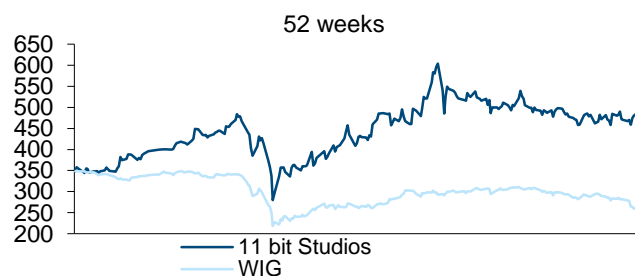


# 11 bit Studios

from Hold to Accumulate

PLN mn	2019	2020e	2021e	2022e
Net sales	71.7	85.9	59.7	83.7
EBITDA	30.3	53.2	27.7	30.1
EBIT	23.9	42.9	19.6	23.4
Net result after min.	21.7	40.6	19.6	22.5
EPS (PLN)	8.98	15.85	7.65	8.78
CEPS (PLN)	11.64	19.86	10.82	11.40
BVPS (PLN)	49.54	67.82	75.48	84.26
Div./share (PLN)	0.00	0.00	0.00	0.00
EV/EBITDA (x)	29.6	21.8	41.7	38.3
P/E (x)	44.5	31.5	65.3	56.9
P/CE (x)	34.4	25.1	46.2	43.8
Dividend Yield	0.0%	0.0%	0.0%	0.0%
Share price (PLN) close as of 06/11/2020				499.5
Number of shares (mn)				2.4
Market capitalization (PLN mn / EUR mn)				1,207 / ,268
Enterprise value (PLN mn / EUR mn)				1,161 / ,257



Performance	12M	6M	3M	1M
in PLN	43.5%	16.2%	-0.7%	7.7%
Reuters	11B.WA	Free float	86.3%	
Bloomberg	11B.PW	Shareholders	zegorz Miechowski (7.5%)	
Div. Ex-date				Aviva Investors TFI (6.18%)
Target price	567.5	Homepage:	www.11bitstudios.com	

## Attractive for LT, but upcoming quarters still quiet

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We perceive 11 bit studios as fundamentally undervalued, given its solid prospects beyond 2022e and potential improvement of the mid-cycle earnings outlook. We estimate that the company should be able to release three own franchises in 2023-24e and deliver outstanding earnings of PLN 117-165mn, bringing the 2022-24e 3y avg. P/E ratio down to as low as 12.6x. 2025-27e might be quiet again, as 11 bit may need 3-4 years for each team to develop a sequel or completely new franchise, but its extensive back portfolio should compensate for the decline in profits to a significantly greater degree than currently. That suggests that the next mid-cycle downturn may be less painful than it is now, which should not go unnoticed.

On the other hand, it sounds fair to say that the sharp earnings decline we expect in 2021e and another 2.5 years without an own game release are not good triggers for immediate sentiment improvement. We thus suspect that investors may become more and more optimistic about the company, if more details about the new franchises are published, and especially when official release dates are revealed, which we suspect is possible in 2022e, at the earliest. It is worth pointing out that our forecasts are extra cautious, considering the company's track record of not meeting market expectations regarding release dates, so surprises in both directions are possible.

Taking all of that into account, **we recommend Accumulate for 11 bit studios with a target price of PLN 567.5 per share**, primarily due to its reasonable valuation and outstanding prospects for earnings improvement since 2023e, limited by an uninspiring outlook of earnings deterioration and no vital triggers in the short term.

## Valuation

We used a 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%. As a secondary tool, we used a peer comparison method. The former method, i.e. the DCF model, reflects the value of 11 bit studios in a more proper way than a peer comparison, as it includes future prospects.

### Assumptions:

Our estimates are based on the following assumptions:

- Risk-free rate of 2.0%, equity premium at 6%, debt premium of 2.0% and beta at 1.0.
- Nominal tax rate of 19% in 2021-25e.
- Blended effective tax rate of 7.7 – 12.2% in 2021-25e.
- IP Box tax rate on own franchises, partial implementation on the publishing games.
- Terminal value growth rate of 3.0%.
- Three releases from own games portfolio scheduled for 2023-24e, detailed volumes assumptions provided in the dedicated section.
- First publishing game expected at the end of 2021e, last expected at the end of 2024e. Detailed volumes assumptions provided in the dedicated section.
- Rising development expenses – up to PLN 50mn annually in 2025e.
- Diluted number of shares used to include upcoming new incentive scheme program. We assumed 6% dilution of the current share capital.

### Peer group comparison

	P/E			EV/EBITDA		
	2020E	2021E	2022E	2020E	2021E	2022E
Activision Blizzard Inc	23.9	23.0	20.2	16.8	16.2	14.8
Electronic Arts Inc	27.5	23.0	21.7	18.2	14.9	14.3
Ubisoft Entertainment	532.5	31.0	27.5	16.0	11.4	10.1
Take-Two Interactive Software	35.8	34.0	30.0	25.5	24.7	20.5
Konami	28.9	26.6	19.8	11.4	10.8	8.6
Capcom	39.3	29.2	25.0	26.1	20.6	16.9
Naver Corp	61.2	39.1	31.1	31.4	24.5	20.6
Tencent	41.0	32.8	27.6	28.6	23.7	19.7
Square Enix	36.4	20.8	20.1	18.4	10.6	10.9
Paradox Interactive	55.7	46.2	42.6	29.0	23.4	22.3
Embracer Group	83.0	37.3	31.0	40.6	19.6	16.6
Ten Square Games	28.0	21.2	20.0	23.9	17.4	15.8
PlayWay	25.2	19.3	17.3	19.0	14.2	12.6
CD Projekt	18.6	22.6	24.7	14.2	17.6	20.3
<b>Median</b>	<b>36.1</b>	<b>27.9</b>	<b>24.9</b>	<b>21.5</b>	<b>17.5</b>	<b>16.2</b>
<b>11 bit studios</b>	<b>31.5</b>	<b>65.3</b>	<b>56.9</b>	<b>21.8</b>	<b>41.7</b>	<b>38.3</b>
Premium/discount	-13%	134%	129%	2%	138%	137%
<b>Implied value (PLN/share)</b>	<b>572.3</b>	<b>213.6</b>	<b>218.4</b>	<b>491.7</b>	<b>237.3</b>	<b>239.4</b>

Source: Bloomberg, Erste Group Research

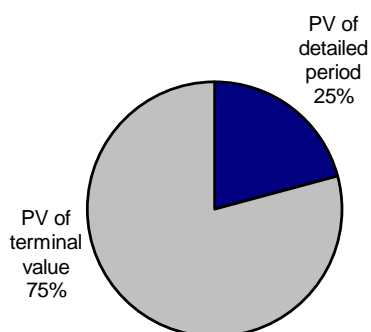
## WACC calculation

	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
<b>Cost of equity</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>9.0%</b>
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%
<b>After-tax cost of debt</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>4.9%</b>
Equity weight	99%	99%	99%	99%	99%	99.5%
<b>WACC</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>9.0%</b>

## DCF valuation

(PLN mn)	2021e	2022e	2023e	2024e	2025e	Normalized
<i>Sales growth</i>	-30.6%	40.2%	199.4%	28.6%	-38.2%	3.0%
EBIT	19.6	23.4	127.0	175.8	75.5	102.6
<i>EBIT margin</i>	32.9%	28.0%	50.7%	54.6%	37.9%	50.0%
<i>Effective tax rate</i>	7.7%	9.6%	12.2%	9.6%	8.8%	10.0%
Taxes on EBIT	-1.5	-2.2	-15.4	-16.8	-6.7	-10.3
<b>NOPLAT</b>	<b>18.1</b>	<b>21.2</b>	<b>111.6</b>	<b>159.0</b>	<b>68.8</b>	<b>92.4</b>
+ Depreciation	8.1	6.7	32.7	49.3	40.9	50.4
<i>Capital expenditures / Depreciation</i>	300.8%	378.4%	93.1%	82.0%	123.3%	100.0%
+/- Change in working capital	0.9	-0.9	-5.9	-2.6	4.4	0.1
<i>Chg. working capital / chg. Sales</i>	-3.6%	-3.6%	-3.6%	-3.6%	-3.6%	1.0%
- Capital expenditures	-24.4	-25.4	-30.4	-40.4	-50.4	-50.4
<b>Free cash flow to the firm</b>	<b>2.7</b>	<b>1.6</b>	<b>107.9</b>	<b>165.3</b>	<b>63.7</b>	<b>92.4</b>
<b>Adjusted free cash flow to the firm</b>	<b>61.0</b>	<b>64.4</b>	<b>68.0</b>	<b>71.9</b>	<b>75.9</b>	<b>78.2</b>
<i>Terminal value growth</i>						3.0%
Terminal value						1 424.7
Discounted free cash flow - Dec 31 2020	56.5	55.3	54.1	52.9	51.7	971.3
<b>Enterprise value - Dec 31 2020</b>	<b>1 241.8</b>					
Minorities	0.0					
Non-operating assets	0.0					
Net debt	-118.7					
Other adjustments	0.0					
<b>Equity value - Dec 31 2020</b>	<b>1 360.4</b>					
Number of shares outstanding (mn)	2.6					
Cost of equity	8.0%					
<b>12M target price per share (PLN)</b>	<b>567.5</b>					
Current share price (PLN)	499.5					
<i>Up/Downside</i>	13.6%					

## Enterprise value breakdown



## Adjusted DCF calculation method

2021e	2022e	2023e	2024e	2025e	
2.7	1.6	107.9	165.3	63.7	FCFF
				341.3	Sum of FCFF
				0.00	Check
61.0	64.4	68.0	71.9	75.9	Adjusted FCFF
	3%	3%	3%	3%	Sum of FCFF growth rate

<b>Income Statement</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020e</b>	<b>2021e</b>	<b>2022e</b>
(IAS, PLN mn, 31/12)	31/12/2017	31/12/2018	31/12/2019	31/12/2020	31/12/2021	31/12/2022
<b>Net sales</b>	<b>19.50</b>	<b>82.78</b>	<b>71.68</b>	<b>85.93</b>	<b>59.67</b>	<b>83.68</b>
Invent. changes + capitalized costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total revenues</b>	<b>19.50</b>	<b>82.78</b>	<b>71.68</b>	<b>85.93</b>	<b>59.67</b>	<b>83.68</b>
Other operating revenues	0.00	0.00	0.00	0.00	0.00	0.00
Material costs	-6.24	-16.75	-26.83	-24.42	-23.86	-44.45
Personnel costs	-2.17	-12.97	-12.29	-6.06	-5.83	-6.85
Other operating expenses	-1.85	-1.63	-2.26	-2.25	-2.25	-2.25
<b>EBITDA</b>	<b>9.24</b>	<b>51.44</b>	<b>30.29</b>	<b>53.21</b>	<b>27.73</b>	<b>30.14</b>
Depreciation/amortization	-1.71	-4.49	-6.42	-10.30	-8.12	-6.72
<b>EBIT</b>	<b>7.52</b>	<b>46.95</b>	<b>23.87</b>	<b>42.91</b>	<b>19.61</b>	<b>23.42</b>
Financial result	-3.23	1.16	1.16	1.08	2.08	2.20
Extraordinary result	0.24	0.00	0.00	0.00	0.00	0.00
<b>EBT</b>	<b>4.53</b>	<b>48.11</b>	<b>25.03</b>	<b>43.99</b>	<b>21.69</b>	<b>25.62</b>
Income taxes	-0.97	-10.56	-3.32	-3.39	-2.07	-3.11
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
<b>Net result after minorities</b>	<b>3.56</b>	<b>37.55</b>	<b>21.71</b>	<b>40.60</b>	<b>19.61</b>	<b>22.50</b>
<b>Balance Sheet</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020e</b>	<b>2021e</b>	<b>2022e</b>
(IAS, PLN mn, 31/12)						
Intangible assets	13.07	17.14	24.87	34.90	52.05	71.56
Tangible assets	0.81	18.73	24.04	23.14	22.28	21.47
Financial assets	0.24	0.35	0.90	0.90	0.90	0.90
<b>Total fixed assets</b>	<b>14.12</b>	<b>36.22</b>	<b>49.82</b>	<b>58.93</b>	<b>75.23</b>	<b>93.93</b>
Inventories	0.00	0.00	0.00	0.00	0.00	0.00
Receivables and other current assets	3.30	16.70	23.64	17.66	14.07	17.35
Other assets	0.00	0.00	0.00	0.00	0.00	0.00
Cash and cash equivalents	31.23	56.34	82.21	128.09	131.34	133.29
<b>Total current assets</b>	<b>34.53</b>	<b>73.04</b>	<b>105.85</b>	<b>145.75</b>	<b>145.41</b>	<b>150.65</b>
<b>TOTAL ASSETS</b>	<b>48.65</b>	<b>109.26</b>	<b>155.67</b>	<b>204.69</b>	<b>220.64</b>	<b>244.58</b>
<b>Shareholders'equity</b>	<b>46.22</b>	<b>89.91</b>	<b>119.74</b>	<b>173.78</b>	<b>193.39</b>	<b>215.90</b>
<b>Minorities</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Hybrid capital and other reserves</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Pension and other LT personnel accruals</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>LT provisions</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Interest-bearing LT debts	0.00	11.34	10.43	9.43	8.43	7.43
Other LT liabilities	0.76	0.68	0.83	0.83	0.83	0.83
<b>Total long-term liabilities</b>	<b>0.76</b>	<b>12.02</b>	<b>11.26</b>	<b>10.26</b>	<b>9.26</b>	<b>8.26</b>
Interest-bearing ST debts	0.00	1.45	1.30	0.00	0.00	0.00
Other ST liabilities	1.66	5.88	23.36	20.64	17.98	20.41
<b>Total short-term liabilities</b>	<b>1.66</b>	<b>7.33</b>	<b>24.67</b>	<b>20.64</b>	<b>17.98</b>	<b>20.41</b>
<b>TOTAL LIAB. , EQUITY</b>	<b>48.65</b>	<b>109.26</b>	<b>155.67</b>	<b>204.69</b>	<b>220.64</b>	<b>244.58</b>
<b>Cash Flow Statement</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020e</b>	<b>2021e</b>	<b>2022e</b>
(IAS, PLN mn, 31/12)						
Cash flow from operating activities	8.07	39.05	41.64	54.16	28.67	28.37
Cash flow from investing activities	-10.03	-55.57	-49.34	-19.41	-24.41	-25.41
Cash flow from financing activities	1.03	12.60	-1.67	11.14	-1.00	-1.00
<b>CHANGE IN CASH , CASH EQU.</b>	<b>-0.94</b>	<b>-3.93</b>	<b>-9.37</b>	<b>45.88</b>	<b>3.25</b>	<b>1.95</b>
<b>Margins &amp; Ratios</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020e</b>	<b>2021e</b>	<b>2022e</b>
Sales growth	-29.1%	324.6%	-13.4%	19.9%	-30.6%	40.2%
EBITDA margin	47.4%	62.1%	42.3%	61.9%	46.5%	36.0%
EBIT margin	38.6%	56.7%	33.3%	49.9%	32.9%	28.0%
Net profit margin	18.2%	45.4%	30.3%	47.2%	32.9%	26.9%
ROE	8.1%	55.2%	20.7%	27.7%	10.7%	11.0%
ROCE	42.4%	116.7%	42.6%	74.7%	27.9%	25.4%
Equity ratio	95.0%	82.3%	76.9%	84.9%	87.7%	88.3%
Net debt	-31.2	-43.6	-70.5	-118.7	-122.9	-125.9
Working capital	32.9	65.7	81.2	125.1	127.4	130.2
Capital employed	15.8	47.0	50.1	56.0	71.3	90.9
Inventory turnover	nm	nm	nm	nm	nm	nm

Source: Company data, Erste Group estimates

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<b>Accumulate</b>	+10% < target price < +20%
<b>Hold</b>	0% < target price < +10%
<b>Reduce</b>	-10% < target price < 0%
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