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The date and the time stated on the front page is the date of the preparation of this document. The price used throughout the recommendation to calculate adequate ratios is the "last" price stated on the front page of this document.

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 (October 1 – December 30, 2019)

	Number	%
Buy	17	53%
Hold	10	31%
Sell	5	16%
Total	32	100%

Rating History – KGHM

Date	Recommendation	Fair Value	Price at recommendation	Author
30/09/2019	SELL	PLN 51.50	PLN 79.80	Robert Maj
04.03.2020	SELL	PLN 48.60	PLN 77.82	Robert Maj