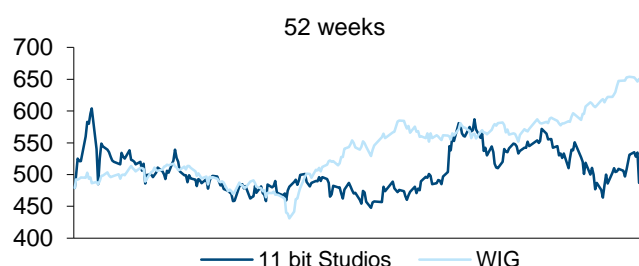


11 bit Studios

Accumulate

PLN mn	2020	2021e	2022e	2023e
Net sales	87.4	64.3	82.2	273.3
EBITDA	51.1	29.8	34.3	175.9
EBIT	40.8	19.5	22.8	122.8
Net result after min.	37.4	18.4	20.9	112.3
EPS (PLN)	15.83	7.78	8.83	47.50
CEPS (PLN)	20.18	12.14	13.69	69.94
BVPS (PLN)	69.75	79.20	89.79	139.05
Div./share (PLN)	0.00	0.00	0.00	0.00
EV/EBITDA (x)	20.2	36.4	32.2	5.6
P/E (x)	29.9	62.9	55.4	10.3
P/CE (x)	23.5	40.3	35.8	7.0
Dividend Yield	0.0%	0.0%	0.0%	0.0%



Performance	12M	6M	3M	1M
in PLN	2.2%	7.8%	-5.8%	0.5%

Share price (PLN) close as of 15/06/2021	489.6	Reuters	11B.WA	Free float	81.9%
Number of shares (mn)	2.4	Bloomberg	11B.PW	Shareholders	zegorz Miechowski (7.5%)
Market capitalization (PLN mn / EUR mn)	1,157 / ,255	Div. Ex-date		Aviva Investors TFI	(6.04%)
Enterprise value (PLN mn / EUR mn)	1,084 / ,239	Target price	574.6	Homepage:	www.11bitstudios.com

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Solid triggers finally ahead, frosty August incoming?

After years of prolonged silence, 11 bit studios is just about to release more details on the first project from its own portfolio, while the snowy trailer, and the fact that Project Eleanor (Frostpunk team) is the most advanced in terms of development, suggests a **great likelihood of a Frostpunk 2 announcement**, which we believe would be **warmly welcomed by investors**, due to the **4mn player base of the first Frostpunk and its likely high conversion, at least based on the 90% share of positive reviews on Steam**. It is important to note that the company's direct focus on increasing franchise recognition, including mobile version development, the successful Kickstarter campaign for the board game, freshly announced Anthology and DLCs port to consoles, all seems supportive for potential FP 2 monetization. **The key issue with the 11b investment case**, i.e. limited details on planned releases coupled with no short-term triggers **seems to be coming to an end**.

The recent decision on scaling up the own production budget led us to increase our forecast regarding **Eleanor/Dolly/P8 development cost up to PLN 40/20/40mn** vs. the PLN 20/12/30mn expected previously. The Eleanor budget is hence **2x higher** than we assumed earlier and **3.3x higher** than the PLN 12mn allocated for Frostpunk, which suggests that Frostpunk 2 may even be two times bigger than the previous version.

Based on our model, 11 bit may deliver **avg. earnings of PLN 73-74mn** in 2021-25/30e. Such earnings imply a **P/E ratio excl. cash of 14.6-14.7x** vs. >20x in terms of peers, which we see as attractive. **Hence, we maintain our Accumulate rating and increase our TP to PLN 574.6 per share.**

Valuation

We use an adjusted DCF model in our valuation, based on our forecasts for 2021-25. We have smoothed out and equated all FCFs using a 3% annual growth rate. WACC is used as a discount rate for the given periods. The terminal value FCF is equal to the previous year's FCF increased by 3%. For comparison purposes, we also present peer multiples and a TP implied by the 5Y average P/E multiple and 2021-25e average earnings.

Assumptions:

- Project Eleanor expected to release in 2Q23e, with 1.7mn copies to be sold in 2023e and 3.9mn in the first 4 years.
- Project Dolly expected at the end of 2023, with 0.7mn copies to be sold in 2023e and 2.5mn copies in the first 4 years.
- Project 8 expected in 2Q24e, with 1.7mn copies to be sold in the release year and 4.1mn in the first 4 years.
- Next releases from own portfolio expected in 2028/29e, i.e. 5 years after Eleanor/Dolly debut.
- Vitrol projects to be first to release in the publishing segment (3Q22e, 2.5mn copies expected in the first 4 years). Botin and Ava expected to release in 2023e with 4 years sales potential of approx. 1.6mn units.
- Foxhole project completely removed from our model.
- USD/PLN at 3.8 in 2021-30e, EUR/PLN of EUR 4.5 in same period.
- 2021-25 CAPEX expected at PLN 237mn vs. PLN 171mn previously.
- Operating profit reduced by PLN 4.2mn non-cash incentive scheme provision. So as not to calculate again for the incentive scheme, we are using a non-diluted number of common shares.

Peer group comparison

	P/E			EV/EBITDA		
	2021E	2022E	2023E	2021E	2022E	2023E
Activision Blizzard Inc	25.9	22.2	21.0	17.9	15.5	14.6
Electronic Arts Inc	26.6	23.6	20.9	17.3	14.9	13.9
Ubisoft Entertainment	24.1	24.5	20.1	6.7	8.3	6.7
Take-Two Interactive Software	30.8	39.0	26.0	20.9	26.5	18.5
Konami	32.2	22.1	19.7	13.8	10.6	9.5
Capcom	32.5	24.3	22.0	23.7	18.0	16.4
Naver Corp	5.4	35.3	31.2	34.2	27.9	23.8
Tencent	33.4	26.9	22.0	23.0	19.4	16.5
Square Enix	27.5	20.7	18.9	11.3	10.3	9.3
Paradox Interactive	35.0	26.3	24.2	16.2	12.1	11.3
Embracer Group	46.6	33.3	33.4	32.6	16.7	15.6
Playtika	26.5	20.5	18.1	11.8	11.0	10.1
Ten Square Games	14.6	12.4	10.7	12.0	10.0	8.7
PlayWay	20.8	18.6	17.1	14.3	12.8	11.7
CD Projekt	31.7	27.3	32.0	20.4	19.8	19.5
Huuuge	23.9	14.2	10.6	9.2	7.8	6.9
Median	27.1	23.9	20.9	16.7	13.9	12.8
11 bit studios	62.9	55.4	10.3	36.4	32.2	5.6
<i>Premium/discount</i>	<i>133%</i>	<i>131%</i>	<i>-51%</i>	<i>118%</i>	<i>132%</i>	<i>-56%</i>
Implied value (PLN/share)	200.0	200.9	943.2	229.7	212.5	969.1

Source: Bloomberg, Erste Group Research

Target price per share implied by average 5Y P/E (mcap excl. cash) ratio and 2021-25e avg. earnings (in PLN/share)

		2021-25e average earnings								
		33	43	53	63	73	83	93	103	113
Average 5y P/E ratio	30.00	456	583	710	837	964	1 091	1 218	1 344	1 471
	29.00	442	565	687	810	933	1 055	1 178	1 301	1 423
	28.00	428	546	665	783	902	1 020	1 138	1 257	1 375
	27.00	414	528	642	756	870	985	1 099	1 213	1 327
	26.00	399	509	619	729	839	949	1 059	1 169	1 279
	25.00	385	491	597	702	808	914	1 020	1 126	1 231
	24.00	371	473	574	676	777	879	980	1 082	1 183
	23.00	357	454	551	649	746	843	941	1 038	1 135
	22.00	343	436	529	622	715	808	901	994	1 087
	21.00	329	417	506	595	684	773	862	950	1 039
	20.00	314	399	484	568	653	737	822	907	991
	19.00	300	381	461	541	622	702	783	863	943
	18.00	286	362	438	515	591	667	743	819	895
	17.00	272	344	416	488	560	632	703	775	847
	16.00	258	325	393	461	529	596	664	732	799
	15.00	244	307	371	434	497	561	624	688	751
	14.00	229	289	348	407	466	526	585	644	703
13.00	215	270	325	380	435	490	545	600	655	
12.00	201	252	303	353	404	455	506	556	607	
11.00	187	233	280	327	373	420	466	513	559	
10.00	173	215	257	300	342	384	427	469	511	

Source: Erste Group Research

Potential valuation upside (+) / downside (-) based on 2021-25 avg. earnings and avg. 5Y P/E ratio (mcap excl. cash)

		2021-25e average earnings								
		33	43	53	63	73	83	93	103	113
Fair P/E ratio	30.00	-7%	19%	45%	71%	97%	123%	149%	175%	201%
	29.00	-10%	15%	40%	65%	90%	116%	141%	166%	191%
	28.00	-13%	12%	36%	60%	84%	108%	133%	157%	181%
	27.00	-16%	8%	31%	54%	78%	101%	124%	148%	171%
	26.00	-18%	4%	27%	49%	71%	94%	116%	139%	161%
	25.00	-21%	0%	22%	43%	65%	87%	108%	130%	151%
	24.00	-24%	-3%	17%	38%	59%	79%	100%	121%	142%
	23.00	-27%	-7%	13%	33%	52%	72%	92%	112%	132%
	22.00	-30%	-11%	8%	27%	46%	65%	84%	103%	122%
	21.00	-33%	-15%	3%	22%	40%	58%	76%	94%	112%
	20.00	-36%	-19%	-1%	16%	33%	51%	68%	85%	102%
	19.00	-39%	-22%	-6%	11%	27%	43%	60%	76%	93%
	18.00	-42%	-26%	-10%	5%	21%	36%	52%	67%	83%
	17.00	-44%	-30%	-15%	0%	14%	29%	44%	58%	73%
	16.00	-47%	-34%	-20%	-6%	8%	22%	36%	49%	63%
	15.00	-50%	-37%	-24%	-11%	2%	15%	28%	40%	53%
	14.00	-53%	-41%	-29%	-17%	-5%	7%	19%	32%	44%
13.00	-56%	-45%	-34%	-22%	-11%	0%	11%	23%	34%	
12.00	-59%	-49%	-38%	-28%	-17%	-7%	3%	14%	24%	
11.00	-62%	-52%	-43%	-33%	-24%	-14%	-5%	5%	14%	
10.00	-65%	-56%	-47%	-39%	-30%	-22%	-13%	-4%	4%	

Source: Erste Group Research

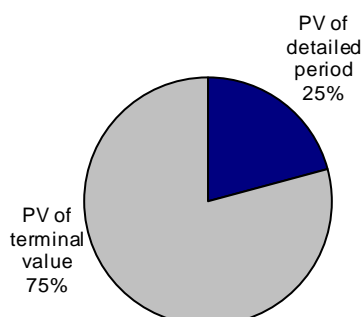
WACC calculation

	2021e	2022e	2023e	2024e	2025e	Term. value
						Normalized
Risk free rate	2.0%	2.0%	2.0%	2.0%	2.0%	4.0%
Equity risk premium	6.0%	6.0%	6.0%	6.0%	6.0%	5.0%
Beta	1.0	1.0	1.0	1.0	1.0	1.0
Cost of equity	8.0%	8.0%	8.0%	8.0%	8.0%	9.0%
Cost of debt	4.0%	4.0%	4.0%	4.0%	4.0%	6.0%
Nominal tax rate	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
After-tax cost of debt	3.2%	3.2%	3.2%	3.2%	3.2%	4.9%
Equity weight	100%	100%	100%	100%	100%	100.0%
WACC	8.0%	8.0%	8.0%	8.0%	8.0%	9.0%

DCF valuation

(PLN mn)	2021e	2022e	2023e	2024e	2025e	Normalized
<i>Sales growth</i>	-26.5%	27.9%	232.6%	28.7%	-39.0%	3.0%
EBIT	19.5	22.8	122.8	146.7	62.2	88.4
<i>EBIT margin</i>	30.3%	27.8%	44.9%	41.7%	29.0%	40.0%
<i>Effective tax rate</i>	8.2%	10.4%	8.8%	8.4%	9.0%	10.0%
Taxes on EBIT	-1.6	-2.4	-10.8	-12.4	-5.6	-8.8
NOPLAT	17.9	20.5	112.0	134.4	56.6	79.6
+ Depreciation	10.3	11.5	53.0	83.1	54.7	55.0
<i>Capital expenditures / Depreciation</i>	427.6%	495.9%	94.3%	45.7%	87.7%	100.0%
+/- Change in working capital	-0.5	-0.6	-6.8	-2.8	4.9	0.1
<i>Chg. working capital / chg. Sales</i>	2.1%	-3.6%	-3.6%	-3.6%	-3.6%	1.0%
- Capital expenditures	-44.0	-57.0	-50.0	-38.0	-48.0	-55.0
Free cash flow to the firm	-16.3	-25.7	108.2	176.7	68.2	79.6
Adjusted free cash flow to the firm	55.7	58.8	62.0	65.5	69.1	71.2
<i>Terminal value growth</i>						3.0%
Terminal value						1 293.8
Discounted free cash flow - Dec 31 2020	51.6	50.4	49.3	48.1	47.1	880.6
Enterprise value - Dec 31 2020	1 127.0					
Minorities	0.0					
Non-operating assets	0.0					
Net debt	-85.3					
Other adjustments	0.0					
Equity value - Dec 31 2020	1 212.3					
Number of shares outstanding (mn)	2.4					
Cost of equity	8.0%					
12M target price per share (PLN)	574.6					
Current share price (PLN)	489.6					
<i>Up/Downside</i>	17.4%					

Enterprise value breakdown



Adjusted DCF calculation method

	2021e	2022e	2023e	2024e	2025e	
	-16.3	-25.7	108.2	176.7	68.2	FCFF
					311.2	Sum of FCFF
					0.00	Check
	55.7	58.8	62.0	65.5	69.1	Adjusted FCFF
					311.2	Sum of FCFF
		3%	3%	3%	3%	growth rate

Erste Group Research – Company Report
11 bit Studios | Technology Software | Poland
18 June 2021

Income Statement	2018	2019	2020	2021e	2022e	2023e
(IAS, PLN mn, 31/12)	31/12/2018	31/12/2019	31/12/2020	31/12/2021	31/12/2022	31/12/2023
Net sales	82.78	71.68	87.43	64.27	82.18	273.35
Invent. changes + capitalized costs	0.00	0.00	0.00	0.00	0.00	0.00
Total revenues	82.78	71.68	87.43	64.27	82.18	273.35
Other operating revenues	0.00	0.00	0.00	0.00	0.00	0.00
Material costs	-16.75	-26.83	-26.22	-19.07	-31.25	-74.15
Personnel costs	-12.97	-12.29	-6.85	-13.13	-14.30	-20.52
Other operating expenses	-1.63	-2.26	-3.30	-2.30	-2.30	-2.80
EBITDA	51.44	30.29	51.06	29.77	34.33	175.88
Depreciation/amortization	-4.49	-6.42	-10.27	-10.29	-11.49	-53.04
EBIT	46.95	23.87	40.79	19.48	22.83	122.83
Financial result	1.16	1.16	-0.14	0.56	0.47	0.30
Extraordinary result	0.00	0.00	0.00	0.00	0.00	0.00
EBT	48.11	25.03	40.65	20.04	23.31	123.13
Income taxes	-10.56	-3.32	-3.29	-1.64	-2.43	-10.84
Result from discontinued operations	0.00	0.00	0.00	0.00	0.00	0.00
Minorities and cost of hybrid capital	0.00	0.00	0.00	0.00	0.00	0.00
Net result after minorities	37.55	21.71	37.36	18.39	20.88	112.28
Balance Sheet	2018	2019	2020	2021e	2022e	2023e
(IAS, PLN mn, 31/12)						
Intangible assets	17.14	24.87	41.86	74.92	119.80	116.16
Tangible assets	18.73	24.04	26.89	27.55	28.17	28.76
Financial assets	0.35	0.90	1.65	1.65	1.65	1.65
Total fixed assets	36.22	49.82	70.40	104.11	149.61	146.57
Inventories	0.00	0.00	0.00	0.00	0.00	0.00
Receivables and other current assets	16.70	23.64	19.81	17.01	19.46	45.65
Other assets	0.00	0.00	0.00	0.00	0.00	0.00
Cash and cash equivalents	56.34	82.21	96.13	82.14	60.03	171.71
Total current assets	73.04	105.85	115.94	99.15	79.50	217.37
TOTAL ASSETS	109.26	155.67	186.34	203.26	229.11	363.93
Shareholders'equity	89.91	119.74	164.65	187.20	212.24	328.68
Minorities	0.00	0.00	0.00	0.00	0.00	0.00
Hybrid capital and other reserves	0.00	0.00	0.00	0.00	0.00	0.00
Pension and other LT personnel accruals	0.00	0.00	0.00	0.00	0.00	0.00
LT provisions	0.00	0.00	0.00	0.00	0.00	0.00
Interest-bearing LT debts	11.34	10.43	9.50	8.50	7.50	6.50
Other LT liabilities	0.68	0.83	0.97	0.97	0.97	0.97
Total long-term liabilities	12.02	11.26	10.47	9.47	8.47	7.47
Interest-bearing ST debts	1.45	1.30	1.36	0.00	0.00	0.00
Other ST liabilities	5.88	23.36	9.86	6.59	8.40	27.78
Total short-term liabilities	7.33	24.67	11.22	6.59	8.40	27.78
TOTAL LIAB. , EQUITY	109.26	155.67	186.34	203.26	229.11	363.93
Cash Flow Statement	2018	2019	2020	2021e	2022e	2023e
(IAS, PLN mn, 31/12)						
Cash flow from operating activities	39.05	41.64	37.66	32.37	35.89	162.68
Cash flow from investing activities	-55.57	-49.34	-34.42	-44.00	-57.00	-50.00
Cash flow from financing activities	12.60	-1.67	6.01	-2.36	-1.00	-1.00
CHANGE IN CASH , CASH EQU.	-3.93	-9.37	9.25	-13.99	-22.11	111.68
Margins & Ratios	2018	2019	2020	2021e	2022e	2023e
Sales growth	324.6%	-13.4%	22.0%	-26.5%	27.9%	232.6%
EBITDA margin	62.1%	42.3%	58.4%	46.3%	41.8%	64.3%
EBIT margin	56.7%	33.3%	46.7%	30.3%	27.8%	44.9%
Net profit margin	45.4%	30.3%	42.7%	28.6%	25.4%	41.1%
ROE	55.2%	20.7%	26.3%	10.5%	10.5%	41.5%
ROCE	116.7%	42.6%	57.5%	18.4%	14.9%	68.9%
Equity ratio	82.3%	76.9%	88.4%	92.1%	92.6%	90.3%
Net debt	-43.6	-70.5	-85.3	-73.6	-52.5	-165.2
Working capital	65.7	81.2	104.7	92.6	71.1	189.6
Capital employed	47.0	50.1	80.3	114.5	160.7	164.4
Inventory turnover	nm	nm	nm	nm	nm	nm

Source: Company data, Erste Group estimates