

VIGO System

Awaiting new strategy

In the 2017-20 period VIGO delivered revenue CAGR of 25%, which effectively means that VIGO's business scale doubled within three years. Such remarkable growth was achieved despite the COVID-19 pandemic outbreak, the ongoing technological transformation of the company (new factory) as well as establishment of the new business unit (semiconductor materials). The current investment program is likely to be completed by the end of 2021 and it seems to us that the upcoming 2021-23E period has all that is needed to at least maintain the pace of expansion. Therefore, we estimate VIGO to reach PLN 104.6m in revenues in 2023E (2020-23E CAGR of 25%). We also expect the company to deliver improvement in norm. net income margin to 37% on average in coming years (vs. 34% in 2020), thanks to increased utilization of the new factory and overall effect of scale. VIGO System trades on our forecasts at a P/E of 22.3x and 18.5x in 2021/22E, respectively, which we perceive as reasonable levels for its high-growth profile. We maintain our BUY recommendation and increase our FV to PLN 850.0 (12% upside potential), from PLN 660.0 previously.

2021E Outlook.

We maintain our core forecasts for 2021E with revenues of PLN 68.1m (up 27% y/y) and norm. net income of PLN 24.8m (up 37% y/y). We slightly decrease our forecast for the industry segment to PLN 26.5m, down 6% vs. previously, due to relatively weak 1Q21 performance (which was however impacted by delays related to the pandemic) and increase our expectation for the military segment to PLN 20.0m, up 10% vs. previously and currently in line with VIGO's target (as the company is even slightly ahead of its initial delivery plan for Safran).

Mid-term outlook.

We increase our revenue estimates for 2022/23E by 6% each to PLN 82.1m and PLN 104.6m, driven by higher forecasts for the military and medicine segments. We perceive as positive the commencement of negotiations with Safran on the new contract, as we previously had seen the lack of such as a major risk for 2022E results. We also believe that the potential start of client medical device production in 2022/23E seems to be a large opportunity for VIGO. We forecast 2022/23E norm. net income of PLN 30.0m/39.3m, up 17%/9% vs. previously.

Strategy update and long-term prospects.

VIGO plans to publish a new strategy in a few weeks. We do not expect it to be revolutionary and rather anticipate it to support VIGO's expansion path (20-30% annual revenue growth rate with solid net margins), which we already expected. In our view, it is too early to envisage another large investment program in the mid-term (currently the utilization of the new factory and new operating segment are likely to remain as a mid-term focus). Material investments are in our view possible to start after 2023E and could be related to expansion in sectors complementary to VIGO's current products.

Figure 1. Summary of financial data (PLN m)

	2018	2019	2020	2021E	2022E	2023E
Revenues	37.4	42.9	53.5	68.1	82.1	104.6
EBITDA	16.2	18.6	26.5	32.6	40.7	51.9
Norm. net income	13.0	13.9	18.1	24.8	30.0	39.3
EV/EBITDA (x)	12.5	15.6	16.0	17.3	13.5	10.4
P/E (x)	15.4	19.6	22.8	22.3	18.5	14.1
DY	0.0%	0.0%	0.0%	1.6%	2.2%	2.7%

Source: Company, IPOPEMA Research

TMT

VIGO SYSTEM

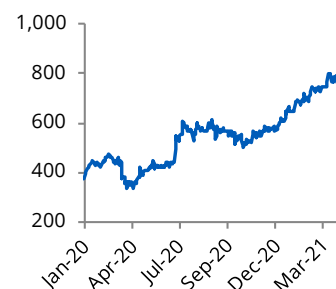
BUY

FV PLN 850.0 from PLN 660.0

12% upside

Price as of 18 May 2021 PLN 760.0

maintained



Share data

Number of shares (m)	0.7
Market cap (EUR m)	122.4
12M avg daily volume (k)	0.5
12M avg daily turnover (EUR m)	0.1
12M high/low (PLN)	818.0/412.0
WIG weight (%)	0.1
Reuters	VGOP.WA
Bloomberg	VGO PW

Total performance

1M	-5.0%
3M	+11.8%
12M	+76.7%

Shareholders

Józef Piotrowski	11.9%
Xarus Holdings Limited	9.9%
TFI Investors SA	9.8%
Janusz Kubrak	6.6%
Mirosław Grudzień	5.1%
Pozostali	56.7%

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VIGO System

BUY

FV PLN 850

Mkt Cap EUR 122.4m

upside +12%

Valuation multiples	2019	2020	2021E	2022E	2023E
P/E (x)	19.6	22.8	22.3	18.5	14.1
EV/EBITDA (x)	15.6	16.0	17.3	13.5	10.4
EV/Sales (x)	6.8	7.9	8.3	6.7	5.1
P/BV (x)	4.0	4.1	4.6	4.1	3.6
FCF yield (%)	-5.5%	1.1%	1.1%	4.9%	5.1%
DY (%)	0.0%	0.0%	1.6%	2.2%	2.7%

Per share	2019	2020	2021E	2022E	2023E
No. of shares (m units)	0.7	0.7	0.7	0.7	0.7
norm. EPS (PLN)	19.0	24.8	34.0	41.2	53.9
BVPS (PLN)	93.4	138.0	164.5	183.5	211.1
FCFPS (PLN)	-22.0	6.7	8.8	37.4	38.0
DPS (PLN)	0.0	0.0	12.4	17.0	20.6

Change y/y (%)	2019	2020	2021E	2022E	2023E
Revenues	14.6%	24.6%	27.3%	20.6%	27.5%
EBITDA	14.6%	42.3%	23.3%	24.7%	27.6%
EBIT	9.8%	44.3%	24.3%	20.6%	30.5%
Norm. net profit	6.6%	30.3%	37.1%	21.1%	31.0%

Leverage and return	2019	2020	2021E	2022E	2023E
Gross margin (%)	63.0%	66.6%	67.1%	63.4%	60.5%
EBITDA margin (%)	43.4%	49.5%	47.9%	49.6%	49.6%
EBIT margin (%)	32.7%	37.8%	36.9%	36.9%	37.8%
Norm. net margin (%)	32.4%	33.8%	36.4%	36.6%	37.6%
Net debt / EBITDA (x)	1.1	0.7	0.6	0.1	-0.2
Net debt / Equity (x)	0.3	0.2	0.2	0.0	-0.1
Net debt / Assets (x)	0.2	0.1	0.1	0.0	0.0
ROE (%)	22.7%	21.5%	22.5%	23.7%	27.3%
ROA (%)	12.7%	12.3%	13.4%	14.0%	16.5%
ROIC (%)	19.1%	19.8%	19.6%	21.9%	28.0%

IR detectors	2019	2020	2021E	2022E	2023E
Revenues	42.7	51.5	64.1	74.6	93.5
Industry	25.4	23.6	26.5	30.7	35.0
Military	8.1	13.4	20.0	13.4	15.4
Transport	5.8	6.2	7.0	7.9	8.8
Medicine and Science	3.1	7.8	7.8	11.3	14.7
Others	0.4	0.4	0.4	0.5	0.5
Affordable d. module	0.0	0.0	2.3	10.8	19.0
EBIT	14.3	19.3	24.4	28.4	36.2
EBITDA	18.8	25.2	31.0	38.0	47.7
norm. net profit*	14.1	18.3	24.0	28.1	35.9
n. net profit marg.*	33.1%	35.5%	37.5%	37.7%	38.4%

Semiconduct. mat.	2019	2020	2021E	2022E	2023E
Revenues	0.2	1.9	4.0	7.4	11.1
EBIT	-0.3	0.9	0.8	1.9	3.4
EBITDA	-0.3	1.2	1.6	2.7	4.2
norm. net profit*	-0.2	-0.2	0.8	1.9	3.4
n. net profit margin*	-153.5%	-8.5%	19.5%	25.6%	30.5%

Cost by type	2019	2020	2021E	2022E	2023E
Salaries, other benefits	-15.8	-18.8	-22.3	-27.2	-34.7
Materials and energy	-8.5	-9.4	-11.1	-14.3	-19.6
D&A	-4.6	-6.2	-7.5	-10.4	-12.4
Services and other	-3.7	-4.6	-5.6	-6.7	-8.0

P&L (PLN m)	2018	2019	2020	2021E	2022E	2023E
Revenues	37.4	42.9	53.5	68.1	82.1	104.6
COGS	-16.9	-15.9	-17.8	-22.4	-30.0	-41.4
Gross profit	20.5	27.0	35.6	45.7	52.1	63.3
Selling costs	-2.2	-2.4	-3.4	-4.2	-5.0	-6.3
G&A costs	-7.7	-12.2	-15.9	-19.1	-21.7	-24.1
Other operating income net	2.1	1.6	3.8	2.8	5.0	6.7
EBITDA	16.2	18.6	26.5	32.6	40.7	51.9
EBIT	12.8	14.0	20.2	25.1	30.3	39.6
Financial income (cost) net	0.3	-0.1	-2.1	-0.3	-0.3	-0.3
Pre-tax profit	13.0	13.9	18.1	24.8	30.0	39.3
Income tax	0.0	0.0	14.5	3.6	-3.8	-4.2
Net profit	13.0	13.9	32.5	28.4	26.3	35.1
Norm. Net profit*	13.0	13.9	18.1	24.8	30.0	39.3

BALANCE SHEET (PLN m)	2018	2019	2020	2021E	2022E	2023E
Non-current assets	67.4	98.8	129.1	163.0	169.9	179.2
Goodwill and intangible assets	6.8	12.4	14.9	23.4	31.0	38.3
Expenditures on R&D	14.4	16.7	24.7	29.6	35.5	42.6
Investments in associates	1.3	2.3	4.3	7.3	7.3	7.3
tangible assets	45.0	67.5	70.7	84.5	81.8	80.9
Deferred tax assets	0.0	0.0	14.5	18.0	14.3	10.1
Other non-current assets	0.0	0.0	0.0	0.0	0.0	0.0
Current assets	22.8	28.9	38.0	41.2	55.8	71.0
Inventories	4.1	6.9	9.2	10.1	11.9	14.9
Trade receivables	5.6	7.1	9.9	10.8	13.1	16.7
Cash and equivalents	9.3	12.8	13.2	15.6	26.1	34.6
Other current assets	3.7	2.1	5.6	4.6	4.7	4.8
Total assets	90.2	127.7	167.1	204.1	225.7	250.2
Equity	54.2	68.1	100.6	119.9	133.8	153.9
Non-current liabilities	17.9	47.1	49.6	67.3	73.9	76.8
Loans and borrowings	5.5	26.8	24.1	29.1	25.1	21.1
Other non-current liabilities	12.4	20.3	25.5	38.2	48.7	55.7
Current liabilities	18.1	12.5	16.9	16.9	18.0	19.5
Trade payables	7.0	1.6	1.7	2.4	3.7	5.1
Loans and borrowings	7.9	6.5	6.4	5.4	4.9	4.4
Other current liabilities	3.3	4.5	8.7	9.0	9.4	10.0
Equity & liabilities	90.2	127.7	167.1	204.1	225.7	250.2
Cash conversion cycle (days)	-8.8	2.6	79.4	72.4	66.4	65.4
Gross debt (PLN m)	13.3	33.3	30.6	34.6	30.1	25.6
Net debt (PLN m)	4.0	20.5	17.3	19.0	4.0	-9.0

CASH FLOW (PLN m)	2018	2019	2020	2021E	2022E	2023E
Operating cash flow	9.1	15.4	21.2	28.9	32.2	39.5
Pre-tax profit	13.0	13.9	18.1	24.8	30.0	39.3
D&A	3.5	4.6	6.2	7.5	10.4	12.4
Change in WC	-5.9	-1.6	-5.1	-1.2	-2.9	-5.3
Other	-1.5	-1.5	2.0	-2.3	-5.3	-6.9
Investment cash flow	-24.6	-31.1	-15.9	-21.2	-4.5	-11.3
Grants	1.9	8.9	10.1	16.6	16.5	14.6
CAPEX excl. R&D	-21.6	-32.0	-8.5	-18.8	-3.0	-5.0
CAPEX on R&D	-4.3	-7.4	-12.0	-16.0	-18.1	-20.9
Net investment in subsidiaries	-0.5	-0.6	-2.5	-3.0	0.0	0.0
other	0.0	0.0	0.0	0.0	0.0	0.0
Financial cash flow	13.3	19.2	-5.1	-5.4	-17.2	-19.8
Change in equity	0.0	0.0	0.0	0.0	0.0	0.0
Change in debt	13.3	19.7	-4.7	4.0	-4.5	-4.5
Interest paid	-0.1	-0.4	-0.4	-0.3	-0.3	-0.3
Dividend	0.0	0.0	0.0	-9.0	-12.4	-15.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
Change in cash	-2.2	3.5	0.2	2.4	10.5	8.5
Cash as of eop	9.3	12.8	13.2	15.6	26.1	34.6

Source: Company data, IPOPEMA Research *net profit normalized by non-cash change in deferred tax

Valuation

Figure 2. Valuation Snapshot

Valuation method	Weight (%)FV (PLN/share)	
DCF	100%	850.0
Peers	0%	854.0
Fair value		850.0
Current price		760.0
Upside/downside		12%

DCF Valuation	2021E	2022E	2023E	2024E	2025E	2026E	TV
Revenues	68.1	82.1	104.6	126.4	149.0	172.0	172.0
- change y/y	27%	21%	27%	21%	18%	15%	
EBITDA	32.6	40.7	51.9	61.7	72.0	81.7	81.7
- EBITDA margin	47.9%	49.6%	49.6%	48.8%	48.3%	47.5%	47.5%
- change y/y	23%	25%	28%	19%	17%	13%	
EBIT norm.*	21.2	24.3	31.9	37.7	42.4	48.5	48.5
Tax rate	0%	0%	0%	0%	1%	5%	9%
NOPAT	21.2	24.3	31.9	37.7	42.0	46.1	44.1
- change y/y	28%	14%	31%	18%	12%	10%	
D&A	7.5	10.4	12.4	14.3	17.0	19.4	19.4
Change in WC	-1.2	-2.9	-5.3	-4.9	-4.8	-4.9	-3.7
CAPEX net	-21.2	-4.5	-11.3	-13.3	-14.2	-17.0	-19.4
FCF	6.4	27.3	27.7	33.7	40.1	43.5	40.5
RFR	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
Beta	1.6	1.5	1.4	1.4	1.4	1.4	1.4
Risk premium	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Cost of Equity	9.8%	9.4%	9.0%	8.8%	8.6%	8.6%	8.6%
After tax cost of debt	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
% D	22%	18%	14%	10%	7%	4%	4%
% E	78%	82%	86%	90%	93%	96%	96%
WACC	8.2%	8.2%	8.2%	8.2%	8.3%	8.3%	8.3%
Discount factor (%)	95%	88%	81%	75%	69%	64%	
FCF PV (PLN m)	6.1	24.0	22.5	25.3	27.8	27.9	
FCF PV 2021-26E (PLN m)	133.6						
Residual growth rate (%)	3.0%						
Discounted residual value (PLN m)	506.3						
EV (PLN m)	639.9						
Investments in associates	4.3						
Others	-7.0						
Net debt (PLN m, 4Q20)	17.3						
Equity value (PLN m)	620.0						
Number of shares (diluted, m)	0.7						
FV (PLN)	850.0						
Current price	760.0						
Upside/downside potential	12%						

DCF Sensitivity analysis

Residual growth rate (%)	WACC (%)				
	7.3%	7.8%	8.3%	8.8%	9.3%
2.0%	843	784	734	691	654
2.5%	919	847	787	736	694
3.0%	1012	923	850	790	739
3.5%	1130	1016	926	853	793
4.0%	1284	1135	1020	930	857

Source: Company data, IPOPEMA Research, * EBIT normalized by non-cash other operating revenues - settlement of grants for R&D.

Figure 3. VIGO System – Peers comparison

COMPANY	Market Cap USD m	P/E (x)			EV/EBITDA (x)			DY 2021E	Revenues CAGR 2020-23E	NI CAGR 2020-23E	ROE 2021E
		2021E	2022E	2023E	2021E	2022E	2023E				
HAMAMATSU PHOTON	9,966	51.6	45.3	40.0	25.7	23.0	20.7	0.6%	7.0%	16.0%	9.0%
TELEDYNE TECH	15,319	36.1	31.5	26.9	22.9	19.3	14.3	n.a.	15.0%	18.0%	n.a.
NIPPON CERAMIC	691	25.5	22.6	20.4	n.a.	n.a.	n.a.	2.0%	8.0%	18.0%	5.8%
II-VI INC	6,663	17.5	16.3	13.6	8.5	7.0	5.5	0.0%	16.0%	-308.0%	15.8%
OPTEX GROUP	664	19.3	16.5	14.4	n.a.	n.a.	n.a.	1.6%	13.0%	51.0%	10.3%
VISUAL PHOTONICS	648	20.1	17.0	15.7	13.0	11.2	10.3	3.6%	22.0%	29.0%	30.2%
IPG PHOTONICS	10,484	35.8	29.2	25.1	18.9	15.8	13.6	0.0%	14.0%	39.0%	11.1%
MEDIAN		25.5	22.6	20.4	18.9	15.8	13.6	1.1%	14.0%	18.0%	10.7%
VIGO System	150	22.3	18.5	14.1	17.3	13.5	10.4	1.6%	25.1%	29.5%	22.5%
premium/discount to all peers (median)		-12%	-18%	-31%	-8%	-14%	-24%				
Weight		25%	25%		25%	25%					

Implied Price (PLN)

854.0

Source: IPOPEMA Research, Bloomberg, prices as of on 18.05.2021.

Figure 4. VIGO System – change in forecasts 2021-23E

	2021E		Change (%)	2022E		Change (%)	2023E		Change (%)
	New	Previous		New	Previous		New	Previous	
Revenues	68.1	67.3	1%	82.1	77.8	6%	104.6	98.7	6%
EBITDA	32.6	33.8	-3%	40.7	38.4	6%	51.9	50.1	4%
EBIT	25.1	25.2	0%	30.3	26.3	15%	39.6	36.5	8%
Norm. net income	24.8	24.6	1%	30.0	25.8	17%	39.3	35.9	9%
Capex net	(21.2)	(28.8)	-26%	(4.5)	(6.1)	-26%	(11.3)	(10.2)	11%

Source: IPOPEMA Research

1Q21 conference call takeaways

Below are our main takeaways from VIGO System's 1Q21 results conference call held on 11 May 2021:

- **2021 outlook.** The company maintained its primary goals for this year (revenue growth rate of 20% or more y/y). The CFO noted that the contract with Safran is likely to be completed earlier than initially expected; therefore, there is negligible risk of not achieving PLN 20m in revenues from the military segment this year. The company expects improvement in the industry segment in coming quarters (the backlog for 2Q is larger than 1Q), partially thanks to introduction of new products. In the transport segment VIGO is set to complete some additional orders for a Chinese client. In medicine, revenues were lower y/y in 1Q21 as the company had no major milestones during the quarter; nevertheless, VIGO expects that the R&D phase for key medicine product will be completed by the end of this year (the partner plans to start production from 2022 or 2023).
- **Mid-term outlook.** The CFO believes that in coming years VIGO should maintain its 20-30% y/y growth rate. The management is currently working on potential opportunities and projects which could provide an additional boost to this dynamic.
- **Safran contract.** The company has started negotiations on a new contract with Safran (as the current one is expected to be completed by the end of this year). According to Mr Piekarski, it is hard to comment on the scale of the contract at this moment, but the management expects it should be no smaller than it was in previous years (before 2021).
- **New products.** The company is also working on several new product lines on which it has received initial positive feedback from clients. The CFO expects that the new products should start to generate visible revenues in 2H21.
- **Materials for photonics.** Currently the company produces epitaxy materials for 5 clients with repeatable orders, but VIGO is focusing on contracts with an additional 10 clients with even greater potential. Additionally, new clients have begun the product qualification process in both 1Q21 and 2Q21. The CFO expects that revenues from epitaxy should be increased in 2Q21 q/q as well as in 2H21.
- **COVID-19 pandemic impact on production.** VIGO noted a COVID-19 related decrease in available workforce in March 2021 resulting in slight production delays, which however were caught up in April 2021. The company did not note any material impact of the pandemic on its clients and providers.
- **Cleanroom construction.** The company completed the building reconstruction process in April. The finalization of works (preparing the cleanroom installations and equipment) is expected to happen by the end of the year.
- **R&D budget.** The company plans to increase its budget on R&D for this year to ca. PLN 16m, up from PLN 13m, due to starting a new R&D project in February 2021. The majority of the R&D budget should be covered by grants.
- **New strategy.** VIGO plans to publish a new strategy in a few weeks. According to the CFO, the strategy is likely to be rather evolutionary. In the strategy, the company plans to provide its outlook for the prospects of the market.

Appendix 1 - Investment risks

Between critical in our opinion risks for operations and results of VIGO System we include:

The risk of decrease of demand for company's products. The market of MID-Infrared detectors on which VIGO operates is currently dynamically developing part of photonics. Nevertheless, there is a risk, that due to different factors (including macroeconomic, political or technological) the demand for detectors will drop significantly and the market would not grow with actual, high dynamic.

The risk of key client loss. In 2019 48% of revenues were generated from the contracts with 4 clients. The end of collaboration with each of these, or the decrease of contracts value could significantly affect the dynamic of VIGO revenues growth. However we note that the competition on the IR detectors market is low (high entry barriers) and high cost of technology replacement (which is also the barrier for VIGO and means that acquisition of new partners is harder).

The risk of competition. Due to high concentration on the market (only few producers) and high entry barriers (complicated technology) we assume that competition risk is quite low. Nonetheless with further dynamic growth of the market and popularization of applications of MID-infrared detectors there is a risk that leading technological companies will decide to enter the market. Another risk is the fast development of technology and short life cycle of the product (there is a risk of obtaining technological advantage by one of the competitors).

The risk of losing key employees. Production of infrared detectors is a process which require highly specialized workers, which supply on the market is very limited. At the same time high qualifications of the staff is perceived by the board as one of the advantages of VIGO.

The risk of alternative technology. There is a risk that other alternative technology could appear on the market and replace VIGO products with better parameters and/or lower price.

The risk of equipment breakdown. The equipment used by VIGO is highly advanced and is not vastly available on the market. In the case of breakdown, the company could have a problem with the production delays. The costs of replacement/repair of machines could be also significant.

Risk of lower subventions/grants in the future. To keep high level of subventions to expenditures on R&D the company needs to meet many criterions. The loss of subvention, or lower level of subvention in the future would result in the necessity of higher company's own spending on R&D or higher debt level.

The Currency risk. The most of the VIGO revenues is generated in EUR, while the cost (based on salaries and other employees' benefits) are mainly in PLN, which result in exposure for currency risk. VIGO is not using currency hedging instruments.

Appendix 2 - ESG

Below we present our ESG analysis of VIGO System operations:

Environmental. VIGO's detectors are used for analysis and detection of harmful gases, thus they are used in environment protection sector as well as in industrial applications, where they could materially contribute to the policy of reducing harmful gas emissions.

The R&D projects conducted by consortiums with VIGO active participation, (which are a part of Horizon 2020 European program) are aiming to develop new technologies and devices for water quality control. VIGO is participating in project Waterspy which targets to develop mobile device for water quality control (analyzing for bacterial contamination) in important points of water distribution network. The second project – AQUARIUS – aims to develop device for spectroscopy for monitoring of oil pollution in transmission networks of drinkable and industrial water, especially in petrochemical industry. In our opinion both projects could materially help to reduce level of pollution and decrease number of diseases especially in developing countries.

VIGO is also investing in development of detectors technology (investment in new production hall and new clean room), which results in optimization of production process and lower consumption of materials and energy (affordable detector) and higher yield (expected with new clean room). VIGO is currently developing detectors from A(III)B(V) materials, which are expected to replace products based on HgCdTe compounds (include mercury, which according to UE ROHS directive will be withdrawn from commercial applications till July 2024). VIGO has not decided yet when HgCdTe detectors will be removed from its offer, however it is intensively working on its substitutes without dangerous compounds (including affordable detection module).

Social responsibility. VIGO's detectors are used for military purposes, mainly in artillery applications (smart munitions, reduction of accidental victims number due to better aiming) and for tracking warning systems. Currently applications in drug and explosives detection are analyzed.

Governance. From 21 November 2014 when VIGO System shares were admitted to trading on WSE, the company is accepting and comply to WSE governance policy rules. We have positive opinion about VIGO's corporate governance due to: 1) lack of transactions with related parties; 2) market-based salaries of the board; 3) transparent dividend policy; 4) solid and clear accounting standards and policy, high quality of presented financial data; 5) reporting of sales data at the end of each quarter and respecting deadlines for financial reporting. The good practice of the company is also presenting the strategy with mid-term financial targets, though its realization was several times postponed in the past years. We like long-term involvement of the board and its professional qualifications. The company is also holding regular meetings with the investors after quarterly earnings publication, when the board is ready to answer shareholders questions.

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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 (January 1 – March 31, 2021)

	Number	%
Buy	15	94%
Hold	0	0%
Sell	1	6%
Total	16	100%

Rating History – VIGO System

Date	Recommendation	Fair Value	Price at recommendation	Author
02.08.2019	BUY	380.0	330.0	Michał Wojciechowski
16.04.2020	BUY	480.0	384.0	Michał Wojciechowski
29.07.2020	BUY	650.0	550.0	Michał Wojciechowski
08.12.2020	BUY	660.0	550.0	Michał Wojciechowski
19.05.2021	BUY	850.0	760.0	Michał Wojciechowski