



Take-Two Interactive Software, Inc.

Q4 Preview: Q3 beat and raised FY22 outlook. Zynga acquisition significant positive and should drive strong growth. Lowering P/T to \$172.

COMPANY UPDATE

Rating: BUY

Ticker: TTWO

Price: \$138.36

Target: \$172.00
(from \$191)

Q4 Preview: Take-Two is expected to report its Q4 FY22 (ending March) results in mid-May (exact date TBA).

Q3 beat: Take-Two recently (on February 7) reported its fiscal Q3 FY22 (ending December) results. Revenue was \$866 million (+6% y-o-y), compared to our estimate of \$900 million and consensus of \$880 million. Pro forma EPS was \$1.32, compared to our estimate of \$1.12 and consensus of \$1.18. Q3 guidance was for revenue of \$800 - 850 million, and for EPS of \$0.95 - 1.05.

More strong results: The company reported another strong quarter as it continues to benefit from people staying at home and playing more video games even as economies are reopening. Digitally-delivered revenue was \$762 million (88% of revenues), led by *NBA 2K*, *GTA Online* and *GTA V*; *RDR 2* and *Red Dead Online*; *Borderlands 3*; mobile games; and *Sid Meier's Civilization VI*. *NBA 2K22* (launched in Q2) has sold in 8 million units to-date.

GTA and RDR2 games continue to sell well: Take-Two's blockbuster game *GTA V* (released 9/2013) has sold-in ~160 million units to date and continues to sell really well. *Red Dead Redemption 2* (released 10/2018) has sold-in 43 million units so far. *GTA Online* and *Red Dead Online* also continues to perform very well.

Raised FY22 guidance: Management raised FY22 guidance for revenue to \$3.37 - 3.42 billion, from \$3.30 - 3.40 billion, and for EPS to \$4.75 - 4.85 from \$4.20 - 4.45.

Adjusting estimates: We are adjusting our FY22 estimates for revenue to \$3.44 billion, from \$3.48 billion, and for EPS to \$4.89 from \$4.60.

Zynga acquisition positive: In January, 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. This deal is expected to close in Q1 FY23. Zynga is a leading social and mobile game publisher with ~2,200 employees and over ~\$2 billion in annual revenue.

FY22 outlook conservative: We believe that while FY22 guidance is lower than FY21's results, it is conservative and the company will likely exceed them just like it has the past several years. We believe that the strong momentum for its games will continue through the end of the pandemic and economies reopening in FY22.

We remain positive: We believe it is likely that continued strong growth in digital (along with its higher profitability), and continued strength with *Borderlands 3*, *NBA 2K*, *RDR2*, *GTA* and *GTA Online* will help drive FY22 results.

Big games pipeline: In FY22, Take-Two has ~21 titles planned for release, and expects to deliver over 40 titles across fiscal 2023 and 2024 so its pipeline of games is large and strong.

Expect continued share price growth: With strong growth expected in digital, key games expected for over the next several years, and continued positive console transition cycle, we believe a favorable valuation is likely to drive continued growth in share price.

Current valuation attractive: Maintaining our BUY rating, but lowering our 12-month price target to \$172 from \$191, which reflects a target P/E of 28x our FY23 EPS estimate of \$6.15, which is above the peer group median to reflect its higher 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.

United States
Interactive Entertainment

April 13, 2022

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Stock Data

Exchange:	NasdaqGS
52-week Range:	\$133.54-195.83
Shares Outstanding (million):	117
Market cap (\$million):	\$16,188
EV (\$million):	\$13,455
Debt (\$million):	\$0
Cash (\$million):	\$2,733
Avg. Daily Trading Vol. (\$million):	\$348
Float (million shares):	103
Short Interest (million shares):	7
Dividend, annual (yield):	\$0 (NA%)

Revenues (US\$ million)

	<u>2022E</u> (Cur.)	<u>2022E</u> (Old)	<u>2023E</u> (Cur.)	<u>2023E</u> (Old)
Q1 Jun	711A		679E	
Q2 Sep	985A		759E	
Q3 Dec	866A	900E	1,542E	
Q4 Mar	<u>880E</u>	<u>879E</u>	<u>721E</u>	
Total	3,442E	3,475E	3,700E	
EV/Rev	3.9x		3.6x	

Earnings per Share (pro forma)

	<u>2022E</u> (Cur.)	<u>2022E</u> (Old)	<u>2023E</u> (Cur.)	<u>2023E</u> (Old)
Q1 Jun	1.01A		0.72E	0.73E
Q2 Sep	1.63A		1.01E	
Q3 Dec	1.32A	1.12E	3.65E	3.64E
Q4 Mar	<u>0.93E</u>	<u>0.84E</u>	<u>0.77E</u>	
Total	\$4.89E	\$4.60E	\$6.15E	
P/E	28x		22x	

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 11.

OVERVIEW

- Take-Two recently (on February 7) reported its fiscal Q3 2022 (ending December) results.
- Revenue was \$866 million (+6% y-o-y), compared to our estimate of \$900 million and consensus of \$880 million.
- Pro forma EPS was \$1.32, compared to our estimate of \$1.12 and consensus of \$1.18.
- Q3 guidance was for revenue of \$800 - 850 million, and for EPS of \$0.95 – 1.05.
- Management raised FY22 guidance for revenue to \$3.37 – 3.42 billion, from \$3.30 - 3.40 billion, and for EPS to \$4.75 – 4.85 from \$4.20 – 4.45.
- Initial Q4 guidance is for revenue of \$808 - 858 million, and for EPS of \$0.78 – 0.88. This compares with prior implied Q4 guidance for revenue of \$754 - 904 million, and for EPS of \$0.55 – 0.90.
- We are adjusting our FY22 estimates for revenue to \$3.44 billion, from \$3.48 billion, and for EPS to \$4.89 from \$4.60.
- We are maintaining our FY23 estimates for revenue of \$3.70 billion, and for EPS of \$6.15.

ADDITIONAL DETAILS

- Gross profit for the quarter was \$533 million, compared with our estimate of \$482 million.
- Gross margin for the quarter was 61%, versus 59% last year and our estimate of 54%.
- Operating expenses were \$345 million, compared with our estimate of \$323 million.
- Operating income was \$188 million, compared with our estimate of \$159 million.
- Pro forma net income was \$154 million, compared with our estimate of \$131 million.

In June, Take-Two acquired mobile games developer NordeusWed for ~\$378 million in cash, stock, and potential earn-out. NordeusWed's top games are its *Top Eleven* soccer management game with over 240 million registered users. NordeusWed has 180 employees and is based in Belgrade, Serbia.

In July, Take-Two acquired privately-held Dynamixyz, a world-class leader in video-based facial animation services. Terms were not disclosed.

In January, 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. This deal is expected to close in Q1 FY23. Zynga is a leading social and mobile game publisher with ~2,200 employees and over ~\$2 billion in annual revenue.

The company's balance sheet remains strong with \$2.7 billion in cash and no debt (~\$23/share in cash), compared with \$3.1 billion in cash and no debt as of September. In April, Take-Two just 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: Take-Two's Acquisition of Zynga (announced January 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

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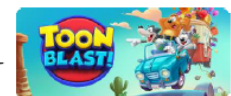
Take-Two + Zynga Form a Leader in Interactive Entertainment

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

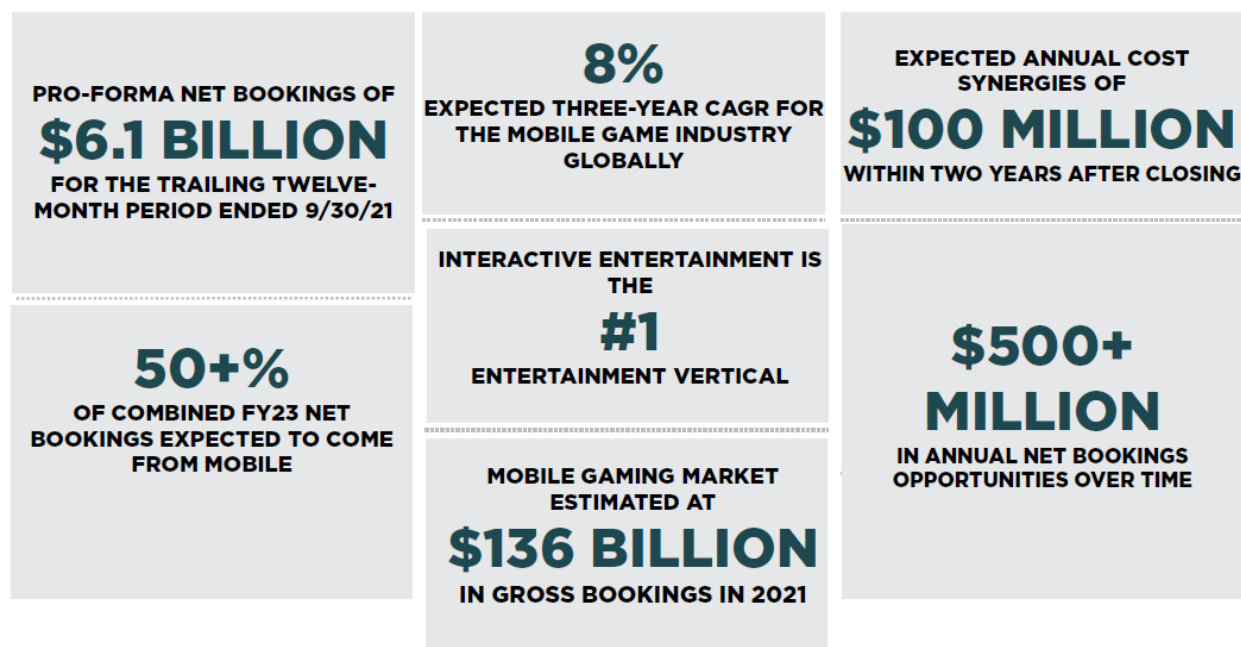
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Source: Company report.

Exhibit 2: 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

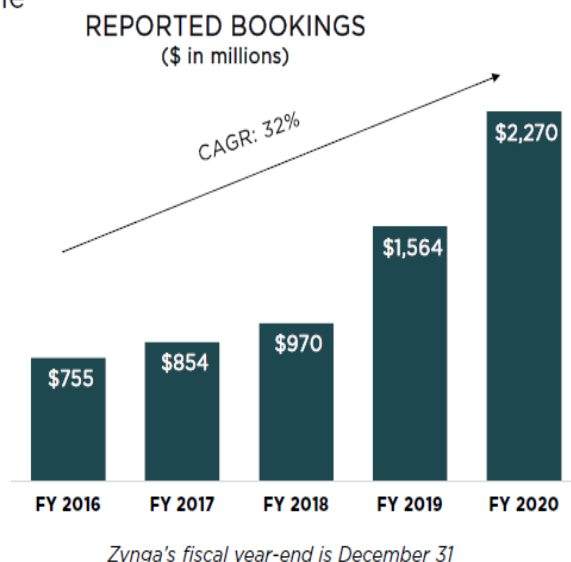
TERMS	<ul style="list-style-type: none"> Take-Two to acquire all outstanding shares of Zynga in a cash and stock transaction valued at \$9.86 per Zynga share¹ Implied total enterprise value of approximately \$12.7 billion Zynga stockholders will receive \$3.50 in cash and \$6.36¹ in shares of Take-Two 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 3: 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



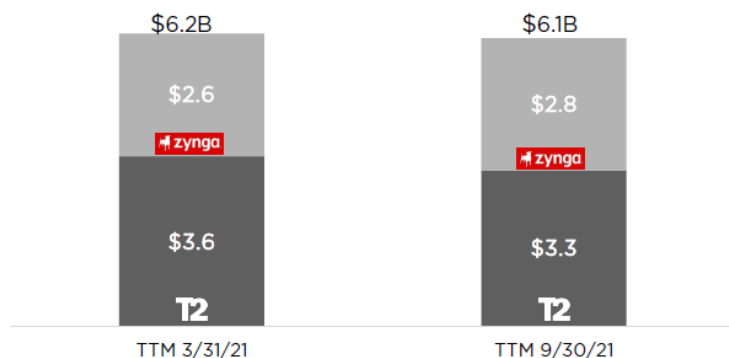
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Source: Company report.

Exhibit 4: Take-Two/Zynga Pro Forma Financial Projections

Pro Forma Financials and Expected Growth Rates

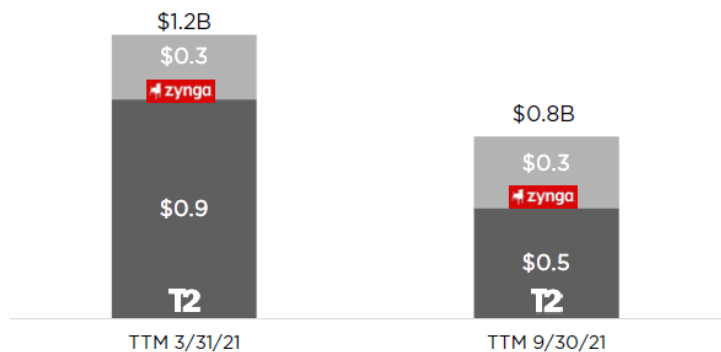
NET BOOKINGS



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



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

Exhibit 6: Consensus Expectations (as of February 7, 2022)

	Revenue (millions)			EPS	
	2022E	2023E		2022E	2023E
Q1 Jun	\$711A		Q1 Jun	\$1.01A	
Q2 Sep	\$985A		Q2 Sep	\$1.63A	
Q3 Dec	\$880E		Q3 Dec	\$1.18E	
Q4 Mar	\$918E		Q4 Mar	\$1.15E	
Total	\$3,491E	\$4,010E	Total	\$4.81E	\$6.65E

*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-19	Sep-19	Dec-19	Mar-20	2020	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
Fiscal Year End: March 31	1QA	2QA	3QA	4QA	FY-A	1QA	2QA	3QA	4QA	FY-A	1QA	2QA	3QA	4QE	FY-E	1QE	2QE	3QE	4QE	FY-E
Net Sales	422	951	888	729	2,990	996	958	814	785	3,553	711	985	866	880	3,442	679	759	1,542	721	3,700
Product costs	32	85	88	39	244	54	70	71	41	236	42	68	76	207	392	141	151	337	169	798
Royalties & Licenses	85	169	215	110	579	241	217	200	212	870	196	246	234	175	851	126	125	210	120	581
Software development costs	61	155	88	160	463	148	135	65	63	411	61	127	24	115	327	80	110	108	100	398
Total Cost of Sales	177	408	391	309	1,285	443	422	337	315	1,517	299	441	334	497	1,570	347	386	655	389	1,777
Gross Profits	245	543	497	420	1,705	553	535	478	469	2,036	413	544	533	383	1,872	332	373	887	332	1,923
Research and development costs	61	64	70	64	259	65	65	76	78	284	79	87	102	69	336	70	70	110	67	317
Selling and marketing	85	146	133	76	440	80	109	134	100	423	94	127	127	115	463	80	80	150	75	385
General and administrative	61	63	70	71	264	89	75	80	83	327	85	87	100	55	328	70	70	100	70	310
Depreciation and amortization	11	12	12	12	48	12	14	14	15	55	12	16	16	8	52	8	8	8	8	32
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	218	285	284	223	1,010	246	262	304	276	1,088	270	317	345	247	1,179	228	228	368	220	1,044
Income (loss) from operations	27	258	213	197	695	307	273	174	194	947	143	227	188	136	693	104	145	519	112	879
Interest expense (income), net	(11)	(8)	(11)	(9)	(39)	(7)	(1)	2	0	(6)	2	(0)	5	5	10	2	2	2	2	8
Income (loss) before equity in loss of affiliate and income taxes	38	266	224	206	733	314	274	172	193	953	141	227	183	131	683	102	143	517	110	871
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	38	266	224	206	733	314	274	172	193	953	141	227	183	131	683	102	143	517	110	871
Provision (benefit) for income taxes	6	45	38	35	125	50	44	28	31	153	23	36	29	22	111	17	24	88	19	148
Net income (loss) before extraordinary items	31	221	186	171	609	264	230	144	162	801	119	191	154	109	572	84	118	429	91	723
Net income (loss)	31	221	186	171	609	264	230	144	162	801	119	191	154	109	572	84	118	429	91	723
EBITDA	38	270	225	210	742	319	287	187	209	1,002	155	243	203	144	745	112	153	527	120	911
Basic Shares	113	113	113	113	113	114	114	115	115	115	116	116	115	115	116	116	116	116	116	116
Diluted Shares	114	114	114	114	114	115	115	116	116	116	117	117	117	117	117	117	117	118	118	117
EPS Basic (pro forma)	\$ 0.28	\$ 1.95	\$ 1.64	\$ 1.51	\$ 5.38	\$ 2.32	\$ 2.01	\$ 1.26	\$ 1.41	\$ 6.99	\$ 1.03	\$ 1.65	\$ 1.33	\$ 0.94	\$ 4.95	\$ 0.73	\$ 1.02	\$ 3.69	\$ 0.78	\$ 6.23
EPS Diluted (pro forma)	\$ 0.27	\$ 1.93	\$ 1.63	\$ 1.50	\$ 5.33	\$ 2.30	\$ 2.00	\$ 1.24	\$ 1.40	\$ 6.92	\$ 1.01	\$ 1.63	\$ 1.32	\$ 0.93	\$ 4.89	\$ 0.72	\$ 1.01	\$ 3.65	\$ 0.77	\$ 6.15

Income Statement Ratios

Gross Margin	58%	57%	56%	58%	57%	56%	56%	59%	60%	57%	58%	55%	61%	44%	54%	49%	49%	58%	46%	52%
Research & Development	14%	7%	8%	9%	9%	7%	7%	9%	10%	8%	11%	9%	12%	8%	10%	10%	9%	7%	9%	9%
Selling and marketing	20%	15%	15%	10%	15%	8%	11%	16%	13%	12%	13%	13%	15%	13%	13%	12%	11%	10%	10%	10%
General and administrative	14%	7%	8%	10%	9%	9%	8%	10%	11%	9%	12%	9%	12%	6%	10%	10%	9%	6%	10%	8%
Operating Profit	6%	27%	24%	27%	23%	31%	29%	21%	25%	27%	20%	23%	22%	15%	20%	15%	19%	34%	16%	24%
Net Income	7%	23%	21%	23%	20%	26%	24%	18%	21%	23%	17%	19%	18%	12%	17%	12%	16%	28%	13%	20%

Y/Y % Change

Revenue	46%	63%	-43%	49%	2%	136%	1%	-8%	8%	19%	-29%	3%	6%	12%	-3%	-5%	-23%	78%	-18%	7%
Gross Margin	40%	53%	-27%	44%	13%	126%	-1%	-4%	12%	19%	-25%	2%	11%	-18%	-8%	-20%	-32%	66%	-13%	3%
Research & Development	36%	18%	30%	33%	29%	7%	1%	10%	21%	10%	21%	34%	33%	-11%	18%	-11%	-19%	8%	-3%	-6%
Selling and marketing	59%	63%	-14%	8%	20%	-6%	-25%	1%	32%	-4%	17%	17%	-5%	15%	10%	-15%	-37%	18%	-35%	-17%
General and administrative	9%	16%	22%	14%	15%	46%	19%	14%	17%	24%	-4%	16%	26%	-34%	0%	-18%	-20%	0%	27%	-5%
Operating Profit	142%	75%	-48%	95%	4%	1051%	6%	-18%	-2%	36%	-53%	-17%	8%	-30%	-27%	-28%	-36%	176%	-18%	27%
Net Income	134%	82%	-44%	93%	9%	746%	4%	-22%	-5%	32%	-55%	-17%	6%	-33%	-29%	-29%	-38%	179%	-16%	26%

Source: Company reports and Ascendant Capital Markets estimates

Take-Two Interactive Software Inc.

Balance Sheet (\$ millions)	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23
Fiscal Year End: March 31	1QA	2QA	3QA	4QA	1QA	2QA	3QA	4QA	1QA	2QA	3QA	4QE	1QE	2QE	3QE	4QE
ASSETS																
Cash	985	762	1,285	1,358	1,404	1,345	1,650	1,423	1,401	857	987	1,471	1,672	1,782	2,198	2,284
Short term investments	558	743	699	644	881	1,041	773	1,309	1,135	1,441	1,479	1,479	1,479	1,479	1,479	1,479
Restricted cash	627	668	458	547	468	450	764	539	653	754	267	267	267	267	267	267
A/R - net	353	859	647	593	685	788	581	553	487	804	648	293	-	14	27	63
Inventories	24	39	24	19	19	27	27	18	11	13	12	99	-	4	4	21
Software development	18	62	60	40	32	74	49	43	15	55	48	48	48	48	48	48
Prepaid royalties / licenses / COGS	37	36	33	20	14	15	20	16	11	13	15	15	15	15	15	15
Prepaid expenses and other current assets	220	219	229	274	184	192	297	321	300	307	250	250	250	250	250	250
Investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deferred tax asset	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Current Assets	2,821	3,388	3,435	3,493	3,687	3,932	4,160	4,221	4,014	4,243	3,705	3,922	3,731	3,858	4,289	4,426
Fixed assets, net	126	129	127	132	129	133	135	149	225	231	236	236	236	236	236	236
Prepaid Royalties / licenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capitalized software development costs, net	634	528	442	402	410	403	437	491	607	621	738	738	738	738	738	738
Investments	-	-	-	-	-	290	99	99	103	103	103	103	103	103	103	103
Intangibles	68	61	57	51	47	126	118	122	306	288	274	274	274	274	274	274
Goodwill	391	384	392	386	390	521	535	535	646	663	680	680	680	680	680	680
Deferred tax asset	109	110	111	117	121	118	127	90	78	75	78	78	78	78	78	78
Other assets, net	216	214	316	367	586	313	356	322	335	394	544	544	544	544	544	544
TOTAL ASSETS	\$4,366	\$4,815	\$4,880	\$4,949	\$5,369	\$5,836	\$5,966	\$6,028	\$6,314	\$6,619	\$6,358	\$6,575	\$6,384	\$6,511	\$6,941	\$7,079
LIABILITIES AND SHAREHOLDERS' EQUITY																
Accounts payable	55	115	82	66	56	85	100	71	67	83	101	276	-	9	11	57
Accrued expenses	1,039	1,251	1,148	1,170	1,137	1,149	1,220	1,204	1,242	1,500	1,026	1,026	1,026	1,026	1,026	1,026
Lines of credit/short term debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deferred revenue	826	902	842	778	928	1,063	991	928	825	952	911	911	911	911	911	911
Other current liabilities (taxes payable and	22	22	24	25	28	29	31	32	31	32	34	34	34	34	34	34
Total Current Liabilities	1,942	2,290	2,096	2,039	2,149	2,326	2,342	2,235	2,165	2,567	2,072	2,248	1,972	1,981	1,982	2,029
Note payable, net of current portion	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deferred revenue	22	25	33	28	33	33	32	37	51	52	68	68	68	68	68	68
Other liabilities	316	318	348	343	537	576	437	424	466	531	552	552	552	552	552	552
Total Liabilities	2,280	2,633	2,478	2,410	2,718	2,935	2,811	2,696	2,683	3,149	2,692	2,868	2,591	2,601	2,602	2,649
Preferred Stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common stock	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Additional paid-in capital	2,026	2,060	2,100	2,135	2,152	2,285	2,328	2,289	2,418	2,475	2,541	2,541	2,541	2,541	2,541	2,541
Accumulated other comprehensive loss	(44)	(54)	(38)	(58)	(52)	(35)	(6)	(9)	(3)	(20)	(35)	(35)	(35)	(35)	(35)	(35)
Retained earnings	924	996	1,159	1,282	1,371	1,470	1,652	1,871	2,023	2,034	2,178	2,287	2,371	2,490	2,918	3,010
Treasury stock	(821)	(821)	(821)	(821)	(821)	(821)	(821)	(821)	(821)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)	(1,021)
Other	-	-	-	-	-	-	-	-	12	3,470	3,666	3,708	3,792	3,910	4,339	4,430
Total Shareholders' Equity	2,086	2,182	2,402	2,539	2,651	2,901	3,155	3,332	3,631	3,470	3,666	3,708	3,792	3,910	4,339	4,430
TOTAL LIABILITIES AND EQUITY	\$4,366	\$4,815	\$4,880	\$4,949	\$5,369	\$5,836	\$5,966	\$6,028	\$6,314	\$6,619	\$6,358	\$6,575	\$6,384	\$6,511	\$6,941	\$7,079
Activity Ratios																
A/R Days Sales Outstanding	75	81	66	73	62	74	64	63	62	74	67	30	40	30	40	30
Reserves as a % of Gross A/R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inventory turnover	29.8x	41.5x	64.0x	64.7x	91.0x	62.7x	50.4x	71.1x	103.9x	140.2x	114.2x	20.0x	20.0x	20.0x	20.0x	20.0x
A/P Days Payable	28	25	19	19	11	18	27	20	20	17	27	50	45	40	45	50
Book & Cash Value (per share)																
Book Value per Share (diluted)	\$18.34	\$19.13	\$21.02	\$22.20	\$23.06	\$25.14	\$27.17	\$28.65	\$31.00	\$29.71	\$31.41	\$31.71	\$32.38	\$33.33	\$36.93	\$37.64
Net Cash per Share (diluted)	\$19.08	\$19.05	\$21.37	\$22.28	\$23.94	\$24.57	\$27.45	\$28.12	\$27.23	\$26.13	\$23.42	\$27.52	\$29.19	\$30.07	\$33.57	\$34.24

Source: Company reports and Ascendant Capital Markets estimates

Take-Two Interactive Software Inc.

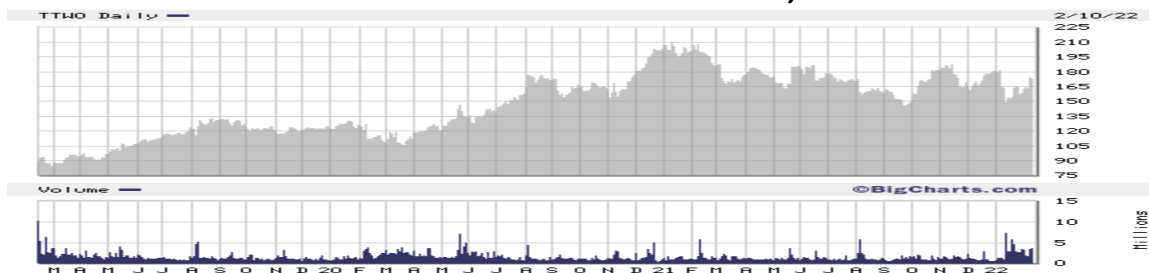
Cash Flow Statement (\$ millions)	Jun-19	Sep-19	Dec-19	Mar-20	2020	Jun-20	Sep-20	Dec-20	Mar-21	2021	Jun-21	Sep-21	Dec-21	Mar-22	2022	Jun-22	Sep-22	Dec-22	Mar-23	2023	
Fiscal Year End: March 31	1QA	2QA	3QA	4QA	FY-A	1QA	2QA	3QA	4QA	FY-A	1QA	2QA	3QA	4QE	FY-E	1QE	2QE	3QE	4QE	FY-E	
Cash flows from operating activities:																					
Net Income	46	72	164	123	404	89	99	182	219	589	152.3	10.3	144.5	109	416	84	118	429	91	723	
Adjustment to reconcile net income (loss) to net cash used:					0					0					0					0	
Depreciation and amortization	17	6	12	12	48	12	14	150	(88)	89	27.7	34.4	(17.4)	8	53	8	8	8	8	32	
Loss on impairment of securities					0					0					0					0	
Non-recurring impairment charge					0					0					0					0	
Loss on disposal of fixed assets					0					0					0					0	
Change in deferred tax asset					0				11	11					0					0	
Gain on sale of subsidiary					0				(42)	(42)					0					0	
Loss on early extinguishment of debt					0					0					0					0	
Foreign currency loss					0					0					0					0	
Equity in loss of affiliate					0					0					0					0	
Recognition of deferred tax asset					0					0					0					0	
Provision for doubtful accounts					0					0					5	5	5	5	5	20	
Amortization of software development & licenses	30	53	49	57	189	62	42	(104)	144	144	24.5	70.8	16.8		112					0	
Provision for inventory					0					0					0					0	
Other Charges	1	3	(3)	7	9	(3)	0	(38)	46	6	13.8	53.3	54.2	(5)	116	(5)	(5)	(5)	(5)	(20)	
Amortization of various expenses and discounts					0					0					0					0	
Deferred revenue	(16)	82	(36)	(86)	(55)	154	131	(76)	(56)	152	(94.7)	127.3	(22.1)		11					0	
Issuance of compensatory stock	57	56	63	81	258	53	45	41	(29)	110	49.1	47.1	46.3	5	148	5	5	5	5	20	
Tax benefit from exercise of stock options				(3)																	
Changes in operating assets and liabilities:																					
Change in restricted cash					0					0					0					0	
Decrease in accounts receivable	44	(507)	213	54	(195)	(92)	(98)	209	28	47	74.7	(317.5)	157.1	350	264	288	(19)	(19)	(41)	210	
(Increase) decrease in inventories	4	(16)	16	5	8	(0)	(7)	1	9	3	6.3	(1.2)	0.8	(88)	(82)	99	(4)	(0)	(16)	79	
Increase in prepaid royalties					0					0					0					0	
Increase in prepaid expenses and other current assets	(131)	0	(84)	(45)	(260)	81	(15)	(115)	(9)	(59)	17.6	(53.4)	(88.0)	0	(124)	0	0	0	0	0	
Increase in capitalized software development	(57)	20	18	(30)	(48)	(60)	(62)	(22)	(76)	(221)	(85.9)	(177.3)	(113.2)	0	(376)	0	0	0	0	0	
Increase in other assets, net	16	(16)	0	32	32	5	(5)	0	4	5	4.9	(1.8)	(3.0)	0	0	0	0	0	0	0	
Increase in accounts payable	97	282	(117)	38	300	144	38	(67)	(36)	79	(42.0)	343.3	(440.7)	175	36	(276)	9	1	46	(219)	
Increase in accrued expenses					0					0					0					0	
Increase in due to/from related parties					0					0					0					0	
Decrease in other liabilities					0					0				0.1	0	0	0	0	0	0	
Decrease in other current liabilities					0					0					0	0	0	0	0	0	
Net cash provided by operating activities	109	36	296	246	686	445	181	161	125	912	148.2	135.4	(264.5)	559	578	209	118	424	94	845	
Cash flows from investing activities:																					
Purchase of fixed assets	(10)	(16)	(9)	(19)	(53)	(9)	(16)	(15)	(29)	(69)	(86)	(25)	(22)	(8)	(141)	(8)	(8)	(8)	(8)	(32)	
Proceeds from the sale of fixed assets					0					0					0					0	
Cash restricted for letter of credit					0					0					0					0	
Cash paid for investments	185	(187)	48	51	97	(232)	(170)	281	(545)	(666)	170	(312)	(49)	0	(190)	0	0	0	0	0	
Investment in affiliates, other					0					0					0					0	
Acquisitions, net cash paid	(9)		(29)	(2)	(40)	(7)	(69)	(4)	8	(72)	(98)	(34)	(26)		(157)	0	0	0	0	0	
Cash paid for prior acquisitions					0					0					1	0	0	0	0	0	
Net cash used in investing activities	167	(203)	9	31	4	(247)	(255)	262	(566)	(807)	(13.9)	(370.2)	(95.7)	(8)	(488)	(8)	(8)	(8)	(8)	(32)	
Cash flows from financing activities:																					
Proceeds from private placement, net					0	7		8	(0)	14	9		10		0	0	0	0	0	0	
Net borrowings under lines of credit					0					0					0	0	0	0	0	0	
Proceeds from loan payable					0					0					0	0	0	0	0	0	
Repayments of loan payable					0					0			(0)	(0)	(0)	0	0	0	0	0	
Proceeds from notes payable					0					0					0	0	0	0	0	0	
Proceeds from minority interest					0					0					0	0	0	0	0	0	
Proceeds from the exercise of stock options	(52)	(9)	1	(17)	(77)	(39)	(10)	(12)	(11)	(72)	(48)	(5)	(6)		(59)	0	0	0	0	0	
Repayment of capital lease obligation					0					0					0	0	0	0	0	0	
Dividends to preferred stockholders					0					0					0	0	0	0	0	0	
Share buyback					0					0					(200)	0	0	0	0	0	
Tax benefit from exercise of stock options					0					0					0	0	0	0	0	0	
Net cash provided by financing activities	(52)	(9)	1	(17)	(77)	(32)	(10)	(5)	(11)	(57)	(39)	(205)	5	0	(240)	0	0	0	0	0	
Effect of foreign exchange rates	(3)	(5)	6	(9)	(11)	2	7	10	(0)	19	2	(3)	(2)		(3)					0	
Net Increase (Decrease) in Cash	220	(182)	312	251	601	168	(76)	428	(453)	67	97	(443)	(358)	551	(152)	201	110	416	86	813	
Cash at beginning of period	955	1,175	993	1,305	955	1,556	1,724	1,647	2,075	1,556	1,623	1,720	1,277	920	1,623	1,471	1,672	1,782	2,198	1,471	
Cash at end of period	1,175	993	1,305	1,556	1,556	1,724	1,647	2,075	1,623	1,623	1,720	1,277	920	1,471	1,471	1,672	1,782	2,198	2,284	2,284	

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	Rating	Price 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

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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 January 15, 2022)

Rating	Count	Percent	Investment Banking Services Past 12 months	
			Count	Percent
Buy	40	98%	16	40%
Hold	0	0%	0	0%
Sell	1	2%	0	0%
Total	41	100%	16	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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