61.36	\$ 62.74	\$ 65.16
Net Cash per Share (diluted)	\$23.94	\$24.57	\$27.45	\$28.12	\$27.23	\$26.13	\$23.42	\$24.93	\$ (10.24)	\$ (8.24)	\$ (6.33)	\$ (4.16)	\$ (3.82)	\$ (1.54)	\$ (1.93)	\$ 1.57

Source: Company reports and Ascendant Capital Markets estimates

Take-Two Interactive Software Inc.

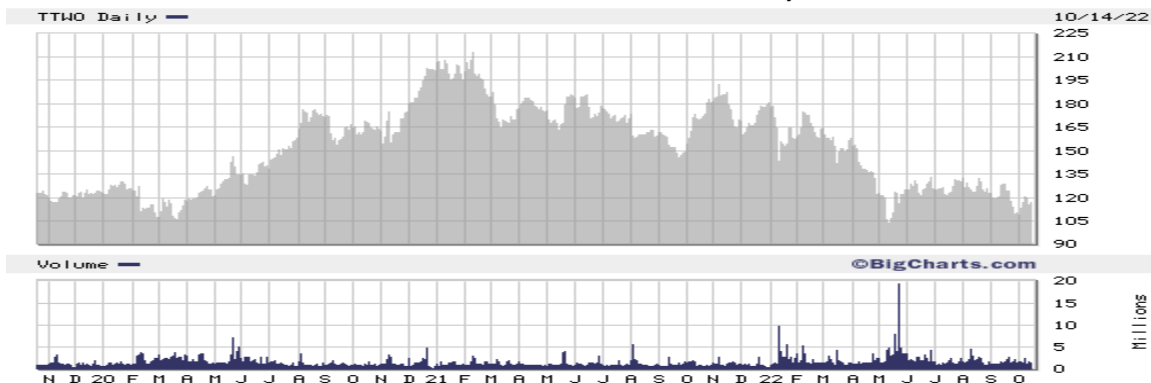
Cash Flow Statement (\$ millions)	Jun-20	Sep-20	Dec-20	Mar-21	2021	Jun-21	Sep-21	Dec-21	Mar-22	2022	Jun-22	Sep-22	Dec-22	Mar-23	2023	Jun-23	Sep-23	Dec-23	Mar-24	2024	
Fiscal Year End: March 31	1QA	2QA	3QA	4QA	FY-A	1QA	2QA	3QA	4QA	FY-A	1QA	2QA	3QE	4QE	FY-E	1QE	2QE	3QE	4QE	FY-E	
Cash flows from operating activities:																					
Net Income	89	99	182	219	589	152	10	144	111	418	(104)	(257)	153	197	(11)	133	215	245	424	1,017	
Adjustment to reconcile net income (loss) to net cash used:					0					0					0					0	0
Depreciation and amortization	12	14	150	(88)	89	28	34	(17)	16	61	135	(15)	17	17	155	17	17	17	17	68	
Loss on impairment of securities					0					0					0					0	0
Non-recurring impairment charge					0					0					0					0	0
Loss on disposal of fixed assets					0					0					0					0	0
Change in deferred tax asset				11	11				8	8					0					0	0
Gain on sale of subsidiary				(42)	(42)					0					0					0	0
Loss on early extinguishment of debt					0				7	7					0					0	0
Foreign currency loss					0					0					0					0	0
Equity in loss of affiliate					0					0					0					0	0
Recognition of deferred tax asset					0					0					0					0	0
Provision for doubtful accounts					0					0					10	5	5	5	5	20	0
Amortization of software development & licenses	62	42	(104)	144	144	25	71	17	106	218	48	391			438					0	
Provision for inventory					0					0					0					0	0
Other Charges	(3)	0	(38)	46	6	14	53	54	(6)	115	(14)	60	(5)	(5)	37	(5)	(5)	(5)	(5)	(20)	
Amortization of various expenses and discounts					0					0					61					0	0
Deferred revenue	154	131	(76)	(56)	152	(95)	127	(22)	(42)	(31)	(160)	102			(57)					0	
Issuance of compensatory stock	53	45	41	(29)	110	49	47	46	40	183	44	108	5	5	162	5	5	5	5	20	
Tax benefit from exercise of stock options					0					0					0					0	0
Changes in operating assets and liabilities:																					
Change in restricted cash					0					0					0					0	0
Decrease in accounts receivable	(92)	(98)	209	28	47	75	(318)	157	68	(18)	215	(200)	186	127	328	(120)	141	(290)	109	(160)	
(Increase) decrease in inventories	(0)	(7)	1	9	3	6	(1)	1	(2)	4			(135)	(9)	(144)	22	4	(49)	3	(20)	
Increase in prepaid royalties					0					0					0					0	0
Increase in prepaid expenses and other	81	(15)	(115)	(9)	(59)	18	(53)	(88)	(84)	(208)	(68)	23	0	0	(45)	0	0	0	0	0	
Increase in capitalized software development	(60)	(62)	(22)	(76)	(221)	(86)	(177)	(113)	(78)	(454)	(104)	(149)	0	0	(252)	0	0	0	0	0	
Increase in other assets, net	5	(5)	0	4	5	5	(2)	(3)	0	0					0					0	
Increase in accounts payable	144	38	(67)	(36)	79	(42)	343	(441)	94	(46)	19	19	(152)	46	(68)	16	22	22	51	111	
Increase in accrued expenses					0					0					0					0	0
Increase in due to/from related parties					0					0					0					0	0
Decrease in other liabilities					0			0	(0)	0					0					0	0
Decrease in other current liabilities					0					0					0					0	0
Net cash provided by operating activities	445	181	161	125	912	148	135	(265)	239	258	101	55	74	383	613	73	403	(49)	610	1,037	
Cash flows from investing activities:																					
Purchase of fixed assets	(9)	(16)	(15)	(29)	(69)	(86)	(25)	(22)	(25)	(159)	(43)	(57)	(17)	(17)	(133)	(17)	(17)	(17)	(17)	(68)	
Proceeds from the sale of fixed assets					0					0					0					0	0
Cash restricted for letter of credit					0					0					0					0	0
Cash paid for investments	(232)	(170)	281	(545)	(666)	170	(312)	(49)	661	471	363	128	0	0	492	0	0	0	0	0	
Investment in affiliates, other					0					0					0					0	0
Acquisitions, net cash paid	(7)	(69)	(4)	8	(72)	(98)	(34)	(26)	(16)	(174)	(3,128)	(55)			(3,183)					0	
Cash paid for prior acquisitions					0					1					0					0	0
Net cash used in investing activities	(247)	(255)	262	(566)	(807)	(14)	(370)	(96)	619	139	(2,807)	17	(17)	(17)	(2,825)	(17)	(17)	(17)	(17)	(68)	
Cash flows from financing activities:																					
Proceeds from private placement, net	7		8	(0)	14	9		10	(0)		11				0					0	
Net borrowings under lines of credit					0					0					0					0	0
Proceeds from loan payable					0					0	3,249	140			3,389					0	0
Repayments of loan payable					0		(0)	(0)	(12)	(12)	(1,189)	0	0	0	(1,189)					0	
Proceeds from notes payable					0					0					0					0	0
Proceeds from minority interest					0					0					0					0	0
Proceeds from the exercise of stock options	(39)	(10)	(12)	(11)	(72)	(48)	(5)	(6)	(5)	(64)	(54)	(24)	0	0	(78)	0	0	0	0	0	
Repayment of capital lease obligation					0					0					0					0	0
Dividends to preferred stockholders					0					0					0					0	0
Share buyback					0		(200)			(200)					0					0	0
Tax benefit from exercise of stock options					0					0					0					0	0
Net cash provided by financing activities	(32)	(10)	(5)	(11)	(57)	(39)	(205)	5	(17)	(257)	2,017	117	0	0	2,134	0	0	0	0	0	
Effect of foreign exchange rates	2	7	10	(0)	19	2	(3)	(2)	(3)	(5)	(15)	(22)			(36)					0	0
Net Increase (Decrease) in Cash	168	(76)	428	(453)	67	97	(443)	(358)	838	135	(704)	166	57	366	(115)	56	386	(66)	593	968	
Cash at beginning of period	1,556	1,724	1,647	2,075	1,556	1,623	1,720	1,277	920	1,623	1,758	1,054	1,220	1,277	1,758	1,643	1,699	2,086	2,019	1,643	
Cash at end of period	1,724	1,647	2,075	1,623	1,623	1,720	1,277	920	1,758	1,758	1,054	1,220	1,277	1,643	1,643	1,699	2,086	2,019	2,612	2,612	

Source: Company reports and Ascendant Capital Markets estimates

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Take-Two Interactive Software, Inc.



Source: <https://bigcharts.marketwatch.com/>

Report	Report Date		Price
	Date	Rating	Target
38	2/8/2018	B	132.00
39	5/17/2018	B	128.00
40	8/3/2018	B	148.00
41	11/8/2018	B	150.00
42	2/7/2019	B	120.00
43	5/14/2019	B	123.00
44	8/6/2019	B	144.00
45	11/13/2019	B	146.00
46	2/9/2020	B	139.00
47	6/3/2020	B	154.00
48	8/10/2020	B	200.00
49	12/7/2020	B	220.00
50	2/21/2021	B	228.00
51	6/20/2021	B	216.00
52	9/13/2021	B	198.00
53	1/9/2022	B	191.00
54	4/13/2022	B	172.00
55	6/12/2022	B	160.00
56	9/14/2022	B	159.00

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Risks & Considerations

Risks to attainment of our share price target include changes in demand for the company's products, changes to game release timing, competition, piracy of software, and weaker macroeconomic factors.

Ascendant Capital Markets, LLC Rating System

BUY: We expect the stock to provide a total return of 15% or more within a 12-month period.

HOLD: We expect the stock to provide a total return of negative 15% to positive 15% within a 12-month period.

SELL: We expect the stock to have a negative total return of more than 15% within a 12-month period.

Total return is defined as price appreciation plus dividend yield.

Ascendant Capital Markets, LLC Rating System

Prior to January 31, 2014, ASCM used the following rating system:

Strong Buy: We expect the stock to provide a total return of 30% or more within a 12-month period.

Buy: We expect the stock to provide a total return of between 10% and 30% within a 12-month period.

Neutral: We expect the stock to provide a total return of between minus 10% and plus 10% within a 12-month period.

Sell: We expect the stock to provide a total return of minus 10% or worse within a 12-month period.

Speculative Buy: This rating is reserved for companies we believe have tremendous potential, but whose stocks are illiquid or whose equity market capitalizations are very small, often in the definition of a nano cap (below \$50 million in market cap). In general, for stocks ranked in this category, we expect the stock to provide a total return of 50%

or more within a 12-month period. However, because of the illiquid nature of the stock's trading and/or the nano cap nature of the investment, we caution that these investments may not be suitable for all parties.

Total return is defined as price appreciation plus dividend yield.

Ascendant Capital Markets, LLC Distribution of Investment Ratings (as of October 7, 2022)

Rating	Count	Percent	Investment Banking Services Past 12 months	
			Count	Percent
Buy	43	98%	17	40%
Hold	0	0%	0	0%
Sell	1	2%	0	0%
Total	44	100%	17	39%

Other Important Disclosures

Our analysts use various valuation methodologies including discounted cash flow, price/earnings (P/E), enterprise value/EBITDAS, and P/E to growth rate, among others. Risks to our price targets include failure to achieve financial results, product risk, regulatory risk, general market conditions, and the risk of a change in economic conditions.

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