



Dom Maklerski BDM S.A.

CREATIVEFORGE GAMES

ANALYTICAL REPORT - SUMMARY

We are starting our recommendation for CreativeForge Games with a BUY recommendation with a target price of PLN 39,0 per share, that is 17% above the current market price. The roots of the company go back to 2011, but it was 2019 that had the greatest impact on the current shape of the studio, which saw staff reshuffles, strategy changes and tightening of cooperation with the PlayWay group. From that moment on, the company began to grow dynamically, working on many interesting projects at the same time. The most important game currently being produced is "Stargate: Timekeepers" - a title set in the popular „Stargate universe”, whose publisher will be Slitherine (famous, among others from titles such as Warhammer 40k). The game's gameplay presentation is planned for the turn of September / October. We expect its premiere to take place in 1H'22. In addition, CFG can boast of other projects with great sales potential - "House Flipper City" (a spin-off of the best-selling games of the PLW group), "Builders of Greece" (a production similar to "BoE" - one of the most important games of the PLW group, which CFG is a co-publisher) and "Aircraft Carrier Survival", which will be the first to make its debut on the market. We expect that in Q4'21 this will be reflected in the company's results. We forecast that in 2021 the company will become profitable and generate a net profit of PLN 0,7 million.

CreativeForge Games is a studio founded in 2011 that focuses on the production and publishing of games. In 2019, it underwent a thorough transformation - the replacement of almost all employees with the president at the helm, strengthening cooperation with the PLW group and changing the strategy from creating costly and time-consuming productions, moved to smaller titles, with greater monetization potential. The most important games in the company's portfolio include "Hard West" and "Phantom Doctrine".

The company is currently working on a number of games. For the most important projects own production includes such titles as: "Stargate: Timekeepers", "Project Y" (multiplayer game), "House Flipper City", "Aircraft Carrier Survival" or "Builders of Greece". Each of them, in our opinion, has big monetization potential. The gameplay of the first of them, and in our opinion the most important, will be unveiled at the turn of September / October (publisher's announcement).

In addition to its own productions, the Group is also developing a publishing department. There are also some interesting projects such as "Cartel", "Saloon" and "Colonize". The imagination is also awakened by "City of Atlantis" - a gameplay game comparable to "Frospunk", also "Orc Warchief" which builds its wishlist well (currently approx. 56 thousand).

	2018	2019	2020	2021P	2022P	2023P	2024P	2025P
Revenues [mln PLN]	3,7	1,6	2,8	6,4	26,0	34,4	33,0	32,3
EBITDA [mln PLN]	-0,6	-0,1	-1,2	0,1	8,5	14,0	12,7	13,1
EBIT [mln PLN]	-0,7	-0,2	-1,2	0,1	8,5	13,9	12,7	13,0
Gross income [mln PLN]	-0,9	-0,2	0,0	0,4	8,5	13,9	12,7	13,0
Net income [mln PLN]	-0,9	-0,2	0,1	0,7	8,0	12,5	11,4	11,7
P/BV	12,2	12,4	12,3	8,0	4,7	2,8	2,7	2,4
P/E	-	-	1 534,0	134,2	11,2	7,1	7,8	7,6
EV/EBITDA	-	-	-	670,8	9,0	4,8	5,0	4,9
EV/EBIT	-	-	-	1 315,3	9,1	4,9	5,0	4,9
DPS	0	0	0	0	0	0	3,5	3,2
DY	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	10,5%	9,6%

The report was prepared by Dom Maklerski BDM at the request of the WSE as part of the Exchange's Analytical Coverage Support Programme

BUY

(INITIAL REPORT)

TARGET PRICE 39,0 PLN

17 AUGUST 2021, 08:00 CEST

Target price [PLN]	39,0
Price upside/downside	17%
Cost of capital	10,0%
Price [PLN]	33,5
Market cap [mln PLN]	89,2
Shares mln. szt.]	2,7
Max. price 6M [PLN]	40,8
Min. price 6m [PLN]	31,3
Rate of return 3M	-12,0%
Rate of return 6M	-15,3%
Rate of return 9M	-4,4%
Shareholders (% of votes):	
PlayWay	47,8%
Andrzej Goczoł	10,5%
Capeman Investments Limited	8,4%
Jarosław Dąbrowski	7,3%
Pozostali	26,0%

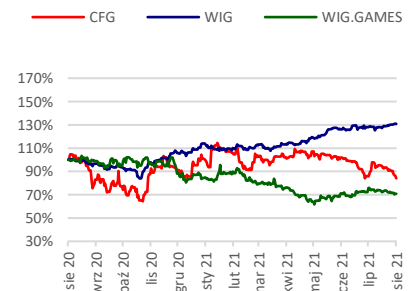
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Valuation summary

	Share	Valuation
DCF valuation	100%	39,0
Peer valuation	0%	48,5
Target price [PLN]		39,0

Source: BDM S.A.

DCF valuation

	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P
Revenues [mln PLN]	6,4	26,0	34,4	33,0	32,3	24,5	33,3	30,0	31,1	33,5
EBIT [mln PLN]	0,1	8,5	13,9	12,7	13,0	5,6	13,1	9,5	11,4	10,4
Tax rate	0,0%	6,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Tax on EBIT [mln PLN]	0,0	0,5	1,4	1,3	1,3	0,6	1,3	1,0	1,1	1,0
NOPLAT [mln PLN]	0,1	8,0	12,5	11,4	11,7	5,1	11,8	8,6	10,2	9,4
Amortization [mln PLN]	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
CAPEX [mln PLN]	-0,1	-0,1	-0,1	-0,1	-0,1	-0,1	-0,1	-0,1	-0,1	-0,1
Purchase of investment [mln PLN]	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Working capital movement [mln PLN]	-1,6	-0,3	-3,3	2,1	-3,7	0,8	-1,0	1,0	-5,4	4,6
FCF [mln PLN]	-1,6	7,6	9,2	13,5	8,0	5,9	10,8	9,6	4,8	14,0
DFCF [mln PLN]	-1,5	6,7	7,4	9,8	5,3	3,5	5,9	4,8	2,2	5,7
Total DFCF [mln PLN]	49,7									
Terminal value [mln PLN]	125,7									
Discounted terminal value [mln PLN]	51,4									
Enterprise value [mln PLN]	101,1									
Net debt 2020 [mln PLN]	-2,8									
Dividend 2021 [mln PLN]	0,0									
Equity value [mln PLN]	103,9									
Number of shares [mln]	2,7									
Value per share [PLN]	39,0									

Terminal growth rate: 3,0%

WACC calculation

	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P
Risk-free rate	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%
Risk premium	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%
Beta	1,40	1,40	1,40	1,40	1,40	1,40	1,40	1,40	1,40	1,40
Credit premium	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%
Cost of equity	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Contribution of equity	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
Cost of debt after tax	4,5%	4,2%	4,1%	4,1%	4,1%	4,1%	4,1%	4,1%	4,1%	4,1%
Contribution of debt	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
WACC	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%

Source: BDM S.A.

Sensitivity analysis

beta	Terminal growth rate			Risk premium	Terminal growth rate			Risk premium	Beta		
	2,5%	3,0%	3,5%		2,5%	3,0%	3,5%		1,3	1,4	1,5
1,3	40,1	41,8	43,7	4,0%	45,7	48,1	50,9	4,0%	50,2	48,1	46,3
1,4	37,6	39,0	40,6	5,0%	37,6	39,0	40,6	5,0%	40,5	39,0	37,7
1,5	35,4	36,5	37,8	6,0%	32,0	32,8	33,8	6,0%	33,9	32,8	31,9

Source: BDM S.A.

Peer valuation

	P/E			EV/EBITDA		
	2021P	2022P	2023P	2021P	2022P	2023P
11 bit studios	34,6	29,0	34,4	23,9	18,9	21,6
PlayWay	18,5	15,6	13,5	16,7	13,5	12,0
Ten Square Games	23,5	19,5	18,6	17,2	14,3	13,6
CD Projekt	68,3	69,8	9,4	39,3	37,6	5,8
Median	29,0	24,3	16,0	20,5	16,6	12,8
CreativeForge Games	134,2	11,2	7,1	670,8	9,0	4,8
Premium/discount	461,9%	46,1%	-55,6%	3268,8%	54,1%	-62,2%
Valuation [PLN/share]	7,2	72,6	75,3	2,8	57,9	75,2
Year's contribution	33%	33%	33%	33%	33%	33%
Average valuation [PLN/share]		51,7			45,3	
Multiple's contribution		50%			50%	
Value per share [PLN]		48,5				

Source: BDM S.A., Bloomberg

Main risks: 1) The risk of diversified and unforeseen demand for different products 2) The risk related to possible delays in game production 3) Risk related to the loss of key employees 4) Risk related to difficulties in acquiring experienced employees 5) The risk related to the possible failure of IT systems, telecommunications infrastructure and servers 6) The risk related to the competitive environment 7) Risk related to the development of new technologies and industry 8) Risk of volatility of foreign exchange rates

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Ratings and price targets history:

rating	price target	previous rating	previous target price	report date	report date (hour)	price	WIG
Buy	39,0	-	-	17.08.2021*	08:00 CEST	33,5	68 812

* The report was prepared by Dom Maklerski BDM at the request of the WSE as part of the Exchange's Analytical Coverage Support Programme

Explanations of terminology:

EBIT - earnings before interest and tax
 EBITDA — earnings before interest, taxes, depreciation, and amortization
 Net debt – interest bearing debt minus cash and equivalents
 WACC - weighted average cost of capital
 CAGR - cumulative average annual growth
 EPS - earnings per share
 DPS - dividend per share
 CEPS - net profit plus depreciation per share
 EV – market capitalization plus interest bearing debt minus cash and equivalents
 EV/S – market capitalization / sales
 EV/EBITDA – EV / sales
 P/EBIT – market capitalization / EBIT
 MC/S – market capitalization / sales
 P/E – market capitalization / net profit
 P/BV – market capitalization / book value
 P/CE - market capitalization / net profit plus depreciation
 ROE – net profit / equity
 ROA - net income / assets
 Gross margin - gross profit on sales / sales
 EBITDA margin – EBITDA / sales
 EBIT margin – EBIT / sales
 Net margin – net profit / sales

Explanation of ratings:

Buy – we believe that the security will reach the target price in the recommended period, which significantly exceeds the current market price (at least + 15%);
 Accumulate – we believe that the security will reach the target price in the recommended period, which exceeds the current market price (in the range of +5 to + 14.99%);
 Hold – we believe that a security in the recommended period will fluctuate around the target price, which is close to the current market price (in the range from -4.99% to + 4.99%);
 Reduce – we believe that the security will reach the target price in the recommended period, which is lower than the market price (range of decline from 5% to 14.99%);
 Sell – we believe that a security in the recommended period will reach the target price, which is significantly lower than the market price (suggested erosion of the value exceeds 15%).
 Target price – the theoretical price which, in our opinion, should reach a security in the recommended period; This price is the result of the company's value (eg based on DCF, comparative and other valuations), market conditions and the industry as well as other factors subjectively considered by the analyst.
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The strengths and weaknesses of the valuation methods used in the report:

DCF – the most popular and the most effective of the valuation methods - it is based on the discounting of future cash flows generated by the company. The disadvantage is the high sensitivity to changes in the basic financial parameters forecast in the model (interest rates, exchange rates, profits, residual value).
 DDM – the method is based on discounting future cash flows from dividends. The advantage of the valuation is the inclusion of future financial results and cash flows from dividends. The main disadvantages are the high sensitivity to changes in the basic financial parameters forecasted in the model (capital cost, profits, residual value) and the risk of changing the dividend payment policy.
 Comparative – the method is based on current and forecasted market multipliers of companies from the industry or related industries, which better than DCF shows the current market situation. The main disadvantages are the difficulty in choosing the right companies for comparison, the risk of ineffective valuation of companies compared at a given moment, as well as high volatility (along with price fluctuations).

Distribution of BDM's recommendations in 3Q'21*:		, distribution of BDM's recommendations for the companies which BDM has supplied with investment banking services within the last 12 months	
numbers	%	numbers	%
Buy	2 67%	0	0%
Accumulate	1 33%	0	0%
Hold	0 0%	0	0%
Reduce	0 0%	0	0%
Sell	0 0%	0	0%

* detailed list of all analytical reports (recommendations) published by BDM during the last 12 months and information on the numbers of issuers to which BDM has supplied services of investment firms set out in Sections A and B of Annex I to Directive 2014/65/EU is included in a cyclical "Monthly Report" or at www.bdm.pl



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