Polish video game developers

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The definitions of terms used in the document include:

NII – Net interest income – interest income minus interest expense.

Net F&C - Net fee and commission income - fee and commission income minus fee and commission expense.



LLP - loan loss provisions - an expense set aside as an allowance for bad loans.

NPL – non-performing loan – loans that are in default or close to be in default.

Cost/Income – operating expenses divided by total banking revenue.

ROE – return on equity – net income (or adjusted net income) divided by the average shareholders' equity.

ROA – return on assets – net income (or adjusted net income) divided by the average assets.

EBIT - earnings before interests and tax.

EBITDA – earnings before interests, tax, depreciation and amortization.

EPS – earnings per share – the net income (or adjusted net income divided by the number of shares outstanding.

P/E – price to earnings ratio – price divided by earnings per share.

PEG - P/E ratio divided by the annual EPS growth, usually over a certain period of time.

CAGR - compound annual growth rate.

BVPS – book value per share, the book value of the Company's equity divided by the number of shares outstanding.

P/BV - price to book value - price divided by the BVPS.

DPS – dividend per share – dividend of a given year divided by the number of shares outstanding.

DY - dividend yield - dividend of a given year divided by the current price.

DDM – dividend discount model – a fundamental method of valuation based on the assumption that the value of stock equals the sum of all discounted future dividends.

FV - Fair Value, calculated based on valuation methods outlined in the document.

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Rating	Difference between FV and price at recommendation	
Buy	Above 10%	
Hold	In between (and including) -10% and 10%	
Sell	Below -10%	

IPOPEMA Research - Distribution by rating category (July 1 – September 30, 2021)			
	Number	%	
Buy	52	74%	
Hold	14	20%	
Sell	4	6%	
Total	70	100%	

Rating History – 11 bit s	ating History – 11 bit studios				
Date	Recommendation	Fair Value	Price at recommendation	Author	
02/12/2019	BUY	PLN 400.00	PLN 348.50	Michał Wojciechowski Marcin Nowak	
09/11/2020	BUY	PLN 650.00	PLN 499.50	Michał Wojciechowski Marcin Nowak	
08/12/2020	BUY	PLN 652.00	PLN 476.50	Michał Wojciechowski Marcin Nowak	
22/07/2021	BUY	PLN 640.00	PLN 505.00	Michał Wojciechowski Marcin Nowak	
08/12/2021	BUY	PLN 600.00	PLN 526.00	Michał Wojciechowski Marcin Nowak	

Rating History – CD Projekt				
Date	Recommendation	Fair Value	Price at recommendation	Author
02/12/2019	SELL	PLN 212.00	PLN 262.50	Michał Wojciechowski Marcin Nowak
17/02/2020	SELL	PLN 215.00	PLN 326.00	Michał Wojciechowski Marcin Nowak
09/11/2020	HOLD	PLN 365.00	PLN 383.10	Michał Wojciechowski Marcin Nowak
08/12/2020	SELL	PLN 380.00	PLN 443.00	Michał Wojciechowski Marcin Nowak
18/02/2021	SELL	PLN 230.00 (adjusted on 31.05.2021 to PLN 225.00 by PLN 5.00 DPS)	PLN 271.30	Michał Wojciechowski Marcin Nowak
26/07/2021	SELL	PLN 140.00	PLN 186.04	Michał Wojciechowski Marcin Nowak
08/12/2021	SELL	PLN 120.00	PLN 185.58	Michał Wojciechowski Marcin Nowak



Rating History - PlayWay	,			
Date	Recommendation	Fair Value	Price at recommendation	Autho
02/12/2019	BUY	PLN 240.00	PLN 178.20	Michał Wojciechowski Marcin Nowak
24/05/2020	BUY	PLN 520.00	PLN 459.50	Michał Wojciechowski Marcin Nowak
09/11/2020	BUY	PLN 615.00	PLN 528.00	Michał Wojciechowski Marcin Nowak
08/12/2020	BUY	PLN 663.00	PLN 476.50	Michał Wojciechowski Marcin Nowak
26/07/2021	BUY	PLN 590.00	PLN 468.20	Michał Wojciechowski Marcin Nowak
08/12/2021	BUY	PLN 505.00	PLN 444.00	Michał Wojciechowski Marcin Nowak
Rating History – Ten Squ	are Games			
Date	Recommendation	Fair Value	Price at recommendation	Auth
02/12/2019	BUY	PLN 220.00	PLN 167.00	Michał Wojciechows
01/06/2020	BUY	PLN 680.00	PLN 508.00	Marcin Now Michał Wojciechows Marcin Now
09/11/2020	BUY	PLN 810.00	PLN 656.00	Michał Wojciechows Marcin Now
08/12/2020	BUY	PLN 725.00	PLN 548.00	Michał Wojciechows Marcin Now
29/03/2021	BUY	PLN 660.00	PLN 518.00	Michał Wojciechows Marcin Now
26/07/2021	BUY	PLN 630.00	PLN 532.00	Michał Wojciechows Marcin Now
08/12/2021	BUY	PLN 460.00	PLN 349.00	Michał Wojciechows Marcin Now
Rating History – Huuuge				
Date	Recommendation	Fair Value	Price at recommendation	Author
18/03//2021	BUY	PLN 62.00	PLN 41.00	Michał Wojciechowski Marcin Nowak
26/07//2021	BUY	PLN 55.00	PLN 37.25	Michał Wojciechowski Marcin Nowak
08/12/2021	BUY	PLN 44.00	PLN 26.10	Michał Wojciechowski Marcin Nowak
Rating History – Creepy J	iar .			
Date	Recommendation	Fair Value	Price at recommendation	Author
26/07/2021	BUY	PLN 900.00	PLN 810.00	Michał Wojciechowski Marcin Nowak
08/12/2021	HOLD	PLN 830.00	PLN 800.00	Michał Wojciechowski Marcin Nowak
Rating History – Ultimate	e Games			
Date	Recommendation	Fair Value	Price at recommendation	Author
07/09/2021	BUY	35.0	28.5	Michał Wojciechowski, Marcin Nowak
08/12/2021	HOLD	26.0	24.70	Michał Wojciechowski, Marcin Nowak