

Friday, September 13, 2019 | daily publication

Morning Comments

Equity Market, Poland

Research Department:

Michał Marczak +48 22 438 24 01 Michał Konarski +48 22 438 24 05 Piotr Poniatowski +48 22 438 24 09 Kamil Kliszcz +48 22 438 24 02 Paweł Szpigiel +48 22 438 24 06

Jakub Szkopek +48 22 438 24 03 Aleksandra Szklarczyk +48 22 438 24 04 Mikołaj Lemańczyk +48 22 438 24 07 Piotr Bogusz +48 22 438 24 08

DJIA	27,182.5	+0.17%	FTSE 100	7,344.7	+0.09%	Copper (LME)	5,833.0	+1.05%
S&P 500	3,009.6	+0.29%	WIG20	2,189.1	-0.01%	Crude Oil (Brent)	60.74	-1.33%
NASDAQ	8,194.5	+0.30%	BUX	40,067.0	-0.34%	USD/PLN	3.9198	-0.55%
DAX	12,410.3	+0.41%	PX	1,049.4	+0.56%	EUR/PLN	4.3365	-0.07%
CA C 40	5,642.9	+0.44%	PLBonds10	2.023	-0.051	EUR/USD	1.1065	+0.50%

Company & Sector News

Polish Banks

Early loan repayment refunds might prove expensive for banks

According to Parkiet daily, the ECJ ruling that banks should return a portion of costs due to early repayment of consumer credit can result in an expense of PLN 1.4-4bn for Polish banking sector. Yesterday we presented our rough estimates which were based on certain assumptions. We present a sensitivity analysis for our estimates below. (M. Konarski, M. Lemańczyk)

Cost for the sector depending on % of early repaid loans originated in 2013 and 2011

% of early repayments	6 years (PLN m)	8 years (PLN m)
70%	831.5	1,177,3
60%	719.4	1,016,1
50%	607.2	855,0
40%	495.1	693,8
30%	382.9	532,6
20%	270.8	371,4

Source: estimates by Dom Maklerski mBanku

Alior Bank

Buy - 2019-07-03 Target price: PLN 72.30

MOL

Accumulate - 2019-08-02 Target price: HUF 3 258 **PKN Orlen** Hold- 2019-08-01 Target price: PLN 92.82

PKN Orlen

Hold- 2019-08-01 Target price: PLN 92.82

Alior successfully securitized leasing receivables

Alior Bank securitized worth PLN 500m receivables from its leasing operations. ING BSK bought senior tranche (PLN 360m) of issued securities, while subordinated tranche (PLN 140m) remained at Alior's book. Pricing terms of deal were not disclosed. Deal should have positive impact on Alior's capital ratios. We recall that not long ago Alior securitized loans portfolio worth of PLN 1.5b, which boosted capital ratios by 26bp. (M. Konarski, M. Lemańczyk)

ICIS comment on global PE price war

According to recent ICIS paper, a global polyethylene (PE) price war is developing as multiple new capacities come on-stream just as demand growth stalls on the back of the US China trade war, Brexit, regulatory pressure on single use plastics, and other uncertainties which are dampening consumer and industrial confidence. More you can find here: https://tinyurl.com/ y43e5nkw. We maintain our skeptical view on global petchem macro in the mid-term. (K. Kliszcz)

Management on retail network in Slovakia

Daniel Obajtek, CEO, told that PKN would open 7 retail fuel locations in Slovakia in the coming weeks as it launched a 2-3 year goal of taking a leading position in the Slovak fuel market as the lead step in retail segment investments at home and abroad. According to this plan Orlen can expand it infant retail network in Slovakia to 30-40 stations within the coming 2-3 years on way to a long-term goal of a top-three ranking with 100 locations. Company wants to increase its share in the Czech retail fuel market as well to 30% in volume terms in 2-3 years from the current 23.7%. Investments in retail segment are the right direction in our view however it won't be easy to expand Orlen network due to high competition. We can expect that potential asset swaps after PKN/LTS merger may help to achieve mentioned goals. (K. Kliszcz)

Call for 100% Stelmet shares at PLN 7.74

Stanisław Bieńkowski calls for the sale of up to 29 million shares of Stelmet, constituting up to 99.05%, at PLN 7.74 per share - broker of DM PKO BP informed. The caller intends to achieve independently as a result of the call 100% total number of votes. Subscriptions will start on October 2 and will last until October 31, 2019. Yesterday the company announced its intention to make a call for all shares by the main shareholder. On our forecasts this

Stelmet

Hold - 2019-09-05 Target price: PLN 6.50



year's call implies financial ratios P / E 10.5x and EV / EBITDA 5.1x. In the next two years, we assume that Stelmet will pay a dividend of 3% annually. Initially, in our opinion, the price is not particularly attractive from the point of view of minority shareholders. We assess the chances of success of the call as low. (J. Szkopek)

Corn

USDA lowers U.S. corn, soybean harvest view by less than expected

U.S. corn and soybean production will be 1% smaller than previously forecast this fall, the U.S. Agriculture Department said on Thursday, with both crops still well behind their typical development schedule after late planting. The news was positivelly assessed by investors on corn, which grew 2% yesterday. For more information please visit https://tinyurl.com/y3n3yc5m (J. Szkopek)

CD Projekt

Accumulate - 2019-09-05 Target price: PLN 272.50

Gwent for iOS will be released on 29 October 2019

CD Projekt announced that the release of the Gwent game for iOS was scheduled for 29 October 2019. The game will maintain full integration between the mobile and the PC platforms. The company had previously announced the launch of the Gwint game for mobile platforms in Q4 2019. Such a step should allow the game to increase the number of potential players and improve the monetization of the project. (P. Bogusz)

LPP

Buy - 2019-09-05 Target price: PLN 8,500.00

2019 Q2 earnings conference highlights

- The increase in expansion plan to 14% y/y in 2019 vs. 12% previously assumed is due to the acceleration of rollout in the Sinsay brand. Once the expansion plans are completed, Sinsay will be the second largest brand in terms of space after Reserved (at the end of 2018, Sinsay stores had the smallest footprint of all brands).
- LPP maintains its target of keeping gross margin on sales within the range of 53-54% (the 13-month period ending at the end of January 2020) despite the potentially negative impact of USDPLN strengthening. The autumn 2019 collection was purchased at the average exchange rate of USDPLN 3.81, which is 2% higher than the autumn 2018 collection.
- The Company will maintain cost discipline in subsequent quarters, indicating further potential
 for reducing the cost of rent per-square-meter. The planned increase in minimum wage will
 translate into a salary increase of less than 15% y/y, the demand effect will be important for
 the company.
- LPP is satisfied with its Q3'19 sales. Weather conditions have had a positive impact on sales volumes since early September.
- The final results of LPP for Q2 2019 were above preliminary results and market expectations. The company maintained the improvement in comparable sales in Q2 2019 (despite the high base effect) and good cost discipline. In Q3 2019, comparable sales should achieve higher dynamics due to favorable weather conditions in September and low base effect. We positively assess the acceleration of the sales area growth dynamics y/y resulting mainly from the change in the assumptions for the expansion of the Sinsay brand. We see the potential to maintain high growth dynamics of sales area in subsequent years. (P. Bogusz)

Quarterly Earnings Results

Skarbiec Holding Buy- 2019-06-03

Buy- 2019-06-03 Target price: PLN 28.17

Skarbiec Holding results once again better than our forecast

- Net profit for 4Q'18/19 came in at PLN 10.8m, up 210% Y/Y but down 22% Q/Q, above our expectations at PLN 6.7m
- The excellent result should be attributed to high success fee in an amount of PLN 11.2m versus our expectations for PLN 9.1m.
- AUM declined in the Q2'19 by 5.6% Q/Q with a low yield assets under management (AUM) dropping by 8.4% Q/Q whilst high-yield AUM decreased by 2.1% Q/Q
- Fixed fee decreased by 4.5% Q/Q and 19.1% Y/Y in-line with the trends observed in AUM.
- Total costs declined by 30% Q/Q and 27% Y/Y, driven by the payroll costs (-49% Q/Q) which should be attributed to the lower variable part connected to success fee (record high success fee in 1Q'19). The drop of the AUM was also visible in distribution costs which dropped by 49% Q/Q and 12% Y/Y.
- The 12M'18/19 net profit states for the 130% of our annual forecast, which is positive as at the end of 1H Skarbiec Holding was far from the target. Nonetheless excellent 1Q'19 (3Q'18/19) will have impact on the dividend only in 2020 which is in our forecast too low (PLN 3.22/share and could go up to c.PLN 4.45/ per share if 100% payout or DY 26%). In the meantime, management indicated that due to the capital gap vs requirements connected with the PPK programme, Skarbiec will very likely curb a dividend from the current fiscal year. (M. Konarski, M. Lemańczyk)

2019 Q2 actuals vs. expectations

(PLN m)	Q2'18	Q1'19	Q2'19	Y/Y	Q/Q	Q2'19E	Diff.
Management of investment funds, of which:	24.33	39.55	28.45	16.9%	-28.1%	26.5	7.4%
- fixed management fee	21.33	18.07	17.26	-19.1%	-4.5%	17.3	-0.5%
- variable performance fee	3.00	21.48	11.19	272.6%	-47.9%	9.1	22.4%
Other management revenue	1.54	0.17	0.66	-57.2%	290.5%	0.2	320.9%
Other	0.00	0.07	-0.14	n.m.	n.m.	0.0	n.m.
Revenue	25.87	39.79	28.97	12.0%	-27.2%	26.6	8.8%
D&A	-0.13	-0.24	-0.02	-88.1%	-93.4%	-0.2	-93.4%
Distribution costs	-11.46	-8.18	-6.50	-43.3%	-20.6%	-7.4	-11.7%
Payroll	-6.00	-10.42	-5.28	-12.0%	-49.3%	-7.1	-25.5%
Other operating costs	-4.09	-3.69	-4.07	-0.4%	10.3%	-3.8	6.2%
Operating costs	-21.68	-22.54	-15.87	-26.8%	-29.6%	-18.5	-14.3%
Other operating gains	0.19	0.01	0.29	n.m.	n.m.	0.3	-7.7%
Other operating losses	-0.04	-0.04	-0.02	n.m.	n.m.	-0.1	-63.0%
Profit on operating activity	4.35	17.22	13.37	207.5%	-22.4%	8.3	60.1%
Financing gains	0.06	0.06	0.13	120.0%	116.4%	0.1	143.4%
Financing costs	-0.03	-0.01	-0.02	n.m.	n.m.	0.0	-41.8%
Pre-tax profit	4.39	17.27	13.46	206.4%	-22.1%	8.4	60.6%
Tax	-0.91	-3.39	-2.66	193.4%	-21.5%	-1.7	58.8%
Net profit	3.49	13.88	10.80	209.8%	-22.2%	6.7	61.1%

Source: Skarbiec Holding, E - estimates by Dom Maklerski mBanku; Consensus estimates provided by PAP



Forte

Neutral - 2019-04-29

Results in line with preliminaries, hard to find anything positive

- The **revenues** in Q2'19 were flat y/y and mostly in line with management estimates.
- The **EBITDA** was in line with preliminary Management forecast. Worth to mention it was affected by 5 m PLN one off on other operating costs related to investment in Suwałki Airport. The company comments that another 2.5 m PLN will be booked in 2H'19 and another 2.5 m PLN in 2020 Year. Worth to mention that the major drivers on weaker y/y results were electricity costs (+0.9 m PLN monthly), zero profitability at new particle board factory, and wage cost inflation (+6.5% y/y in IH'19). Also we focus on higher y/y SG&A costs by 14% with flat sales.
- The **net profit** in Q2'19 was 2.6 m PLN. Worth to mention that **loss from Indian JV** in quarter was 1.5 m PLN. The company after 1Q'19 results commented that loss in Q1'19 was unexpected and does not foresee further loess in subsequent quarters. Also worth noting high CIRT rate due to dissolution of assets for tax loss in a subsidiary Forte Brand Sp. z o.o. in the amount of PLN 2.7 m PLN.
- The OCF in Q2'19 was 39 m PLN vs. -2 m PLN last year. The net debt decreased within the quarter by 35 m PLN (to 614 m PLN; 5,1xEBITDA'12m). Forte had previously reported that it had not violated banking covenants. Worth to mention that investment facility for new particle board line was classified as short term debt even the repayment date is on 2024 year.
- In our opinion in the results it is hard to find anything positive. The costs are growing of flat sales. The company books additional costs to non-core investments line Airport and loss at Indian JV does not shrink. We still find company shares under pressure. (J. Szkopek).

2019 O2 actuals vs. expectations

(m PLN)	Q2'19	Q2'18	Change	Management forecast	Diff.	2019E	2018	Change	YTD
Revenues	255.8	258.0	-1%	260.6	-2%	1 157.7	1 107.3	-4.4%	49.7%
EBITDA	22.3	34.6	-36%	22.0	1%	139.8	117.5	-15.9%	43.4%
EBITDA margin	8.7%	13.4%		11.9%		12.1%	10.6%		
EBIT	7.8	23.2	-67%	8.0	-3%	87.5	72.5	-17.2%	36.8%
Net income	2.6	0.3	-	bd.	-	47.5	34.5	-27.4%	34.8%

Source: Forte, E - estimates by Dom Maklerski mBanku; Consensus estimates provided by PAP

Atende

Neutral - 2019-01-31

Results for Q2'19 below expectations

- Atende reported Q2'19 results below our expectations: EBITDA was at PLN 3.2m vs. 4.3m PLN our expectations.
- The company generated a net loss of PLN 0.4m vs.expected PLN 0.3m net profit.
- The main reason for the surprise were lower than expected sales revenues: PLN 73.0m vs. PLN 83.0m our assumptions. Tjhe decrease in turnover is visible both in the public segment (to PLN 14.8m, i.e. -20.3% y/y) and in TMT (to PLN 21.1m, i.e. -19.2% y/y).
- Gross margin on sales in the quarter was 23.1% vs. 23.3% of the assumption. SG&A costs increased slightly in Q2'19 (to PLN 16.8m, i.e. 5.8% y/y).
- After half-year, the CFO amounts to PLN -10.6m.
- All in all, Atende's Q2'19 results are below our expectations. Declines in turnover are visible both in the public segment (which may be related to the uncertainty of small administration before the elections), but also in the TMT segment (management guidance needed here!). Our forecast of net income for 2019, i.e. PLN 14.5m, seems to be an ambitious goal for the company. Of course, everything can change in Q4'19 (strong seasonality during the year is natural for Atende). (P. Szpigiel)

2019 Q2 actuals vs. expectations

(PLN m)	Q2'19	Q2'18	change	Q2'19E	differ.
Revenue	73.0	57.5	26.9%	83.0	-12.0%
EBITDA	3.2	1.8	76.0%	4.3	-24.7%
EBITDA margin	4.4%	3.2%	-	5.2%	-
EBIT	0.1	0.0	-	0.8	-
Pre-tax profit	0.3	-0.8	-	0.3	-
Net profit	-0.4	-1.0	-	0.3	-

Source: Atende, E - estimates by Dom Maklerski mBanku

Archicom

Q2'19 revenues in line with our estimates; a beat on net profit

- In Q2'19 Archicom reported strong financial results due to (1) higher number of apartments handed over, (2) improvement of developer's margin as well as (3) positive impact from IP revaluation.
- Revenue increased by 209% y/y to PLN 238m. Company handed over 730 units, up +202% y/y. The value of an average apartment handed over was PLN 325k what is 4% higher y/y (and -8% q/q). At the same time revenues was in line with our estimates and market consensus.
- Developer's margin positively surprised and amounted to 29.5% (the best result since Q3'17) vs. 24.9% a year ago. It was 2.1pp higher than our estimates and translated into a beat our gross margin forecast by 7.8%.
- SG&A costs increased by 26% y/y to PLN 13.7m. On net other operating activity Company reported negatively impact of PLN 2.6m (vs. PLN -0.3m year ago). Both SG&A costs and net costs from other operating activity was slightly higher than our expectations. As a consequence adj. EBIT was 3.7% above our estimates.
- Investment properties revaluation had positive impact on the result of PLN 21.1m, above our assumption of PLN +15m. As a result reported EBIT was 12%-13% above our estimates and market consensus.
- Company reported negative impact on net financial activity of PLN 2.4m vs. PLN-1.2m in Q2'18.
- Adj. net profit increased to PLN 39.9m from PLN 4.9m a year ago. At the same time reported NP was 6.5% above our estimates due to higher developer's margin and higher IP revaluation gains.
- Net debt at the end of June amounted to PLN 91m, translating into net debt to equity ratio 18%.
- Between January and August, Archicom sold 1,001 flats vs. its pre-sales target of 1,300-1,600 homes. At the end of August company had ca. 1,900 units in offer. (A. Szklarczyk)

2019 Q2 actuals vs. expectations

(PLN m)	Q2'19	Q2'18	change	Q2'19E	change	consens.	diff.
Revenue	238.4	77.2	209.0%	238.1	0.1%	241.3	-1.2%
Gross profit	70.4	19.2	266.7%	65.3	7.8%		
margin	29.5%	24.9%	-	27.4%	-		
Adj. EBIT	54.2	8.0	574.8%	52.2	3.7%		
Revaluation	21.1	0.0	-	15.0	-		
EBIT	75.2	8.0	837.1%	67.2	11.9%	66.4	13.3%
Pre-tax profit	72.8	6.8	969.1%	66.4	9.6%		
Net profit	57.0	4.9	1061.7%	53.5	6.5%	53.0	7.5%

Source: Archicom, E - estimates by Dom Maklerski mBanku; Consensus estimates provided by PAP



More News

BOŚ BOS Bank named Jerzy Zan a deputy CEO, the bank said in a press statement.

Insurance Polish insurers increased 6M net earnings in the life segment by nearly 3% y/y and by 9.3% in

the non-life segment, a report by sector lobby PIU shows.

Kruk Listed debt collector Kruk could invest PLN 1 bln in new portfolios in 2019 and no less in 2020,

CEO Piotr Krupa told PAP.

PHN Listed real estate group PHN earned PLN 14.7 mln in attributable net profits in the second quarter

of 2019, down by 26% from the prior year period, H1 financial statements out post-session

showed.

PHN Real estate group PHN plans to issue another tranche of bonds under its up to PLN 1 bln program

no sooner than in 2020, CEO Marcin Mazurek told a news conference.

PHN Listed real estate firm PHN will complete the process of taking over Chemobudowa-Krakow and

CB Plac Grunwaldzki by end-year, CEO Marcin Mazurek told a news conference.

Solaris Bus maker Solaris Bus & Coach will deliver 21 buses to a Norwegian transport company Unibuss

AS, the company said in a press statement.

Ultimate Games Game developer Ultimate Games sees 772k players who added its games to their wish list on the

Steam platform as of September 12, the company said in a market filing.

W.Kruk Jeweler W.Kruk, unit of listed fashion group VRG, wants to expand to foreign markets and would

like to increase the number of shops in Poland to 200 within three years from 140 at present,

CEO Radoslaw Jakociuk told PAP.

Work Service Work agency Work Service eyes raising up to PLN 50 mln from issuing convertible bonds and

shares, the company said in a market filing. EGM will decide on the issues on October 8.

Corporate Action Calendar

Date	Time	Company	Event
13-Sep	12:00	Atende	Q2'19 earnings announcement (Polonia Palace Hotel, Warsaw)
13-Sep	12:00	Forte	Q2'19 earnings conference (Sheraton Hotel, Warsaw)
17-Sep	10:30	Echo Investment	Q2'19 earnings announcement & conference (Warsaw Brawery, Willa Fabrykanta)
17-Sep	15:00	Archicom	Q2'19 earnings announcement & conference (Hotel Intercontinental, Warsaw)
17-Sep		Boryszew	Q2'19 earnings announcement
17-Sep		Idea Bank	Q2'19 earnings announcement
18-Sep	12:00	Wielton	Q2'19 earnings announcement and conference (Hotel Warszawa, pl. Powstańców Warszawy 9, Warsaw)
18-Sep		Ferro	Investor meetings (CC Group, ul. Marszałkowska 89, Warsaw)
19-Sep	10:00	Seco/Warwick	Investor meetings (CC Group, ul. Marszałkowska 89, Warsaw)
19-Sep		ZEPAK	Q2'19 earnings announcement
20-Sep		Kruszwica	Q2'19 earnings announcement
24-Sep		PGE	Q2'19 earnings announcement
25-Sep		Pfleiderer Group	Q2'19 earnings announcement
27-Sep		Energa	Q2'19 earnings announcement
27-Sep		Getin Noble Bank	Q2'19 earnings announcement
27-Sep		Monnari	Q2'19 earnings announcement
27-Sep		Tarczyński	Q2'19 earnings announcement
30-Sep		Ailleron	Q2'19 earnings announcement
30-Sep		Elektrobudowa	Q2'19 earnings announcement
30-Sep		Enea	Q2'19 earnings announcement
30-Sep		Polnord	Q2'19 earnings announcement
30-Sep		Tauron	Q2'19 earnings announcement
1-2 Oct			mBank's European Financials Conference (PGE Narodowy, Warsaw) - registration required
21-Oct		Cognor	Dividend record date: 0.29 PLN per share
23-Oct		Grupa Kęty	Q3'19 earnings announcement
23-Oct			Q3'19 earnings announcement (after market close)
23-Oct		Kernel	Q4'19 earnings announcement
24-Oct		Kruk	Q3'19 earnings announcement
28-Oct		Millennium	Q3'19 earnings announcement
29-Oct		Budimex	Q3'19 earnings announcement
30-Oct		Alumetal	Q3'19 earnings announcement
30-Oct		Apator	Q3'19 earnings announcement
30-Oct		CCC	Q3'19 earnings announcement
30-Oct		Erste Bank	Q3'19 earnings announcement
30-Oct		GPW	Q3'19 earnings announcement
30-Oct		Mangata	Q3'19 earnings announcement
30-Oct		mBank	Q3'19 earnings announcement
30-Oct		Santander	Q3'19 earnings announcement
31-Oct		Cognor	Q3'19 earnings announcement
31-Oct		ING BSK	Q3'19 earnings announcement
31-Oct		Mennica Polska	Q3'19 earnings announcement



Economic Calendar

Friday	, 13 Septe	ember 2019			
Time	Region	Data	Period	Forecast	Previous
06:30	Japan	Industrial Production (F)	July	-3.30	0% m/m; -3.80% y/y
10:00	Poland	CPI	August	0.0	00% m/m; 2.90% y/y
11:00	EU	Exports	July		189.90bn
11:00	EU	Imports	July		169.30bn
11:00	EU	Labor Cost	Q2		2.40% y/y
11:00	EU	Trade Balance	July		20.60bn
14:00	Poland	Capital Account Balance	July		946m
14:00	Poland	Current Account Balance	July		21m
14:00	Poland	Financial Account Balance	July		249m
14:30	USA	Exports	August	0.20	0% m/m; -0.90% y/y
14:30	USA	Import Price Index	August	0.20	0% m/m; -1.80% y/y
16:00	USA	Business Inventories	July	0.0	00% m/m; 5.20% y/y
Monda	ay, 16 Sep	tember 2019			
Time	Region	Data	Period	Forecast	Previous
04:00	China	Industrial Production	August		4.80% y/y
04:00	China	Retail Sales	August		7.60% y/y
14:00	Poland	Core CPI	August	0.1	.0% m/m; 2.20% y/y
14:30	USA	Empire State Manufacturing Index	September		4.80
Friday	, 20 Septe	ember 2019			
Time	Region	Data	Period	Forecast	Previous
08:00	Germany	PPI	August	0.1	.0% m/m; 1.10% y/y
10:00	Poland	Retail Sales	August		7.40% y/y
16:00	EU	Consumer Confidence Index	September		-7.10

Current Recommendations by Dom Maklerski mBanku

	Recommendation		Price At	Target	Current	Upside/	P/I	.	EV/EBI	TDA
Company	Recommendation	Issued On	Reco.	Price	Price	Downside	2019	2020	2019	2020
Financial Sector						+18.5%	10.0	9.3		
Alior Bank	buy	2019-07-03	51.10	72.30	40.58	+78.2%	7.3	5.7		
Handlowy	accumulate	2019-07-03	53.60	59.45	51.40	+15.7%	13.0	10.6		
ING BSK	accumulate	2019-09-05	187.40	197.53	190.80	+3.5%	14.2	13.0		
Millennium	buy	2019-08-02	7.51	10.00	6.40	+56.3%	10.6	7.6		
Pekao	buy	2019-08-02	99.88	119.75	107.40	+11.5%	12.4	10.8		
PKO BP	buy	2019-08-02	39.34	47.17	40.94	+15.2%	11.6	11.2		
Santander Bank Polska	hold	2019-08-02	319.60	337.00	315.80	+6.7%	13.7	11.3		
Komercni Banka	buy	2019-08-28	817.00	945.02 CZK	836.50	+13.0%	10.5	10.8		
Moneta Money Bank	buy	2019-08-28	75.95	94.33 CZK	74.65	+26.4%	10.0	9.3		
Erste Group RBI	buy accumulate	2019-08-28	30.03	40.38 EUR	31.17 21.44	+29.5% +7.5%	8.7 6.5	8.0 6.1		
OTP Bank	buy	2019-08-28 2019-08-28	20.44 12,000	23.05 EUR 14,681 HUF	12,630	+7.5%	8.7	7.9		
PZU	buy	2019-08-28	36.59	43.38	37.65	+15.2%	10.0	9.5		
Kruk	buy	2019-03-03	152.30	213.65	158.20	+35.1%	8.9	8.7		
Skarbiec Holding	buy	2019-04-02	16.50	28.17	17.40	+61.9%	6.0	5.2		
Chemicals	buy	2017 00 03	10.30	20.17	17.40	+7.1%	7.7	16.2	5.0	6.6
Ciech	buy	2019-09-05	34.00	42.03	38.55	+9.0%	8.7	9.1	5.6	5.4
Grupa Azoty	hold	2019-09-05	39.98	39.77	37.50	+6.1%	6.7	23.2	4.4	7.7
Oil & Gas	Hold	2015 05 05	33.30	33.77	37.30	+10.2%	11.2	9.8	4.9	4.8
Lotos	sell	2019-08-02	88.66	72.31	84.70	-14.6%	12.9	11.9	6.6	5.6
MOL	accumulate	2019-08-02	3,004	3,258 HUF	2,890	+12.7%	10.4	9.2	4.3	4.1
PGNiG	buy	2019-09-05	4.49	6.33	4.94	+28.0%	11.9	8.2	4.6	3.5
PKN Orlen	hold	2019-08-01	97.36	92.82	92.82	+0.0%	8.8	10.4	5.2	5.5
Power Utilities						+35.2%	3.9	4.3	3.8	3.7
CEZ	accumulate	2019-06-25	544.00	597.80 CZK	521.00	+14.7%	15.5	13.5	7.4	6.9
Enea	buy	2019-06-25	8.53	12.41	8.83	+40.5%	3.3	3.0	3.2	3.0
Energa	buy	2019-06-25	7.33	12.67	6.85	+85.0%	3.9	4.3	3.8	4.1
PGE	buy	2019-06-25	9.00	13.26	8.08	+64.1%	4.9	5.6	3.2	3.3
Tauron	buy	2019-06-25	1.57	2.52	1.60	+57.5%	2.5	2.4	4.1	3.7
Telecoms, Media, IT						+8.4%	19.8	15.4	5.7	5.8
Netia	hold	2018-11-26	4.66	4.70	4.54	+3.5%	30.5	25.3	5.2	5.3
Orange Polska	buy	2019-09-05	6.12	7.50	5.90	+27.1%	38.2	24.0	4.7	4.6
Play	buy	2019-09-12	27.16	33.10	27.18	+21.8%	8.3	7.7	5.7	5.7
Agora	buy	2018-11-27	9.50	16.00	9.90	+61.6%	32.9	17.5	4.5	4.2
Cyfrowy Polsat	reduce	2019-05-31	26.00	24.15	27.70	-12.8%	14.5	12.4	7.0	6.8
Wirtualna Polska	hold	2019-07-03	61.20	61.50	63.00	-2.4%	19.8	16.9	10.5	9.2
Asseco Poland	hold	2019-06-03	51.10	50.80	51.80	-1.9%	13.9	13.5	4.5	4.2
Comarch	buy	2019-07-25	178.50	231.00	179.00	+29.1%	15.5	14.0	6.5	5.9
11 bit studios	buy	2019-05-20	398.00	518.00	411.00	+26.0%	27.6	39.2	19.3	23.9
CD Projekt	accumulate	2019-09-05	251.30	272.50	251.00	+8.6%	-	10.4	-	9.2
Industrials, Mining						+7.5%	6.3	10.6	4.4	5.2
Cognor	accumulate	2019-09-05	1.65	2.00	1.75	+6.1%	6.3	11.4	4.4	5.2
Famur	buy	2019-08-07	4.42	5.33	3.97	+34.3%	5.0	9.2	4.1	4.8
Grupa Kęty	hold	2019-09-05	310.00	327.11	302.50	+8.1%	11.7	11.1	8.3	7.9
JSW	buy	2019-09-05	26.50	39.29	28.10	+39.8%	4.8	-	0.7	2.2
Kemel	reduce	2019-08-19	48.60	42.70	43.25	-1.3%	4.5	8.2	5.0	5.7
KGHM	hold	2019-08-22	74.90	77.51	81.70	-5.1%	7.1	10.1	4.0	4.6
Stelmet	hold	2019-09-05	6.70	6.50	8.40	-22.6%	11.4	15.6	5.3	5.7
Property Developers						+4.9%	8.4	8.3	7.6	7.6
Atal	accumulate	2019-07-03	36.60	41.89	36.70	+14.1%	7.9	8.2	7.4	7.7
Dom Development	hold	2019-09-05	84.00	81.10	83.20	-2.5%	8.9	8.3	7.8	7.6
Retail						-1.6%	38.6	21.8	9.8	8.9
AmRest	buy	2019-04-02	41.20	48.00	43.65	+10.0%	41.0	30.0	13.8	11.0
CCC	buy	2019-09-05	131.90	161.00	141.70	+13.6%	52.9	21.8	7.2	5.7
Dino	hold	2019-08-23	149.60	149.20	160.40	-7.0%	38.6	28.1	22.2	16.7
Eurocash	reduce	2019-09-05	20.62	18.10	22.60	-19.9%	43.7	30.9	9.3	8.3
Jeronimo Martins	reduce	2019-09-05	15.88	14.30 EUR	15.82	-9.6%	22.5	20.2	9.8	8.9
LPP	buy	2019-09-05	7,280.00	8,500.00	7,725.00	+10.0%	21.1	19.1	10.7	9.6
VRG	buy	2019-07-26	4.20	5.20	4.29	+21.4%	13.6	11.8	8.5	7.2



Current Calls by Dom Maklerski mBanku

Camman	Relative	Rated On	Price At	Current	Change	P/E	E	EV/EBITDA	
Company	Positioning	Kated On	Rating	Price	Change	2019	2020	2019	2020
IT						11.8	10.8	5.1	4.8
Ailleron	neutral	2019-06-28	8.40	7.40	-11.9%	9.6	8.7	3.3	2.4
Asseco BS	neutral	2019-03-29	29.50	27.60	-6.4%	14.0	13.0	9.4	8.7
Asseco SEE	overweight	2019-04-11	14.20	19.80	+39.4%	14.5	13.8	6.1	5.6
Atende	neutral	2019-01-31	4.40	3.46	-21.4%	8.7	8.1	4.1	4.0
Industrials						10.0	9.5	6.4	6.0
AC	underweight	2019-08-30	43.60	40.20	-7.8%	11.9	11.4	7.8	7.2
Alumetal	underweight	2019-08-30	51.00	35.40	-30.6%	11.3	11.0	7.7	7.7
Amica	neutral	2019-04-29	130.00	114.20	-12.2%	7.5	7.1	4.9	4.6
Apator	neutral	2019-04-29	25.80	22.10	-14.3%	10.5	10.3	6.8	6.6
Astarta	overweight	2019-09-05	23.00	22.90	-0.4%	-	4.2	7.0	4.1
Boryszew	underweight	2019-07-26	4.49	4.31	-4.0%	9.6	8.9	7.5	7.3
Ergis	neutral	2019-08-30	2.48	2.61	+5.2%	10.7	12.1	5.5	5.5
Forte	neutral	2019-04-29	40.60	23.20	-42.9%	11.6	10.1	8.2	7.6
Kruszwica	neutral	2019-04-02	43.90	40.60	-7.5%	9.7	8.8	5.0	4.6
Mangata	neutral	2019-05-29	69.50	66.00	-5.0%	8.9	10.1	6.0	6.5
Pfleiderer Group	underweight	2019-07-29	28.00	26.30	-6.1%	53.9	25.5	7.1	6.6
Pozbud	neutral	2019-09-05	2.14	2.11	-1.4%	4.1	4.3	3.0	3.7
Tarczyński	neutral	2019-05-29	15.40	15.20	-1.3%	6.6	5.5	4.8	4.4
TIM	overweight	2019-04-29	7.90	8.80	+11.4%	10.0	8.9	5.9	5.3
Retail						8.9	8.8	4.0	3.2
Monnari	neutral	2019-07-17	4.66	4.49	-3.6%	8.9	8.8	4.0	3.2

CEE bank valuations

			P/E			ROE			P/BV			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish banks													
Alior Bank	40.58	7.3	5.7	4.9	10%	12%	12%	0.7	0.6	0.6	0.0%	0.0%	0.0%
Handlowy	51.40	13.0	10.6	10.0	7%	9%	9%	0.9	0.9	0.9	7.3%	8.2%	7.0%
ING BSK	190.80	14.2	13.0	12.1	13%	13%	13%	1.8	1.6	1.5	1.8%	2.1%	2.3%
Millennium	6.40	10.6	7.6	6.8	8%	11%	11%	0.9	0.8	0.7	0.0%	0.0%	0.0%
Pekao	107.40	12.4	10.8	10.2	10%	11%	11%	1.2	1.2	1.1	6.1%	6.1%	6.9%
РКО ВР	40.94	11.6	11.2	10.6	11%	11%	11%	1.2	1.2	1.2	3.2%	7.6%	9.2%
Santander BP	315.80	13.7	11.3	10.4	9%	11%	11%	1.3	1.2	1.1	6.2%	3.6%	4.4%
Median		12.4	10.8	10.2	10%	11%	11%	1.2	1.2	1.1	3.2%	3.6%	4.4%
Investors in Polish ba	nks												
ВСР	0.205	7.1	6.2	5.2	7%	8%	9%	0.5	0.5	0.4	2.4%	5.4%	6.8%
Citigroup	69.300	9.1	8.1	7.4	10%	10%	10%	0.8	0.8	0.7	2.8%	3.1%	3.6%
Commerzbank	5.740	8.4	6.8	6.2	3%	4%	4%	0.2	0.2	0.2	3.8%	4.7%	5.6%
ING	9.566	7.3	7.4	7.2	10%	9%	9%	0.7	0.7	0.6	7.3%	7.4%	7.6%
UCI	10.984	6.0	6.1	5.9	8%	7%	7%	0.4	0.4	0.4	5.3%	6.5%	7.1%
Median		7.3	6.8	6.2	8%	8%	9%	0.5	0.5	0.4	3.8%	5.4%	6.8%
Foreign banks													
Erste Group	31.17	8.7	8.0	7.6	10%	11%	11%	0.9	0.9	0.8	4.2%	4.8%	5.2%
Komercni Banka	836.50	10.5	10.8	10.4	14%	14%	14%	1.5	1.4	1.4	6.1%	6.1%	6.1%
Moneta Money	74.65	10.0	9.3	9.2	15%	16%	16%	1.5	1.5	1.4	8.2%	7.5%	8.1%
OTP Bank	12,630	8.7	7.9	7.8	20%	18%	17%	1.6	1.4	1.2	1.8%	1.9%	4.3%
RBI	21.44	6.5	6.1	5.6	9%	9%	9%	0.6	0.5	0.5	5.4%	4.6%	4.9%
Akbank	7.58	7.1	4.8	4.1	12%	15%	15%	0.8	0.7	0.6	2.5%	4.4%	5.8%
Alpha Bank	1.65	16.5	10.4	7.4	2%	3%	4%	0.3	0.3	0.3	0.0%	0.0%	0.0%
Banco Santander	3.73	7.8	7.4	7.0	8%	8%	8%	0.6	0.6	0.6	6.0%	6.3%	6.6%
Deutsche Bank	7.49	124.8	18.4	10.5	-1%	1%	3%	0.3	0.3	0.3	0.0%	0.5%	2.4%
Eurobank Ergasias	0.82	9.6	7.0	5.7	5%	9%	9%	0.6	0.5	0.5	0.0%	0.0%	0.0%
National Bank of Greece	2.58	14.3	12.4	9.0	2%	4%	6%	0.5	0.5	0.4	-	0.0%	0.0%
Piraeus Bank	3.02	25.2	9.2	7.0	2%	3%	4%	0.2	0.2	0.2	-	0.0%	0.0%
Sberbank	234.57	5.8	5.1	4.6	22%	22%	21%	1.2	1.0	0.9	8.0%	9.7%	11.0%
Turkiye Garanti Bank	9.66	5.6	4.4	3.6	14%	15%	17%	0.7	0.6	0.6	5.0%	4.1%	5.0%
Turkiye Halk Bank	6.57	4.8	2.5	1.9	7%	9%	9%	0.3	0.2	0.2	1.2%	1.8%	1.8%
Turkiye Vakiflar Bankasi	5.27	4.1	2.9	2.4	10%	12%	13%	0.4	0.3	0.3	-	-	-
VTB Bank	0.04	3.6	3.6	3.3	12%	13%	13%	0.4	0.4	0.4	7.0%	7.0%	9.3%
Yapi ve Kredi Bankasi	2.58	5.0	3.9	3.1	11%	13%	13%	0.5	0.4	0.4	0.0%	1.1%	-
Median		8.2	7.2	6.3	10%	11%	12%	0.6	0.5	0.5	4.2%	4.1%	4.9%

Insurance company valuations

			P/E			ROE			P/BV			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Insurers													
PZU	37.65	10.0	9.5	9.3	22%	23%	23%	2.2	2.1	2.1	7.9%	8.0%	8.4%
Aegon	3.78	5.7	5.4	5.2	7%	8%	8%	0.4	0.4	0.3	8.0%	8.5%	9.0%
Allianz	209.80	11.1	10.4	9.8	12%	12%	12%	1.3	1.2	1.2	4.6%	4.9%	5.1%
Assicurazioni Generali	17.50	10.3	10.3	9.8	11%	10%	10%	1.0	1.0	1.0	5.5%	5.8%	6.2%
Aviva	3.91	6.5	6.4	6.1	12%	13%	14%	0.9	0.9	0.8	8.0%	8.3%	8.7%
AXA	22.43	8.7	7.8	7.6	10%	11%	11%	0.9	0.8	0.8	6.6%	7.0%	7.2%
Baloise	175.80	12.1	12.5	11.8	10%	9%	9%	1.2	1.2	1.1	3.6%	3.9%	4.1%
Helvetia	136.50	12.7	12.7	12.3	11%	10%	10%	1.2	1.2	1.1	3.7%	3.8%	4.0%
Mapfre	2.54	10.3	9.4	8.7	9%	10%	10%	0.9	0.9	0.9	6.1%	6.4%	6.7%
RSA Insurance	5.34	13.2	11.3	10.6	11%	12%	13%	1.4	1.4	1.3	4.6%	5.2%	5.9%
Uniqa	8.51	12.3	11.5	10.9	7%	7%	8%	0.9	0.9	1.0	6.5%	6.7%	6.9%
Vienna Insurance G.	24.00	10.0	9.8	8.9	6%	7%	6%	0.6	0.5	0.5	4.1%	4.6%	4.8%
Zurich Financial	382.00	14.0	12.7	12.1	13%	13%	13%	1.7	1.6	1.6	5.4%	5.7%	6.0%
Median		10.3	10.3	9.8	11%	10%	10%	1.0	1.0	1.0	5.5%	5.8%	6.2%



Gas & Oil valuations

		EV	/ EBITD	4		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Oil companies																
Lotos	84.70	6.6	5.6	4.8	0.7	0.6	0.6	12.9	11.9	10.8	10%	11%	12%	3.5%	2.3%	2.5%
MOL	2890.00	4.3	4.1	3.7	0.6	0.6	0.5	10.4	9.2	8.0	15%	15%	15%	4.9%	5.2%	5.5%
PKN Orlen	92.82	5.2	5.5	5.3	0.5	0.4	0.4	8.8	10.4	10.6	9%	8%	7%	3.8%	3.2%	3.2%
Hellenic Petroleum	8.52	6.1	4.9	5.2	0.4	0.4	0.4	10.6	6.5	6.7	7%	9%	8%	6.0%	6.8%	6.7%
HollyFrontier	50.69	5.9	5.9	6.2	0.6	0.6	0.6	10.3	9.7	10.6	10%	11%	10%	2.6%	2.7%	2.7%
Marathon Petroleum	53.19	7.5	5.6	5.6	0.6	0.5	0.5	12.0	7.0	7.5	7%	9%	9%	4.0%	4.5%	4.9%
Motor Oil	20.16	4.6	4.1	4.5	0.3	0.3	0.3	7.5	6.3	7.2	6%	7%	7%	6.7%	7.1%	7.3%
Neste Oil	28.82	11.0	10.1	9.6	1.4	1.5	1.4	17.4	15.5	14.7	13%	15%	14%	3.0%	3.4%	3.6%
OMV	46.33	3.8	3.5	3.4	0.9	0.9	0.9	8.8	8.0	7.6	25%	26%	27%	4.1%	4.6%	5.0%
Phillips 66	102.19	8.0	6.8	7.3	0.5	0.5	0.5	13.0	9.9	10.5	7%	7%	7%	3.4%	3.7%	4.0%
Saras SpA	1.49	4.1	2.5	3.5	0.2	0.2	0.1	14.4	5.1	8.5	4%	6%	4%	4.4%	9.2%	6.2%
Tupras	137.70	7.1	5.0	4.7	0.5	0.4	0.4	11.0	5.9	5.5	7%	8%	8%	8.5%	14.6%	15.5%
Valero Energy	83.70	7.9	5.5	6.0	0.4	0.4	0.4	16.0	8.7	9.3	5%	7%	7%	4.3%	4.7%	4.9%
Median		6.1	5.5	5.2	0.5	0.5	0.5	11.0	8.7	8.5	7%	9%	8%	4.1%	4.6%	4.9%
Gas companies																
PGNiG	4.94	4.6	3.5	2.9	0.8	0.8	0.6	11.9	8.2	6.8	18%	22%	22%	2.2%	3.4%	4.9%
A2A SpA	1.63	7.4	6.9	6.6	1.4	1.3	1.3	15.8	13.6	12.9	18%	19%	19%	4.8%	4.9%	5.0%
BP	504.00	4.6	4.3	4.2	0.6	0.6	0.6	11.9	10.4	9.7	14%	14%	15%	0.0%	0.0%	0.0%
Centrica	74.78	4.1	3.9	4.2	0.3	0.3	0.3	10.2	7.6	7.5	7%	8%	7%	0.0%	0.0%	0.0%
Enagas	20.20	9.7	9.5	10.4	7.8	7.9	8.6	11.4	10.6	11.6	80%	83%	83%	7.9%	8.2%	8.1%
Endesa	23.56	8.6	8.5	8.4	1.5	1.5	1.5	16.3	16.1	15.7	18%	18%	18%	6.1%	6.2%	5.2%
Engie	13.94	6.6	6.2	5.9	1.0	1.0	0.9	13.4	12.0	10.9	15%	15%	16%	5.6%	6.0%	6.5%
Eni	13.90	3.6	3.4	3.2	0.9	0.9	0.9	12.5	10.3	9.7	24%	26%	28%	6.2%	6.3%	6.4%
Equinor	171.00	3.1	2.7	2.6	1.1	1.0	1.0	11.6	9.8	9.1	36%	37%	39%	0.1%	0.1%	0.1%
Gas Natural SDG	23.48	9.3	8.9	8.8	1.6	1.6	1.6	16.9	15.8	14.8	17%	18%	18%	5.8%	6.1%	6.4%
Gazprom	232.88	3.6	3.5	3.3	1.0	1.0	0.9	3.6	3.8	3.5	28%	28%	28%	7.1%	8.1%	10.5%
Hera SpA	3.57	7.7	7.4	7.2	1.3	1.2	1.2	17.6	17.2	17.1	17%	16%	17%	2.9%	3.1%	3.1%
NovaTek	1274.00	11.6	11.2	11.1	4.5	4.3	4.0	8.4	7.4	6.3	38%	38%	36%	4.2%	5.0%	5.5%
ROMGAZ	34.10	5.5	5.2	4.9	2.7	2.5	2.3	9.9	9.0	8.3	48%	47%	47%	9.5%	10.4%	11.3%
Shell	25.57	3.4	3.1	2.9	0.5	0.5	0.5	11.6	9.6	8.9	16%	17%	18%	8.2%	8.2%	8.5%
Snam SpA	4.55	12.6	12.3	11.9	10.2	10.0	9.7	14.3	14.0	13.4	81%	81%	81%	5.3%	5.5%	5.8%
Total	46.58	5.1	4.8	4.6	0.9	0.9	0.9	11.5	10.0	9.6	18%	20%	19%	6.4%	6.6%	6.8%
Median		5.5	5.2	4.9	1.1	1.0	1.0	11.9	10.3	9.7	18%	20%	19%	5.6%	6.0%	5.8%

Power generation company valuations

rower generatio																
			//EBITD			EV/S			P/E			TDA mar			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Power generation																
CEZ	521.00	7.4	6.9	6.8	2.1	1.9	1.8	15.5	13.5	13.6	29%	28%	27%	4.6%	5.8%	6.7%
Enea	8.83	3.2	3.0	2.8	0.7	0.6	0.6	3.3	3.0	2.5	20%	19%	22%	0.0%	0.0%	3.3%
Energa	6.85	3.8	4.1	4.3	0.7	0.7	0.8	3.9	4.3	4.3	18%	17%	18%	0.0%	0.0%	0.0%
PGE	8.08	3.2	3.3	2.4	0.7	0.6	0.5	4.9	5.6	3.8	21%	18%	22%	0.0%	5.1%	4.5%
Tauron	1.60	4.1	3.7	3.2	0.7	0.6	0.6	2.5	2.4	2.0	17%	17%	19%	0.0%	0.0%	0.0%
EDF	10.63	5.2	4.8	4.7	1.2	1.1	1.1	15.4	12.1	11.1	23%	24%	24%	3.0%	3.8%	4.0%
EDP	3.48	8.7	8.3	8.0	2.1	2.0	1.8	15.9	14.3	13.4	24%	24%	23%	5.5%	5.6%	5.8%
Endesa	23.56	8.6	8.5	8.4	1.5	1.5	1.5	16.3	16.1	15.7	18%	18%	18%	6.1%	6.2%	5.2%
Enel	6.61	7.3	6.9	6.7	1.6	1.6	1.5	14.1	13.0	12.2	22%	23%	23%	5.0%	5.4%	5.7%
EON	8.73	7.5	5.6	5.5	1.2	0.6	0.6	12.8	13.0	12.3	16%	11%	10%	5.3%	5.6%	5.7%
Fortum	21.08	14.6	13.5	13.0	4.5	4.3	4.2	15.2	14.3	13.2	31%	32%	32%	5.2%	5.2%	5.2%
Iberdola	9.31	10.2	9.6	9.1	2.7	2.6	2.5	17.7	16.6	15.9	27%	27%	28%	4.0%	4.3%	4.5%
National Grid	831.90	11.1	10.5	9.9	3.6	3.6	3.5	14.3	14.3	13.5	32%	34%	35%	0.0%	0.0%	0.0%
Red Electrica	18.34	9.6	9.7	9.7	7.5	7.5	7.5	13.8	14.8	15.1	78%	78%	77%	5.7%	5.6%	5.5%
RWE	26.52	9.4	5.5	4.7	1.2	0.8	0.8	23.8	15.4	11.4	12%	15%	16%	3.0%	3.5%	4.0%
SSE	1166.00	10.8	10.0	9.3	0.7	1.4	1.4	17.4	12.8	11.3	7%	14%	15%	0.0%	0.0%	0.0%
Verbund	52.20	9.3	7.9	7.4	3.4	3.1	3.0	32.1	25.2	23.8	36%	39%	40%	1.3%	1.8%	2.0%
Median		8.6	6.9	6.8	1.5	1.5	1.5	15.2	13.5	12.3	22%	23%	23%	3.0%	4.3%	4.5%

Machine and equipment manufacturers

		E۱	//EBITD	A		EV/S			P/E		EBIT	ΓDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Industrials																
Famur	3.97	4.1	4.8	5.6	1.1	1.3	1.3	5.0	9.2	11.6	26%	27%	24%	13.4%	9.9%	8.2%
Caterpillar	131.75	7.8	8.0	7.8	1.6	1.6	1.6	11.1	10.7	10.2	21%	20%	20%	2.9%	3.2%	3.5%
Epiroc	107.55	8.6	8.1	7.7	2.1	2.1	2.0	19.8	18.5	17.5	25%	26%	26%	2.4%	2.6%	2.7%
Komatsu	2490.00	5.8	6.2	6.2	1.1	1.2	1.1	9.4	10.5	10.3	19%	18%	18%	4.3%	4.5%	4.5%
Sandvig AG	158.25	8.7	8.4	8.1	2.0	1.9	1.9	14.8	14.0	13.2	23%	23%	24%	2.9%	3.1%	3.3%
Median		7.8	8.0	7.7	1.6	1.6	1.6	11.1	10.7	11.6	23%	22%	22%	2.9%	3.2%	3.5%

Fertilizer producers and chemical companies

		EV	/EBITD	4		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Fertilizer producers																
Grupa Azoty	37.50	4.4	7.7	8.9	0.6	0.7	0.7	6.7	23.2	23.0	13%	9%	8%	0.0%	0.0%	1.3%
Acron	5030.00	7.1	6.6	6.6	2.4	2.2	2.1	9.2	8.9	8.7	34%	34%	32%	6.6%	7.0%	7.6%
CF Industries	49.10	9.6	8.8	8.3	3.6	3.5	3.4	20.5	16.7	14.4	38%	40%	41%	2.4%	2.5%	2.5%
Israel Chemicals	1687.00	6.5	6.3	6.2	1.5	1.4	1.4	11.3	10.5	10.2	23%	23%	22%	0.0%	0.0%	0.0%
K+S	15.18	8.0	7.0	6.5	1.5	1.4	1.4	13.6	10.3	8.7	19%	21%	21%	2.7%	3.7%	4.4%
Phosagro	2570.00	6.2	6.0	5.7	1.9	1.9	1.8	9.9	10.3	9.7	31%	31%	31%	6.7%	5.4%	5.4%
The Mosaic Company	21.98	7.0	5.7	5.2	1.3	1.2	1.2	18.1	11.1	8.7	19%	21%	23%	0.9%	1.0%	1.3%
Yara International	409.60	53.8	46.2	43.7	8.6	7.9	7.8	-	-	-	16%	17%	18%	0.3%	0.5%	0.6%
ZA Police	14.30	6.0	4.9	4.9	1.3	1.2	1.2	1.7	1.2	1.2	21%	24%	24%	58.1%	62.9%	69.9%
ZCh Puławy	92.00	1.8	1.8	-	0.3	0.3	0.3	6.9	7.4	-	15%	15%	-	5.4%	5.4%	-
Median		6.8	6.5	6.5	1.5	1.4	1.4	9.9	10.3	9.2	20%	22%	23%	2.6%	3.1%	2.5%
Chemical companies																
Ciech	38.55	5.6	5.4	5.2	1.0	1.0	1.0	8.7	9.1	8.9	17%	19%	18%	0.0%	0.0%	5.5%
Akzo Nobel	81.89	13.6	11.9	11.1	1.9	1.9	1.8	26.4	19.7	17.5	14%	16%	16%	2.4%	2.6%	2.9%
BASF	64.41	9.5	8.3	7.7	1.3	1.2	1.2	16.4	14.1	12.7	13%	15%	15%	5.0%	5.1%	5.3%
Croda	4948.00	16.8	15.7	14.9	4.9	4.7	4.5	25.9	24.1	22.6	29%	30%	30%	0.0%	0.0%	0.0%
Sisecam	4.56	3.5	3.0	2.5	0.7	0.6	0.5	4.9	4.4	4.2	20%	20%	21%	4.7%	5.1%	5.9%
Soda Sanayii	5.76	4.2	3.5	3.0	1.0	0.8	0.7	4.5	4.6	4.0	24%	24%	24%	5.9%	5.9%	6.8%
Solvay	98.64	5.8	5.5	5.2	1.2	1.2	1.2	11.9	11.2	10.1	21%	22%	22%	3.8%	4.0%	4.2%
Tata Chemicals	586.85	8.2	7.2	6.5	1.5	1.4	1.3	14.2	13.0	11.5	18%	19%	20%	2.0%	2.2%	2.1%
Tessenderlo Chemie	30.05	6.0	5.6	5.2	0.8	0.8	0.7	13.8	12.1	10.2	13%	14%	14%	-	-	-
Wacker Chemie	72.92	5.5	5.2	4.8	0.9	0.9	0.8	23.1	16.9	13.8	16%	17%	17%	3.2%	3.7%	4.1%
Median		5.9	5.5	5.2	1.1	1.1	1.1	14.0	12.5	10.9	18%	19%	19%	3.2%	3.7%	4.2%

Mining company valuations

		EV	/ EBITD	A		EV/S			P/E		EBIT	TDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Metals																
KGHM	81.70	4.0	4.6	4.0	0.9	0.9	0.9	7.1	10.1	8.5	23%	20%	21%	0.0%	1.8%	3.0%
Anglo American	1932.80	3.8	4.1	4.4	1.4	1.4	1.4	7.7	8.6	9.4	36%	34%	32%	0.0%	0.0%	0.0%
Antofagasta	903.00	5.6	5.7	5.2	2.8	2.7	2.6	17.8	18.2	15.2	49%	48%	50%	0.0%	0.0%	0.0%
BHP Group LTD	36.97	3.7	3.5	3.9	2.0	1.9	2.0	13.4	11.5	13.1	53%	55%	52%	4.1%	3.0%	2.5%
Boliden	245.85	5.6	5.5	5.6	1.4	1.3	1.3	11.8	11.4	11.6	24%	24%	23%	4.4%	4.5%	4.6%
First Quantum	10.03	7.9	5.5	5.2	3.2	2.3	2.3	16.8	11.1	8.5	41%	43%	44%	0.1%	0.1%	0.1%
Freeport-McMoRan	10.37	10.8	7.8	4.8	2.1	2.0	1.7	-	16.5	7.2	19%	26%	35%	1.9%	2.8%	3.5%
Fresnillo	749.40	9.6	7.8	6.4	3.5	3.3	3.0	39.5	30.5	20.1	36%	42%	47%	0.0%	0.0%	0.0%
Gold Fields	7421.00	4.6	3.9	3.8	2.0	1.9	1.8	21.0	14.3	14.7	44%	48%	48%	0.0%	0.0%	0.0%
Hudbay Min	5.18	4.0	3.4	3.0	1.3	1.3	1.2	-	26.0	11.7	33%	37%	41%	0.2%	0.2%	0.2%
KAZ Minerals	437.00	4.5	4.5	4.3	2.4	2.4	2.3	5.4	5.2	4.8	54%	53%	53%	0.0%	0.0%	0.0%
Lundin Min	6.83	6.6	4.0	3.5	2.4	1.8	1.7	20.3	9.4	7.7	36%	45%	47%	1.1%	1.1%	1.4%
MMC Norilsk Nickel	24.55	6.8	6.6	6.5	3.7	3.8	3.6	9.9	9.8	9.5	55%	57%	55%	9.3%	10.8%	11.1%
OZ Minerals	9.58	6.8	5.3	4.4	3.0	2.4	2.1	17.6	12.8	8.8	43%	45%	48%	2.2%	2.4%	2.9%
Polymetal Intl	1172.50	8.3	7.6	7.6	3.9	3.7	3.7	12.4	10.7	10.5	47%	49%	48%	0.0%	0.0%	0.0%
Polyus	7500.00	7.9	7.4	7.6	5.1	4.8	4.8	10.8	10.3	11.2	64%	64%	63%	4.2%	4.6%	4.4%
Sandfire Resources	6.44	2.6	2.2	2.0	1.3	1.2	1.1	9.1	7.0	5.8	51%	55%	57%	3.9%	4.3%	4.8%
Southern CC	35.33	8.9	8.4	8.1	4.5	4.3	4.0	16.5	15.3	14.7	51%	51%	50%	4.3%	4.2%	4.1%
Median		6.1	5.4	4.6	2.4	2.2	2.1	12.9	11.3	10.0	44%	46%	48%	0.7%	1.5%	2.0%
			/EBITD			EV/S			P/E			DA mar			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Coal																
JSW	28.10	0.7	2.2	1.7	0.1	0.3	0.3	4.8	-	24.4	19%	12%	16%	6.1%	0.0%	0.0%
Alliance Res Partners	15.86	4.1	4.8	5.2	1.3	1.3	1.4	5.4	9.9	13.6	31%	28%	27%	13.5%	12.5%	11.7%
Arch Coal	80.42	2.7	3.2	3.3	0.5	0.5	0.5	5.1	6.4	6.1	19%	17%	16%	2.2%	2.2%	2.2%
Banpu	12.70	10.8	11.2	10.6	2.1	2.2	2.3	12.5	11.2	10.6	19%	19%	22%	3.9%	4.0%	4.3%
BHP Group	50.92	3.7	3.5	3.9	2.0	1.9	2.0	13.4	11.5	13.1	53%	55%	52%	8.7%	6.4%	5.3%
China Coal Energy	3.26	4.8	4.8	5.1	0.9	0.9	0.9	7.1	7.5	7.2	19%	19%	18%	3.5%	3.2%	3.0%
Cloud Peak Energy	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW Bogdanka	40.30	1.5	1.6	1.6	0.5	0.5	0.5	5.0	6.1	6.5	35%	33%	32%	1.8%	5.3%	6.0%
Natural Res Partners	26.93	1.6	1.8	1.8	1.2	1.4	1.4	5.4	5.0	4.9	77%	78%	78%	6.7%	6.7%	6.7%
Peabody Energy Corp	18.37	2.5	3.2	3.3	0.5	0.5	0.5	11.7	_	_	19%	16%	16%	12.4%	2.9%	3.0%
PT Bukit Asam Tbk	2620.00	4.1	4.1	3.8	1.2	1.1	1.1	5.9	6.6	6.5	29%	28%	28%	10.9%	11.2%	11.0%
Rio Tinto	4332.00	3.5	3.9	4.4	1.7	1.8	2.0	8.2	9.2	11.2	49%	47%	44%	0.0%	0.0%	0.0%
Semirara Mining&Power	23.70	5.5	4.9	4.7	2.7	2.3	2.3	8.6	7.8	7.8	50%	47%	48%	6.4%	6.7%	7.3%
Shaanxi Heimao Coking	3,66	_	_	_	0.7	0.7	0.7	14.1	12.2	11.8	_	_	_	_	_	_
Shanxi Xishan Coal&Ele	6.18	5.4	5.5	5.4	1.0	1.0	1.0	9.8	9.8	9.7	19%	19%	19%	3.0%	3.0%	2.9%
Shougang Fushan Res	1.79	1.2	1.1	1.2	0.6	0.6	0.6	7.6	7.0	7.9	53%	52%	49%	7.9%	8.1%	5.3%
Stanmore Coal	1.43	1.9	2.4	3.2	0.7	0.7	0.8	4.3	5.7	8.3	37%	31%	24%	5.7%	5.2%	4.8%
Teck Resources	18.96	3.4	3.7	3.8	1.4	1.4	1.4	7.0	7.5	7.9	40%	39%	38%	1.5%	1.8%	3.7%
Terracom	0.41	1.7	1.4	1.5	0.5	0.4	0.4	3.2	2.1	2.7	30%	28%	26%	_	7.3%	12.2%
Warrior Met Coal	22.34	2.2	3.2	3.4	0.9	1.0	1.1	3.4	5.2	5.2	41%	33%	33%	15.7%	8.5%	11.3%
Yanzhou Coal Mining	8.44	3.6	4.0	4.3	1.0	0.9	0.9	4.4	4.7	4.8	28%	23%	21%	7.9%	5.6%	5.1%
Median	0.71	3.4	3.5	3.8	1.0	1.0	1.0	6.5	7.3	7.9	31%	28%	27%	6.2%	5.3%	5.1%



European telecom valuations

		EV	/EBITD	4		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
Netia	4.54	5.2	5.3	5.1	1.3	1.4	1.4	30.5	25.3	21.5	26%	26%	27%	0.0%	0.0%	8.8%
Orange Polska	5.90	4.7	4.6	4.3	1.4	1.3	1.3	38.2	24.0	17.1	29%	29%	29%	0.0%	0.0%	4.2%
Play	27.18	5.7	5.7	5.3	1.9	2.0	1.9	8.3	7.7	7.7	34%	35%	35%	5.3%	5.2%	5.2%
Median		5.2	5.3	5.1	1.4	1.4	1.4	30.5	24.0	17.1	29%	29%	29%	0%	0.0%	5.2%
Mid Caps																
Proximus	26.38	6.0	6.0	6.0	2.0	2.0	2.0	15.5	15.3	15.5	33%	33%	33%	5.7%	5.9%	6.0%
Telefonica CP	215.00	6.8	6.9	6.9	2.1	2.1	2.0	12.9	13.4	13.4	30%	30%	30%	9.7%	9.7%	9.7%
Hellenic Telekom	12.30	5.1	5.0	4.9	1.8	1.8	1.8	17.7	13.9	12.2	36%	36%	36%	4.7%	5.1%	5.5%
Matav	421.50	4.1	4.1	4.2	1.3	1.3	1.3	9.3	9.0	9.1	31%	31%	30%	6.2%	6.6%	7.2%
Telecom Austria	6.60	5.0	4.9	4.8	1.7	1.7	1.7	10.4	9.8	9.4	34%	34%	35%	3.2%	3.9%	4.3%
Median		5.1	5.0	4.9	1.8	1.8	1.8	12.9	13.4	12.2	33%	33%	33%	5.7%	5.9%	6.0%
Big Caps																
BT	170.82	3.8	3.5	3.5	1.2	1.2	1.2	6.5	7.0	6.8	32%	34%	35%	0.0%	0.0%	0.0%
DT	15.17	5.7	5.4	5.1	1.8	1.8	1.7	15.1	13.7	12.2	32%	33%	33%	4.8%	5.0%	5.4%
KPN	2.77	7.5	7.3	7.0	3.2	3.2	3.3	23.9	20.7	17.6	43%	44%	47%	4.8%	5.0%	5.3%
Orange France	13.87	5.1	5.0	4.9	1.6	1.6	1.5	13.2	12.3	11.5	31%	31%	32%	5.1%	5.4%	5.7%
Swisscom	492.20	7.8	7.8	7.7	2.9	3.0	3.0	17.1	17.3	17.2	38%	38%	38%	4.5%	4.5%	4.5%
Telefonica S.A.	6.72	5.3	5.3	5.2	1.8	1.8	1.8	9.8	9.1	8.5	34%	34%	35%	6.0%	6.0%	6.1%
Telia Company	43.12	8.7	8.6	8.4	3.1	3.0	3.0	17.8	16.6	15.5	35%	35%	36%	5.7%	5.8%	6.0%
TI	0.51	4.6	4.6	4.5	1.9	1.9	1.9	8.3	7.9	7.7	42%	42%	42%	0.0%	0.0%	0.0%
Median		5.5	5.3	5.1	1.9	1.9	1.9	14.2	13.0	11.8	35%	35%	36%	4.8%	5.0%	5.3%

Media company valuations

		EΝ	/EBITD	A		EV/S			P/E		EBI	ΓDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
Agora	9.90	4.5	4.2	3.7	0.4	0.4	0.4	32.9	17.5	10.9	9%	10%	11%	5.1%	5.1%	5.1%
Wirtualna Polska	63.00	10.5	9.2	8.4	3.3	3.0	2.7	19.8	16.9	15.4	31%	32%	32%	1.6%	2.6%	3.1%
Median		7.5	6.7	6.0	1.8	1.7	1.5	26.3	17.2	13.1	20%	21%	21%	3.3%	3.8%	4.1%
Daily Mail																
Arnolgo Mondadori	1.48	5.6	5.1	5.1	0.5	0.6	0.6	10.7	9.8	9.8	10%	11%	11%	3.9%	4.8%	3.3%
Axel Springer	63.50	9.2	9.2	8.3	2.1	2.0	1.9	24.3	24.8	21.6	23%	22%	24%	3.4%	3.5%	3.7%
Daily Mail	834.00	9.5	10.0	9.3	1.3	1.3	1.3	22.1	20.2	18.8	13%	13%	14%	0.0%	0.0%	0.0%
Gruppo Editorial	0.27	4.6	4.4	4.5	0.4	0.4	0.4	-	11.7	8.6	8%	9%	9%	1.9%	3.4%	4.5%
New York Times	29.98	20.6	18.8	15.2	2.6	2.5	2.3	39.6	35.6	27.6	13%	13%	15%	0.7%	0.7%	0.7%
Promotora de Inform	1.34	8.3	7.1	6.5	1.7	1.7	1.6	20.7	14.3	9.1	21%	24%	25%	0.0%	0.0%	-
Median		8.7	8.2	7.4	1.5	1.5	1.4	22.1	17.2	14.3	13%	13%	15%	1.3%	2.0%	3.3%
TV																
Atresmedia Corp	3.78	5.8	5.9	6.1	1.0	1.0	1.0	6.8	7.0	7.3	18%	17%	17%	12.0%	11.5%	11.2%
Gestevision Telecinco	6.16	7.5	8.1	8.4	2.0	2.0	2.0	10.2	10.3	10.5	27%	25%	24%	6.8%	7.6%	7.2%
ITV PLC	120.15	8.2	8.0	7.6	1.8	1.8	1.7	9.3	9.0	8.6	22%	22%	22%	0.0%	0.0%	0.0%
M6-Metropole Tel	16.15	5.5	5.4	5.2	1.4	1.3	1.3	11.7	11.2	10.8	25%	25%	26%	6.0%	6.2%	6.5%
Mediaset SPA	2.77	4.4	4.5	4.0	1.5	1.5	1.5	13.5	11.4	10.4	33%	33%	37%	4.2%	5.6%	5.9%
Prosieben	13.71	6.0	5.8	5.5	1.4	1.3	1.2	7.0	6.7	6.3	23%	22%	23%	7.4%	7.6%	7.3%
RTL Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF1-TV Francaise	8.59	3.7	3.5	3.4	0.8	0.7	0.7	10.2	9.3	8.3	20%	21%	21%	5.3%	5.7%	5.8%
Median		5.7	5.6	5.4	1.4	1.4	1.4	10.2	9.8	9.5	24%	23%	23%	5.7%	5.9%	6.2%
Pay TV																
Cogeco	106.78	6.0	5.9	5.8	2.9	2.8	2.8	15.5	14.1	14.4	48%	48%	48%	2.0%	2.2%	2.4%
Comcast	46.97	9.1	8.5	8.3	2.9	2.7	2.7	15.5	13.9	12.9	31%	32%	32%	1.8%	1.9%	2.1%
Dish Network	35.89	9.3	10.1	10.9	1.7	1.8	1.8	14.8	19.9	22.2	19%	18%	16%	0.0%	0.0%	0.0%
Liberty Global	28.27	5.1	5.1	5.0	2.1	2.1	2.1	-	-	-	41%	42%	42%	0.0%	0.0%	-
Shaw Communications	20.06	8.0	7.6	7.3	3.3	3.2	3.0	19.8	19.4	18.5	41%	41%	42%	7.9%	7.9%	7.9%
Median		8.0	7.6	7.3	2.9	2.7	2.7	15.5	16.7	16.4	41%	41%	42%	1.8%	1.9%	2.3%

IT company valuations

		EV	//EBITD	A		EV/S			P/E		EBIT	TDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
Asseco Poland	51.80	4.5	4.2	4.0	0.7	0.6	0.6	13.9	13.5	13.3	15%	15%	15%	5.9%	4.4%	4.4%
Comarch	179.00	6.5	5.9	5.5	1.0	0.9	0.8	15.5	14.0	13.2	15%	15%	15%	0.8%	0.8%	0.8%
Median		5.5	5.0	4.8	0.8	0.8	0.7	14.7	13.8	13.3	15%	15%	15%	3.4%	2.6%	2.6%
Foreign companies																
Atos Origin	67.20	7.3	7.0	6.5	1.0	1.0	1.0	8.0	7.5	7.0	14%	14%	15%	2.3%	2.6%	2.9%
CapGemini	108.85	8.8	8.2	7.8	1.3	1.3	1.2	16.6	15.2	14.1	15%	15%	15%	1.7%	1.9%	2.0%
IBM	143.62	9.9	9.3	8.8	2.2	2.2	2.1	11.1	10.6	9.9	23%	23%	24%	4.5%	4.7%	4.9%
Indra Sistemas	8.15	5.4	5.1	4.8	0.6	0.6	0.6	10.8	9.3	8.4	11%	11%	12%	1.3%	2.1%	2.4%
Microsoft	137.52	18.5	16.1	14.5	7.9	7.0	6.4	30.0	26.2	23.2	43%	44%	44%	1.3%	1.4%	1.6%
Oracle	53.89	10.6	9.9	9.6	4.9	4.8	4.7	15.6	13.9	12.9	47%	48%	48%	1.5%	1.7%	1.7%
SAP	109.36	17.7	15.1	13.4	5.3	4.9	4.5	22.4	20.1	17.9	30%	32%	34%	1.4%	1.6%	1.8%
TietoEnator	23.72	8.3	7.8	7.6	1.2	1.2	1.2	12.9	12.6	12.0	15%	15%	15%	6.2%	6.5%	6.7%
Median		9.3	8.8	8.3	1.8	1.7	1.7	14.3	13.2	12.5	19%	19%	20%	1.6%	2.0%	2.2%

Gaming company valuations

		EV	/EBITD	Ą		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Gaming																
11 bit studios	411.00	19.3	23.9	6.2	11.1	10.0	4.1	27.6	39.2	9.7	58%	42%	66%	0.0%	0.0%	0.0%
CD Projekt	251.00	-	9.2	10.2	62.9	7.0	8.2	-	10.4	11.7	21%	76%	80%	0.4%	0.0%	0.0%
PlayWay	180.40	14.3	12.5	11.2	9.4	8.4	7.6	21.6	19.8	18.4	66%	67%	67%	1.4%	3.4%	3.8%
Activision Blizzars	55.45	17.4	14.8	13.6	6.2	5.7	5.2	25.4	22.2	19.2	36%	38%	38%	0.7%	0.7%	0.8%
Capcom	2745.00	13.8	12.6	11.2	3.3	3.6	3.3	22.4	19.0	18.1	24%	29%	29%	1.3%	1.4%	1.5%
Take Two	126.24	17.3	17.9	16.7	4.2	4.4	4.3	26.7	26.7	25.5	24%	25%	26%	-	-	-
Ubisoft	72.76	8.2	8.8	8.3	4.1	3.8	3.6	24.6	25.5	22.6	50%	43%	43%	0.0%	0.0%	0.0%
Electronic Arts	98.34	16.8	14.7	12.9	5.3	5.0	4.7	25.1	21.4	19.3	32%	34%	36%	-	0.0%	0.0%
Paradox Interactive	133.90	18.1	13.8	11.6	10.0	8.1	7.1	43.2	33.4	22.6	55%	59%	61%	1.4%	1.7%	1.4%
Mediana		17.0	13.8	11.2	6.2	5.7	4.7	25.2	22.2	19.2	36%	42%	43%	0.7%	0.3%	0.4%

Source: Dom Maklerski mBanku (stocks marked with bold), Bloomberg

Steam Global Top Sellers

2019-09-13	Company	Position	D/D change	W/W change	1-week average	Price (PLN)	D/D change	W/W change	1-week average
Frostpunk	11 bit studios	200+	-	-	157	-	-	-	110.00
Frostpunk: SP	11 bit studios	184	-33	-89	121	88.00	0%	0%	88.00
Children of Morta	11 bit studios	92	-27	-65	39	80.00	0%	0%	80.00
Blair Witch	Bloober Team	200+	-	-	172	-	-	-	110.00
Cyberpunk 2077	CD Projekt	24	+3	-12	41	199.00	0%	0%	199.00
The Witcher 3: WH	CD Projekt	200+	-	-	78	-	-	-	47.50
The Witcher 3: WH (GOTY)	CD Projekt	141	-1	-132	71	150.00	0%	+2x	105.00
Green Hell	Creepy Jar	101	-48	-79	42	90.00	0%	0%	90.00
Dying Light	Techland	200+	-	-	-	-	-	-	

Steam Wishlist

Ottomin Tribiniot						
2019-09-13	Company	Position	D/D change	W/W change	1-week average	Release date
Cyberpunk 2077	CD Projekt	1	-	-	1	2020-04-16
Alaskan Truck Simulator	Movie Games	62	+3	+4	64	2020
Bum Simulator	PlayWay	48	+2	+3	49	2019
I am Your President	PlayWay	60	+3	+2	61	TBA
Junkyard Simulator	PlayWay	56	+3	+3	57	2019
Ship Builder Simulator	PlayWay	84	+2	+2	85	TBA
Tank Mechanic Simulator	PlayWay	74	+3	-1	74	2019
Dying Light 2	Techland	10	-	-	10	Spring 2020
Chernobylite	The Farm 51	50	+1	+2	50	2019

Source: Steam (Valve Corporation), Dom Maklerski mBanku



Construction company valuations

		ΕV	/EBITD	A		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Construction																
Acciona	97.95	8.4	8.1	7.8	1.4	1.4	1.4	18.9	18.3	17.3	17%	17%	17%	3.8%	4.0%	4.2%
Astaldi	0.69	4.5	4.4	4.4	0.5	0.5	0.5	1.2	1.0	0.9	10%	10%	11%	-	-	-
Budimex	138.20	8.2	7.9	9.2	0.3	0.4	0.3	20.0	17.7	20.4	4%	5%	4%	8.9%	4.4%	4.8%
Ferrovial	25.88	-	40.1	35.4	4.1	4.0	3.9	-	43.4	37.7	3%	10%	11%	2.9%	2.9%	3.0%
Hochtief	104.00	3.9	3.8	3.5	0.2	0.2	0.2	11.0	10.3	10.0	6%	6%	7%	5.8%	6.2%	6.4%
Mota Engil	2.09	4.2	3.8	3.7	0.6	0.6	0.6	16.1	10.5	8.9	15%	15%	15%	2.4%	4.8%	5.7%
NCC	161.40	6.8	5.5	5.3	0.3	0.3	0.3	16.3	11.3	10.7	4%	5%	5%	3.9%	4.7%	4.8%
Skanska	189.75	8.6	8.6	8.1	0.4	0.5	0.4	14.2	14.3	13.4	5%	5%	6%	3.5%	3.7%	4.1%
Strabag	29.50	2.4	2.5	2.4	0.2	0.2	0.1	9.3	9.5	9.1	6%	6%	6%	4.4%	4.5%	4.7%
Median		5.7	5.5	5.3	0.4	0.5	0.4	15.2	11.3	10.7	6%	6%	7%	3.8%	4.5%	4.8%

Real-estate developers

	EV/EBITDA				P/BV			P/E			EBITDA margin				DY		
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	
RE Developers																	
Atal	36.70	7.4	7.7	7.0	1.7	1.6	1.6	7.9	8.2	7.4	24%	23%	23%	12.8%	11.6%	11.1%	
Dom Development	83.20	7.8	7.6	8.5	2.0	1.9	2.0	8.9	8.3	9.2	18%	18%	17%	10.9%	11.3%	12.0%	
Develia	2.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Echo Investment	4.82	13.3	15.4	13.4	1.2	1.2	1.2	7.2	9.0	11.3	36%	31%	30%	9.2%	9.2%	6.0%	
GTC	9.35	15.2	14.5	13.5	1.0	0.9	0.9	10.8	10.5	10.0	84%	81%	80%	0.2%	0.2%	0.3%	
CA Immobilien Anlagen	30.65	25.4	22.3	20.3	1.0	1.0	0.9	24.5	21.5	19.4	78%	69%	67%	3.1%	3.4%	3.7%	
Deutsche Euroshop AG	24.38	15.3	15.3	15.3	0.7	0.7	0.7	11.3	12.1	12.4	88%	88%	88%	6.3%	6.5%	6.5%	
Immofinanz AG	24.63	29.7	26.7	26.1	0.9	0.9	0.8	16.0	17.0	15.2	46%	54%	53%	3.6%	3.9%	4.1%	
Klepierre	29.66	19.4	18.9	18.7	0.8	0.8	0.9	11.1	10.7	10.5	84%	85%	85%	7.4%	7.6%	7.8%	
Segro	779.60	34.8	31.3	28.5	1.1	1.0	1.0	31.7	29.2	28.2	77%	81%	83%	0.0%	0.0%	0.0%	
Median		15.3	15.4	15.3	1.0	1.0	0.9	11.1	10.7	11.3	77%	69%	67%	6.3%	6.5%	6.0%	

Clothing and footwear company valuations

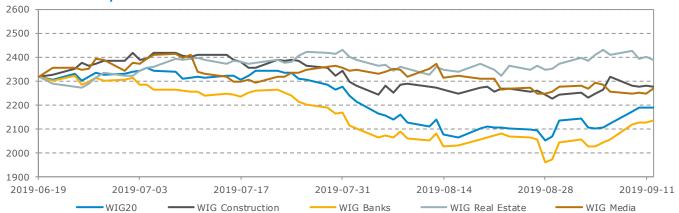
	EV/EBITDA				EV/S P/E					EBITDA margin				DY		
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
CCC	141.70	7.2	5.7	5.5	1.2	1.0	0.9	52.9	21.8	19.3	16%	18%	16%	0.3%	1.4%	1.4%
LPP	7725.00	10.7	9.6	8.4	1.5	1.3	1.1	21.1	19.1	17.4	14%	14%	14%	0.8%	1.0%	0.8%
Monnari	4.49	4.0	3.2	2.0	0.3	0.2	0.1	8.9	8.8	7.5	7%	7%	7%	0.0%	0.0%	0.0%
VRG	4.29	8.5	7.2	6.4	1.0	0.9	0.8	13.6	11.8	10.7	12%	12%	12%	0.0%	0.0%	0.0%
Median		7.9	6.5	5.9	1.1	0.9	0.8	17.4	15.5	14.1	13%	13%	13%	0.2%	0.5%	0.4%
Foreign companies																
ABC Mart	6730.00	8.9	8.6	8.2	1.6	1.5	1.5	18.2	17.7	17.0	18%	18%	18%	2.4%	2.5%	2.5%
Adidas	275.85	15.6	14.3	12.9	2.3	2.2	2.0	28.2	24.9	21.7	15%	15%	16%	1.4%	1.6%	1.8%
Assoc Brit Foods	2300.00	8.7	8.0	7.6	1.1	1.0	1.0	16.9	15.1	14.1	13%	13%	13%	0.0%	0.0%	0.0%
Caleries	22.20	5.1	4.8	4.6	0.4	0.3	0.3	9.7	9.2	8.1	7%	7%	7%	1.3%	1.3%	1.3%
Crocs	28.05	12.7	11.0	9.8	1.6	1.5	1.5	20.4	17.7	15.8	13%	14%	15%	-	-	-
Foot Locker	40.52	4.2	4.1	4.1	0.5	0.5	0.5	8.9	8.2	7.8	11%	11%	11%	3.4%	3.7%	4.2%
Geox	1.28	7.7	5.6	3.4	0.4	0.4	0.4	-	24.2	14.5	5%	7%	11%	1.8%	3.0%	5.4%
H&M	189.62	10.6	10.0	9.4	1.3	1.2	1.2	24.5	22.8	21.5	12%	12%	12%	4.9%	4.8%	4.8%
Hugo Boss	53.88	6.7	6.3	5.9	1.3	1.2	1.2	14.6	13.1	12.1	19%	20%	20%	5.3%	5.9%	6.4%
Inditex	27.18	14.0	10.7	10.0	2.9	2.8	2.6	24.3	22.3	20.9	21%	26%	26%	2.9%	3.9%	4.3%
KappAhl	19.93	6.9	5.7	5.7	0.4	0.4	0.4	11.4	10.9	10.8	6%	7%	7%	4.4%	5.2%	5.0%
Lululemon	198.73	28.4	24.1	20.8	7.2	6.2	5.4	53.1	42.8	36.0	25%	26%	26%	0.0%	0.0%	0.0%
Nike	87.67	19.4	17.5	15.4	2.8	2.6	2.4	34.0	30.2	25.8	15%	15%	16%	1.0%	1.1%	1.2%
Under Armour	21.62	10.0	8.2	6.5	0.8	0.7	0.7	63.8	45.0	32.3	8%	9%	11%	0.0%	0.0%	0.0%
Median		9.4	8.4	7.9	1.3	1.2	1.2	20.4	20.0	16.4	13%	13%	14%	1.8%	2.5%	2.5%

Luxury, e-commerce, and food retail company valuations

	EV/EBITDA				EV/S			P/E		EBIT	DA mar	gin		DY		
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Luxury goods																
Estee Lauder	197.22	14.3	12.7	11.5	3.0	2.8	2.6	37.6	33.0	29.6	21%	22%	22%	0.8%	0.9%	1.0%
Hermes Internetional	645.00	25.2	23.2	21.2	9.5	8.8	8.1	44.8	40.8	36.9	38%	38%	38%	0.9%	1.0%	1.1%
Kering	472.15	11.2	10.3	9.7	3.9	3.6	3.3	18.8	16.5	15.2	35%	35%	35%	2.4%	2.8%	3.0%
LVMH	379.70	14.3	13.1	12.3	3.8	3.5	3.3	26.4	23.9	21.9	26%	27%	27%	1.8%	2.0%	2.2%
Moncler	35.39	14.4	12.9	11.6	5.2	4.6	4.1	24.0	22.3	20.0	36%	36%	36%	1.3%	1.5%	1.7%
Median		14.3	12.9	11.6	3.9	3.6	3.3	26.4	23.9	21.9	35%	35%	35%	1.3%	1.5%	1.7%
E-commerce																
Asos	2674.00	20.2	14.1	10.9	0.8	0.7	0.6	-	43.8	30.2	4%	5%	6%	0.0%	0.0%	0.0%
boohoo.com	269.80	36.8	27.1	22.0	3.6	2.7	2.1	67.5	55.1	42.8	10%	10%	10%	0.0%	0.0%	0.0%
Zalando	45.40	31.2	25.2	19.3	1.7	1.4	1.2	-	-	66.4	5%	6%	6%	0.0%	0.0%	0.0%
Median		31.2	25.2	19.3	1.7	1.4	1.2	67.5	49.4	42.8	5%	6%	6%	0.0%	0.0%	0.0%
Retail																
Dino	160.40	22.2	16.7	13.1	2.1	1.6	1.3	38.6	28.1	21.5	10%	10%	10%	0.0%	0.0%	0.0%
Eurocash	22.60	9.3	8.3	7.0	0.1	0.1	0.1	43.7	30.9	21.8	2%	2%	2%	4.4%	1.1%	1.6%
Jeronimo Martins	15.82	9.8	8.9	8.4	0.6	0.5	0.5	22.5	20.2	19.2	6%	6%	6%	1.7%	1.8%	1.9%
Carrefour	16.90	5.3	4.9	4.7	0.3	0.2	0.2	14.6	12.6	11.8	5%	5%	5%	3.0%	3.4%	3.6%
AXFood	202.30	10.3	10.1	9.9	0.9	0.9	0.8	26.1	25.5	25.2	9%	9%	9%	3.5%	3.5%	3.3%
Tesco	235.90	7.5	5.9	5.7	0.4	0.4	0.4	16.6	14.0	12.8	5%	7%	7%	0.0%	0.0%	0.0%
Ahold	22.63	6.3	6.1	6.0	0.5	0.5	0.5	14.0	13.1	12.5	8%	8%	8%	3.3%	3.6%	3.8%
X 5 Retail	2369.00	7.0	6.4	5.9	0.5	0.5	0.4	16.1	14.5	13.1	7%	7%	7%	4.0%	4.9%	6.1%
Magnit	3625.00	5.7	5.0	4.4	0.4	0.4	0.3	12.7	9.9	8.6	8%	8%	8%	6.1%	6.5%	7.3%
Sonae	0.89	9.7	9.1	7.0	0.8	0.7	0.7	12.2	10.4	8.5	8%	8%	10%	5.0%	5.4%	5.5%
Median		8.4	7.3	6.5	0.5	0.5	0.4	16.3	14.3	13.0	7%	7%	7%	3.4%	3.4%	3.4%



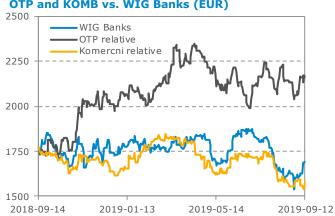




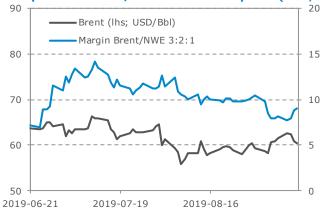
WIG IT vs. MSCI Europe Software & Services (USD)



OTP and KOMB vs. WIG Banks (EUR)



Brent price and Brent/NWE 3:2:1 crack spread (USD, rhs) Orange Polska vs. BETELES (EUR)

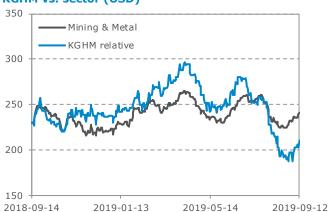




LME copper prices



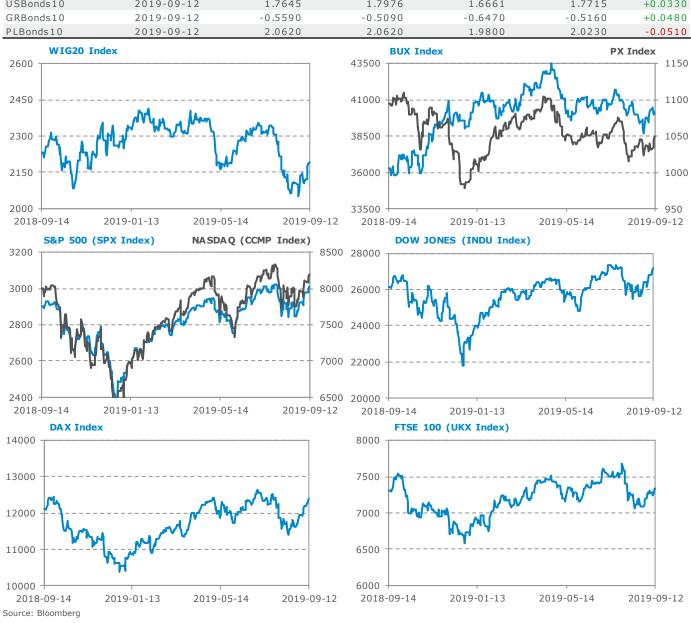
KGHM vs. sector (USD)



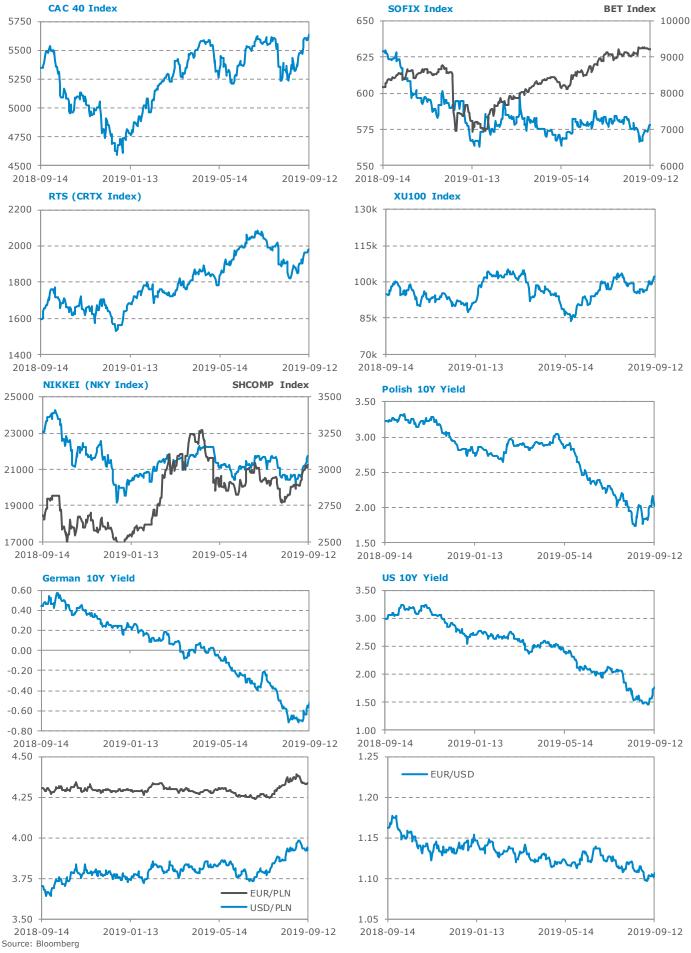
mBank.pl

Global Market Overview

Index	Date	Open	Maximum	Minimum	Close	Change
DJIA	2019-09-12	27,197.32	27,306.73	27,105.01	27,182.45	+0.17%
S&P 500	2019-09-12	3,009.08	3,020.74	3,000.92	3,009.57	+0.29%
NASDAQ	2019-09-12	8,206.59	8,243.80	8,176.73	8,194.47	+0.30%
DAX	2019-09-12	12,399.40	12,471.83	12,311.81	12,410.25	+0.41%
CAC 40	2019-09-12	5,633.95	5,667.46	5,596.37	5,642.86	+0.44%
FTSE 100	2019-09-12	7,338.03	7,369.34	7,303.17	7,344.67	+0.09%
WIG20	2019-09-12	2,191.97	2,205.99	2,174.51	2,189.07	-0.01%
BUX	2019-09-12	40,164.82	40,322.54	39,960.67	40,066.95	-0.34%
PX	2019-09-12	1,043.53	1,049.76	1,039.83	1,049.42	+0.56%
RTS	2019-09-12	1,984.04	1,987.96	1,962.12	1,978.68	-0.15%
SOFIX	2019-09-12	578.22	579.16	575.44	578.01	-0.04%
BET	2019-09-12	9,227.21	9,240.63	9,204.23	9,221.69	-0.07%
XU100	2019-09-12	102,311.80	103,009.00	101,746.10	102,447.30	+0.52%
BETELES	2019-09-12	132.38	134.30	132.38	133.37	+0.75%
NIKKEI	2019-09-12	21,761.09	21,825.92	21,743.96	21,759.61	+0.75%
SHCOMP	2019-09-12	3,016.63	3,033.47	3,005.20	3,031.24	+0.75%
Copper (LME)	2019-09-12	5,814.00	5,898.00	5,741.00	5,833.00	+1.05%
Crude Oil (Brent)	2019-09-12	61.66	61.87	59.35	60.74	-1.33%
USD/PLN	2019-09-12	3.9415	3.9621	3.9100	3.9198	-0.55%
EUR/PLN	2019-09-12	4.3395	4.3497	4.3273	4.3365	-0.07%
EUR/USD	2019-09-12	1.1010	1.1087	1.0927	1.1065	+0.50%
USBonds10	2019-09-12	1.7645	1.7976	1.6661	1.7715	+0.0330
GRBonds10	2019-09-12	-0.5590	-0.5090	-0.6470	-0.5160	+0.0480
PLBonds10	2019-09-12	2.0620	2.0620	1.9800	2.0230	-0.0510







List of abbreviations and ratios contained in the report.

EV – net debt + market value (EV – economic value)
EBIT – Earnings Before Interest and Taxes
EBITDA – EBIT + Depreciation and Amortisation
PBA – Profit on Banking Activity P/CE – price to earnings with amortisation MC/S – market capitalisation to sales EBIT/EV – operating profit to economic value
P/E – (Price/Earnings) – price divided by annual net profit per share
ROE – (Return on Equity) – annual net profit divided by average equity
P/BV – (Price/Book Value) – price divided by book value per share Net debt – credits + debt papers + interest bearing loans – cash and cash equivalents EBITDA margin – EBITDA/Sales

OVERWEIGHT (OW) – a rating which indicates that we expect a stock to outperform the broad market NEUTRAL (N) – a rating which indicates that we expect the stock to perform in line with the broad market UNDERWEIGHT (UW) – a rating which indicates that we expect the stock to underperform the broad market

Recommendations of Dom Maklerski mBanku:

A recommendation is valid for a period of 9 months, unless a subsequent recommendation is issued within this period. Expected returns from individual recommendations are as follows:

BUY — we expect that the rate of return from an investment will be at least 15%

ACCUMULATE — we expect that the rate of return from an investment will range from 5% to 15%

HOLD — we expect that the rate of return from an investment will range from -5% to +5%

REDUCE — we expect that the rate of return from an investment will range from -5% to -15%

SELL — we expect that the rate of return from an investment will range from -5% to -15%

SELL — we expect that an investment will bear a loss greater than 15%

Recommendations are updated at least once every nine months.

mBank S.A. with its registered office in Warsaw at Senatorska 18 renders brokerage services in the form of derived organisational unit - Brokerage Office which uses name Dom Maklerski mBanku.

mBank S.A. as part of the Exchange's Analytical Coverage Support Programme ("Programme", https://www.gpw.pl/eacsp) prepares analytical reports for the following companies: Cognor Holding, Comarch, VRG. These documents are prepared at the request of Gielda Papierów Wartościowych w Warszawie S.A. ("WSE"), which is entitled to copyrights to these materials. mBank S.A. receives remuneration from the WSE for the preparation of the reports. All documents prepared for the Programme are available at:
https://www.mdm.pl/ui-pub/site/market_and_analysis/analysis_and_recommendations/analytical_coverage_support_programme

This document has been created and published by Dom Maklerski mBanku. The present report expresses the knowledge as well as opinions of the authors on day the report was prepared. The opinions and estimates contained herein constitute our best judgment at this date and time, and are subject to change without notice. The present report was prepared with due care and attention, observing principles of methodological correctness and objectivity, on the basis of sources available to the public, which Dom Maklerski mBanku considers reliable, including information published by issuers, shares of which are subject to recommendations. However, Dom Maklerski mBanku, on case, guarantees the accuracy and completeness of the report, in particular should sources on the basis of which the report was prepared prove to be inaccurate, incomplete or not fully consistent with the facts. mBank S.A. bears no responsibility for investment decisions taken on the basis of the present report or for any damages incurred as a result of investment decisions taken on the basis of the

This document does not constitute an offer or invitation to subscribe for or purchase any financial instruments and neither this document nor anything contained herein shall form the basis of any contract or commitment whatsoever. It is being furnished to you solely for your information and may not be reproduced or redistributed to any other person This document does not constitute investment, legal, accounting or other advice, and mBank is not liable for damages resulting from or related to the use of data provided in the documents. This document may not be copied, duplicated and/or be directly or indirectly distributed in the United States, Canada, Australia or Japana, nor transferred to citizens or residents of a state where its distribution may be legally restricted, which does not limit the possibility of publishing materials prepared for the Programme on Cognor Holding, Comarch, VRG, mBank or WSE websites. Persons who disseminate this document should be aware of the need to comply with such restrictions.

Recommendations are based on essential data from the entire history of a company being the subject of a recommendation, with particular emphasis on the period since the previous recommendation. Investing in is connected with a number of risks including, but not limited to, the macroeconomic situation of the country, changes in legal regulations as well as changes on commodity markets. Full elimination of these virtually impossible.

ndations are based on essential data from the entire history of a company being the subject of a recommendation, with particular emphasis on the period since the previous recommendation.

Investing in shares is connected with a number of risks including, but not limited to, the macroeconomic situation of the country, changes in legal regulations as well as changes on commodity markets. Full elimination of these risks is virtually impossible.

mBank S.A. bears no responsibility for investment decisions taken on the basis of the present report or for any damages incurred as a result of investment decisions taken on the basis of the present report.

It is possible that mBank S.A. in its brokerage activity renders, will render or in the past has rendered services for companies and other entities mentioned in the present report.

mBank S.A. does not rule out offering brokerage services to an issuer of securities being the subject of a recommendation. Information about any conflicts of interest that may arise in connection with the issuance recommendations (should such a conflict exist) is provided below, and it is valid as of the date of the most recent Monthly Report published by Dom Maklerski mBanku or as of the date of the most recent recommendations (should such a conflict exist) is provided below, and it is valid as of the date of the most recent Monthly Report published by Dom Maklerski mBanku or as of the date of the most recent meantains and it is valid as of the date of the most recent Monthly Report published by Dom Maklerski mBanku or as of the date of the most recent Monthly Report published by Dom Maklerski mBanku or as of the date of the most recent meantains.

mBank S.A. may have received compensation from the following companies in the last 12 months: ABC Data, Alchemia, Alior Bank, Ambra, Amica, Bank Handlowy, Bank Millennium, Bank Pekao, BGŹ BNP Paribas, BoomBIT, Boryszew, Capital Park, CD Projekt, Centrum Nowoczesnych Technologii, CI Games, Echo Investment, Elemental Holding, Elzab, Enea, Energoaparatura, Erbud, Ergis, Erste Bank, Famur, Ferrum, GetBack, Getin Holding, Getin Noble Bank, Globalworth Poland, Groclin, Helio SA, Impexmetal, INDATA, ING BSK, Kopex, Kruk, LW Bogdanka, Mangata, MCI Capital, Mennica Polska, Mostostal Warszawa, Netia, Neuca, NWAI Dom Maklerski, Oponeo.pl, Orbis, OTP Bank, PA Nova, PBKM, PEKABEX, Pfleiderer Group, PGE, PGNIG, PKO BP, Polenergia, Polimev-Mostostal, Polnord, Polwax, Prime Car Management, Primetech, Prochem, Projprzem, PZU, Raiffeisen Bank International, Rawlplug, Santander Bank Polska, Seco/Warwick, Skarbiec Holding, Solar Company, Sygnity, Tarczyński, Trakcja, Unibep, Vistal Gdynia, YOLO, Zastal, ZUE.

In the last 12 months mBank S.A. has acted as dealer-manager for tender or exchange offers for the shares of: ABC Data, BoomBIT, Centrum Nowoczesnych Technologii, CI Games, Globalworth Poland, Helio SA, MCI Capital, Mostostal Warszawa, NWAI Dom Maklerski, Orbis, Pfleiderer Group, Polenergia, Prime Car Management, Primetech.

Asseco Poland provides IT services to mBank S.A.

mBank S.A. has a cash service agreement in place with Pekao and a phone subscription agreement in place with Orange Polska S.A.

mBank S.A., its shareholders and employees may hold long or short positions in the issuers' shares or other financial instruments related to the issuers' shares. mBank, its affiliates and/or clients may conduct or may have conducted transactions for their own account or for account of another with respect to the financial instruments mentioned in this report or related investments before the recipient has received this report.

Copying or publishing the present report, in full or in part, or disseminating in any way information contained in the present report requires the prior written agreement of mBank S.A. Recommendations are addressed to all Clients of Dom Maklerski mBanku.

Recommendations are addressed to all Clients of Dom Maklerski mBanku.

All investment recommendations and strategies issued by mBank S.A. over the last 12 months are available at: http://www.mdm.pl/ui-pub/site/market_and_analysis/analysis_and_recommendations/fundamental_analysis/recommendations?recent_filter_active=true&lang=en

The activity of mBank S.A. is subject to the supervision of the Polish Financial Supervision Commission.

Individuals who did not participate in the preparation of recommendations, but had or could have had access to recommendations prior to their publication, are employees of Dom Maklerski mBanku authorised to access the premises in which recommendations are prepared and/or individuals having to access to recommendations based on their corporate roles, other than the analysts mentioned as the authors of the present recommendations.

This publication constitutes investment research within the meaning of Art. 36.1 of Commission Delegated Regulation (EU) 2017/565.

The compensation of the research analysts responsible for preparing investment research is determined independently of and without regard to the compensation of or revenue generated by any other employee of the Bank, including but not limited to any employee whose business interests may reasonably be considered to conflict with the interests of the persons to whom the investment research prepared by the Research Department of Dom Maklerski mBanku is disseminated. With that being said, since one of the factors taction to consideration when determining the compensation of research analysts is the degree of fulfillment of annual financial targets by customer service functions, there is a risk that the adequacy of compensation offered to persons preparing investment research will be questioned by a competent oversight body.

For U.S. persons only: This research report is a product of mBank SA which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by mBank SA only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, mBank SA has entered into an agreement with a U.S. registered broker-dealer, Cabrera Capital Markets. ("Cabrera"). Transactions in securities discussed in this research report should be effected through Cabrera or another U.S. registered broker-dealer, Cabrera or another U.S.

registered broker dealer.

Strong and weak points of valuation methods used in recommendations:

DCF – acknowledged as the most methodologically correct method of valuation; it consists in discounting financial flows generated by a company; its weak point is the significant susceptibility to a change of forecast assumptions in the model.

assumptions in the model.

Relative – based on a comparison of valuation multipliers of companies from a given sector; simple in construction, reflects the current state of the market better than DCF; weak points include substantial variability (fluctuations together with market indices) as well as difficulty in the selection of the group of comparable companies.

Economic profits – discounting of future economic profits; the weak point is high sensitivity to changes in the assumptions made in the valuation model.

Discounted Dividends (DDM) – discounting of future dividends; the weak point is high sensitivity to changes in the assumptions as to future dividends made in the valuation model.

NAV - valuation based on equity value, one of the most frequently used method in case of developing companies; the weak point of the method is that it does not factor in future changes in revenue/profits of a company.



Dom Maklerski mBanku

Senatorska 18 00-082 Warszawa http://www.mbank.pl/

Research Department

Kamil Kliszcz director +48 22 438 24 02 kamil.kliszcz@mbank.pl energy, power generation

Jakub Szkopek +48 22 438 24 03 jakub.szkopek@mbank.pl industrials, chemicals, metals

Aleksandra Szklarczyk +48 22 438 24 04 aleksandra.szklarczyk@mbank.pl construction, real-estate development Michał Marczak +48 22 438 24 01 michal.marczak@mbank.pl strategy

Paweł Szpigiel +48 22 438 24 06 pawel.szpigiel@mbank.pl media, IT, telco

Piotr Poniatowski +48 22 438 24 09 piotr.poniatowski@mbank.pl industrials Michał Konarski +48 22 438 24 05 michal.konarski@mbank.pl banks, financials

Piotr Bogusz +48 22 438 24 08 piotr.bogusz@mbank.pl retail, gaming

Mikołaj Lemańczyk +48 22 438 24 07 mikolaj.lemanczyk@mbank.pl financials

Sales and Trading

Traders

Piotr Gawron director +48 22 697 48 95 piotr.gawron@mbank.pl

Jędrzej Łukomski +48 22 697 49 85 jedrzej.lukomski@mbank.pl

Tomasz Galanciak +48 22 697 49 68 tomasz.galanciak@mbank.pl

Sales, Foreign Markets

Joanna Łukasik +48 22 697 48 82 joanna.lukasik@mbank.pl Krzysztof Bodek +48 22 697 48 89 krzysztof.bodek@mbank.pl

Adam Prokop +48 22 697 47 90 adam.prokop@mbank.pl

Magdalena Bernacik +48 22 697 47 35 magdalena.bernacik@mbank.pl Tomasz Jakubiec +48 22 697 47 31 tomasz.jakubiec@mbank.pl

Bartosz Orzechowski +48 22 697 48 47 bartosz.orzechowski@mbank.pl

Andrzej Sychowski +48 22 697 48 46 andrzej.sychowski@mbank.pl

Private Client Sales

Kamil Szymański director +48 22 697 47 06 kamil.szymanski@mbank.pl Jarosław Banasiak deputy director +48 22 697 48 70 jaroslaw.banasiak@mbank.pl