

Thursday, September 16, 2021

Morning Comments

Equity Market, Poland

Equity Research Contacts

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 Szpigel +48 22 438 24 06
 Aleksandra Szklarczyk +48 22 438 24 04

Jakub Szkopek +48 22 438 24 03
 Mikołaj Lemańczyk +48 22 438 24 07
 Janusz Pięta +48 22 438 24 08

DJIA	34,814	+0.68%	FTSE 100	7,016	-0.25%	Copper (LME)	9,627	+1.96%
S&P 500	4,481	+0.85%	WIG20	2,355	-0.87%	Crude Oil (Brent)	75.26	+2.14%
NASDAQ	15,162	+0.82%	BUX	52,318	-0.14%	USD/PLN	3.863	+0.24%
DAX	15,616	-0.68%	PX	1,295	-0.24%	EUR/PLN	4.566	+0.40%
CAC 40	6,584	-1.04%	PLBonds10	1.991	-0.006	EUR/USD	1.1817	+0.12%

Daily Briefing

Millennium

Accumulate – 2021-09-01
 Target price: PLN 7.30

Millennium waits for Supreme Court guidance

According to PAP, CEO of Millennium said that despite lack of Supreme Court verdict regarding CHF loans, bank continues to work on settlements program for all clients. Bank hopes that in absence of full Civil Chamber verdicts, some issues will be clarified at the meeting of 7-person squad of Supreme Court, which is scheduled at the beginning of November to answer question regarding remuneration for granted capital. **It seems that Millennium will wait with mass settlements offer at least until November. We recall that in our base case scenario at the break of September and October PKO BP will launch settlements program and depending on success rate other banks will follow. (M. Konarski, M. Lemańczyk)**

Oil&Gas

US crude inventories sharply down again

EIA report showed that US domestic crude inventories decreased by 6.4 mmboe (5 week in a row) to the lowest since September 2019, whereas market consensus stood at -3.6 mmboe. Refinery runs were up from 91.3% to 91.5% (in line with 5Y pre-COVID average) whereas market expected much stronger 2.3 p.p. throughput increase. Crude oil net import was 10% down. Gasoline stocks decreased this time by 1.9 mmboe (expectations at -2.9 mmboe) and are 5.8% lower yoy. Diesel inventories decreased by 1.7 mmboe vs -1.9 mmboe expected. Gasoline consumption 4-weeks moving average dynamics yoy stood at +8% with last week deliveries 7% down week on week (comparing to 2019 reference period 4-weeks average is 1.2% down). Diesel consumption 4-weeks moving average indicates yoy increase by 11% (~1% above 2019 reference level). US crude production was slightly up to 10.1 mb/d after falling by 1.5 mb/d due to hurricane Ida last week. It is far from pre-COVID levels at 13 mb/d. **(K. Kliszcz)**

PGE

Suspended – 2021-06-02

No impairments at conventional generation segment, reversal in RES

Results of conducted tests indicate the necessity to reverse the impairment loss in renewables segment in amount of PLN 40m. At the same time, as a result of conducted tests, no impairment loss of balance sheet value of property, plant and equipment was identified in conventional generation segment. **That is surprising as rising CO2 costs put a pressure on PGE lignite units. Current book value of conventional generation segment amounts to PLN 17.9bn. Market may find this news positive regarding speculations on selling coal assets to NABE without losses but of course this does not determine anything at this stage. (K. Kliszcz)**

Tauron

Suspended – 2021-06-02

LOI with State Treasury on potential sale of mining unit

Tauron informed yesterday (during trading hours) that company signed a letter of intent with the State Treasury concerning potential purchase of 100% shares in Tauron Wydobycie (mining unit). The parties declared that they will take all actions necessary to prepare and complete the transaction and will in good faith hold talks, negotiate and take actions related to the transaction, which includes taking actions related to selection of an advisor for the purpose of valuation. **It was already announced that the State Treasury will take over control on coal mines in line with coal mining sector restructuring process. Polish Government started talks with EU this week on pre-notification of state aid that is to be injected to the sector. Of course the sale of loss making (1H'21 EBITDA at PLN -45m) and CF negative (capex in 1H'21 at PLN 120m) unit would be a great news for shareholders. Current book value of this assets, after Q2 impairments, amount to PLN 0.1bn. (K. Kliszcz)**



Biuro maklerskie

Cognor

Accumulate – 2021-08-31
Target price: PLN 5.05

European mills propose green steel premiums

An Austrian steelmaker has tabled a €55/t green steel premium in its first talks with automotive customers, although the value appears to be negotiable. A German producer has requested "compensation" for strip produced through its electric arc furnace, as it is costlier than traditional blast furnace-based production. **The trend is very favorable for Cognor. Currently, the company sells about 650 thousand. tons of steel products, of which ~ 20% to automotive customers. In the case of Cognor, such an additional payment would mean an additional ~ PLN 70m in revenues and EBITDA per year. For more information please visit [link](#). (J. Szkopek)**

Grupa Azoty

Sell – 2021-08-04
Target price: PLN 20.97

Halt of Operations at UK Facilities on high gas prices

CF Industries Holdings, a leading global manufacturer of hydrogen and nitrogen products, today announced that it is halting operations at both its Billingham and Ince, UK, manufacturing complexes due to high natural gas prices. The Company does not have an estimate for when production will resume at the facilities. **Currently, the margins on the production of nitrate fertilizers have reached annual lows, which is negative for the fertilizer companies. As a result, some players on the market see no chance of achieving positive results with such high gas prices. Negative for Grupa Azoty. (J. Szkopek)**

Retail

Fruit farmers threaten to block supplies to stores

Apple producers protested at the Warsaw headquarters of Jeronimo Martins on Tuesday. Mirosław Maliszewski, CEO of Związek Sadowników RP, claims that the buying-in price per kg of apples is PLN 0.7 and price at retail chains is PLN 4. Protesters estimate the cost of production for PLN 2. They have a proposal to distribute the final amount in a different way: PLN 2 would go to fruit farmer, PLN 1 to a supplier to the market and PLN 1 to the retail chain. Meanwhile, Biedronka announces special offer for Polish apples, reducing the price from PLN 3.49 to PLN 1.79 per kilogram. Związek does not rule out that it will start blocking deliveries to logistic platforms of retail chains, what could cause problems with the availability of all goods in stores. **(J. Pięta)**

Quarterly Earnings Results

Tauron

Suspended – 2021-06-02

Final figures in line with preliminary statement

- Reported results are in line with preliminary figures with EBITDA at PLN 1.18bn vs our primary estimates at PLN 1.14bn and market consensus at PLN 1.1bn. Company does not report on any significant one-off items however it is worth to mention that Tauron booked PLN +30m at net other operating profits/losses line.
- Conventional generation** EBITDA (incl. district heating) amounted to PLN 322m vs PLN 245m in our forecast. Positive surprise was driven by lower CO2 costs (PLN ~30m positive impact) and higher New Jaworzno unit contribution at PLN 150m. Production volumes were in line with our assumptions.
- Renewables** unit posted PLN 83m EBITDA, in line with our expectations despite slightly lower volumes.
- Distribution** segment was the main contributor to EBITDA at PLN 777m vs PLN 740 in our estimates (positive surprise due to lower grid losses and probably underestimated volumes effect=> volumes increased +14%, probably stronger than anticipated in tariff). As a reminder, in 2021 network operators receive compensations for lower regulated revenues in 2020, that may explain to some extent such yoy EBITDA increase here (adj. EBITDA in 2Q'20 at PLN 580m).
- Trading** EBITDA was much lower than expected at PLN 2m vs PLN 106m in our forecasts probably due to negative impact from offtake contract with new Jaworzno unit.
- In **mining** EBITDA loss was in lower than expected at PLN -32m vs PLN -54m, mainly due to opex capitalized in inventories as volumes sold were 0.2mt lower than production (we estimate this effect at PLN +30m).
- Net profit was affected by already announced asset impairments at PLN -1.1bn, partially offset by positive fx gains at financials line (PLN 122m).
- CFO/Net debt:** Operating cash flow at PLN 0.75bn with some negative impact from working capital line (PLN-109m, mainly driven by lower payables). Capital expenditures amounted to PLN 0.7 bn and 7M figures make up 54% our FY estimate. Net debt finally decreased slightly qoq to PLN 12.89bn. Net debt to EBITDA ratio stands at 2.7x LTM EBITDA and 2.06x EBITDA calculating in line with credit covenants methodology.
- Summary: Final EBITDA figures are in line with preliminary announcement. 6M figures make up to 67% our FY EBITDA estimate (upward revision potential), however it is worth to mention that in H2 company will book significant losses on lack of new Jaworzno unit production and position balancing at very expensive spot market. (K. Kliszczyk)**

Teleconference details:

Date: September 16, 2021

Time: 11:00 (CET)

Webcast link: <https://tauronwyniki.pl>

2021 Q2 actuals vs. expectations

(PLN m)	Q1'20	Q2'20	3Q'20	4Q'20	1Q'21	2Q'21	yoy	2Q'21E	diff.	2021E	% YTD
revenues	5,467.8	4,719.0	5,100.6	5,629.1	6,444.5	5,421.9	15%	5,700.9	-5%	19,639.4	60%
adj. EBITDA	1,026.4	917.3	1,005.9	809.1	1,371.4	1,183.2	29%	1,135.3	4%	3,837.5	67%
EBITDA	957.4	1,450.3	1,005.9	809.1	1,735.4	1,183.2	-18%	1,135.3	4%	4,201.5	69%
mining	-36.4	43.1	-39.2	-124.9	-13.6	-31.8	-174%	-53.5	-41%	-135.6	33%
power generation	69.5	28.4	21.6	129.0	686.3	321.9	1032%	244.7	32%	991.2	102%
renewables	121.1	42.5	53.8	74.0	83.7	83.3	96%	82.4	1%	329.0	51%
distribution	683.5	1,005.2	728.2	606.1	741.9	776.9	-23%	740.1	5%	2,579.6	59%
trading	182.4	220.5	237.6	42.8	234.1	2.4	-99%	106.6	-98%	422.6	56%
others	-62.8	110.6	3.9	82.1	3.0	30.6	-72%	15.0	104%	14.8	226%
EBIT	474.1	-112.1	523.5	-2,617.5	1,212.5	-481.9	-	612.4	-	1,978.7	37%
net financials	-242.6	-2.6	-39.4	-357.5	-115.1	-18.8	-	-80.0	-	-332.3	40%
net profit	162.1	-478.6	376.9	-2,548.3	839.0	-483.1	-	431.2	-	1,333.6	27%

Source: Tauron, E – estimates by mBank, Consensus estimates provided by PAP

**Ailleron**

Neutral- 2020-05-05

Q2'21 results in line with expectations

- Ailleron reported the results in line with our expectations.
- In Q2'21, revenues amounted to PLN 46.2m (vs. PLN 43.2m our forecast due to slightly higher turnover of the Enterprise Services segment).
- The gross profit margin on sales was 29.1% vs. 29.8% expectations and 29.2% a year earlier.
- SG&A expenses were at PLN 8.8m (vs. PLN 8.1m expected).
- The balance on other operating activities amounted to PLN 0.1m.
- Q2'21 EBITDA amounted to PLN 7.2m and was close to our expectations.
- By segment, the Enterprise Services division generated a slightly higher result than we expected (PLN 5.5m vs. PLN 5.1m forecast). On the other hand, Ailleron posted a slightly higher loss in the Fintech segment (-PLN 0.7m vs. -PLN 0.3m forecast by mBank).
- In Q2'21, Ailleron booked PLN 2.4m in tax (effective tax rate at 51%), which influenced the net profit.
- To sum up, Ailleron's results for Q2'21 are close to our expectations. Net profit was lowered by the high tax rate. By segment, as in the previous quarters, Enterprise Services is performing well. On the other hand the loss of the key Fintech segment has slightly deepened y/y. We expect neutral reaction to the results. (P. Szpigel)**

2021 Q2 actuals vs. expectations

(PLN m)	Q2'21	Q2'20	change	Q2'21E	differ.
revenue	46.2	35.0	32.1%	43.2	7.1%
EBITDA	7.2	5.3	36.9%	7.1	1.9%
EBITDA margin	15.6%	15.1%	-	16.4%	-
EBIT	4.5	3.3	35.4%	4.7	-5.9%
PBT	4.7	2.7	72.0%	4.2	9.9%
net profit	2.3	2.2	3.0%	3.4	-33.1%

Source: Ailleron, E – estimates by mBank, Consensus estimates provided by PAP

Forte

Overweight – 2021-07-30

Results in line with preliminaries

- The **revenues** in Q2'21 were 16% higher we expected and in line with preliminary results. Both domestic and export sales were better in q/q and y/y comparison.
- The **EBITDA** in Q2'21 was 4% higher than in the preliminary results. This was due to lower provisions on assets for sale revaluation (Management expected ~10 m PLN, while final figure was ~8 m PLN). Worth to mention that Forte improved profitability in y/y and q/q terms.
- The **OCF** in Q2'21 was 23 m PLN vs 30 m PLN in Q2'20. **Net debt** decreased by 27 m PLN q/q to 293 m PLN (1.1x EBITDA'12m).
- **The results are in line with preliminaries with lower provisions on assets from sales. On the occasion of the results, the Management Board does not mention that the introduced state of emergency at the border with Belarus had any negative impact on the operation of the plant in Hajnówka. (J. Szkopek)**

2021 Q2 actuals vs. expectations

(PLN m)	Q2'21	Q2'20	y/y	Q2'21E	diff.	management forecast	diff.	2021	2020	y/y	YTD
revenues	310	154	101%	268	16%	310	0%	1222	1160	5%	50%
EBITDA	54	11	376%	38	43%	52	4%	245	198	23%	46%
EBITDA margin	18%	7%		14%		17%		20%	17%		
EBIT	41	-3	-1704%	24	69%	38	7%	189	142	33%	45%
net income	35	-3	-1489%	13	181%	-	-	131	50	164%	48%

Source: Forte, E – estimates by mBank, Consensus estimates provided by PAP

2021 Q2 results' details

revenues	1Q'19	2Q'19	3Q'19	4Q'19	1Q'20	2Q'20	3Q'20	4Q'20	1Q'21	2Q'21	2Q'21E	diff.
domestic sales	44	44	39	56	52	33	67	73	56	59	52	13%
export sales	276	212	224	281	224	122	280	309	243	251	216	16%
change y/y	1Q'19	2Q'19	3Q'19	4Q'19	1Q'20	2Q'20	3Q'20	4Q'20	1Q'21	2Q'21	2Q'21E	diff.
domestic sales	21%	-22%	-26%	5%	20%	-26%	70%	30%	6%	80%	60%	-
export sales	6%	5%	11%	15%	-19%	-42%	25%	10%	8%	106%	77%	-

Source: Forte, E – estimates by mBank



More News

Banking	<p>Polish banks enjoyed an increase in 12M ROE to 1.51% in July from 1.29% in June, while 12M NIM stayed flat m/m at 2.03%, data from financial market regulator KNF show.</p> <p>Polish financial services prices increased 3.9% y/y and stayed flat m/m, according to stats office GUS.</p> <p>Some Polish banks may decide to release part of their loan loss provisions if the fourth pandemic wave proves mild and restrictions are not too big, partner at EY Polska Janusz Miszczak told PAP.</p>
Erbud	<p>Erbud inked a ca. PLN 69.8 mln net deal with Warsaw School of Economics for the construction of a didactic building, the company wrote in a market filing.</p>
Eurocash	<p>Eurocash will expand operations of its online grocer Frisco to Krakow in September, Frisco said in a press release.</p> <p>Eurocash supports Poland's efforts to tighten the existing Sunday trade ban by making it more difficult for stores to offer postal services, spokesperson Jan Domanski said. The company will support its franchise outlets in developing parcel delivery services, he noted. The number of retail outlets offering postal services in Poland has more than tripled to over 6.2k since 2020, according to research by Dun&Bradstreet commissioned by the daily Rzeczpospolita. (Rzeczpospolita, Parkiet)</p>
Huuuge	<p>Huuuge is conducting "advanced" talks about potential acquisition of 3-4 companies, CEO Anton Gauffin told a conference. Huuuge expects revenues from its two flagship games Huuuge Casino and Billionaire Casino to return to a double-digit y/y growth pace in Q3, CEO also said.</p>
Infrastructure	<p>Ministry of Infrastructure will regulate the functioning of monorail as it has signals there are plans to build such railway in Poland, the legislative works agenda shows.</p>
Inpro	<p>Real estate developer Inpro will issue PLN 35 mln worth of 4-year bearer bonds, the company said in a market filing.</p>
Kety	<p>Kety and Alumetal may have trouble with defending their current margins due to the current situation on the aluminum market, even if they raise prices of their products, analysts surveyed by PAP point out. Aluminum prices may stabilize after recent increases, but are unlikely to go down any time soon, the analysts point out.</p>
Kruk	<p>Kruk has no intention to sell its non-bank lender unit Wonga, CEO Piotr Krupa vows. Wonga has rebuilt customer volumes after the pandemic and is on the lookout for new sales channels, Krupa says. (Puls Biznesu)</p>
Lotos	<p>Lotos may spend ca. PLN 1.4 bln on a planned base oil hydrocracking installation, according to the company's press office. Final decision on the project is expected this year, with construction seen consuming 3-4 years. (Rzeczpospolita, Parkiet)</p>
Luxmed	<p>LuxMed and Bruno Hangartner bought 2.04 mln shares in medical firm Swissmed CZ in a bid for 2.73 mln company shares, or. ca. 44.6%, launched back in July, tender offer manager PKO BP said in a statement. The bidders sought to reach a 100% stake in Swissmed CZ.</p>
LW Bogdanka	<p>Bogdanka, unit of power group Enea, expects a positive H2 and a good result at the end of the year, and plans to keep capex in 2022 similar to that in 2021, CEO Artur Wasil told PAP in an interview.</p>
Offshore	<p>Poland would like the Polish industry to be able to deliver key elements for building offshore wind farms so that Polish companies benefit to the greatest degree possible from the offshore program estimated at PLN 130 bln, government pointperson for renewables Ireneusz Zyska told Rzeczpospolita daily. Poland expects at least 60k new well-paid jobs directly and indirectly connected to offshore development will be created to 2040, Zyska said. (Rzeczpospolita)</p>
Pension Funds	<p>Poland's private pension funds OFE transferred PLN 3.4 bln to the social insurance board ZUS under the pre-retirement asset shift in H1, ZUS announced.</p>
PKO BP	<p>BP is on track to launching its corporate branch in Romania in line with schedule, i.e. in H2 2022, as a relevant notification document was sent to Romanian central bank by Polish financial market regulator KNF, head of foreign ops development Robert Zmiejko told PAP.</p>
Retail	<p>Poland has made some progress in its efforts to tighten the current Sunday retail trade ban regulations, as a relevant draft bill filed by a ruling party PiS MP was approved by a parliamentary committee and sent to the lower house for the so-called second reading.</p>
Steel	<p>Polish steelworks should brace themselves for replacement of blast furnaces with lower-emission technologies, such as electric furnaces or hydrogen installations, as the trend is already budding in Europe, head of steelworks lobby HIPH tells Puls Biznesu daily. Implementation of such technologies won't be possible without government or EU aid, though, because of high costs, he stresses. (Puls Biznesu)</p>
Telecom	<p>Polish telecom services prices grew 4.8% y/y in September and inched up 0.9% m/m, according to stats office GUS.</p>

Corporate Action Calendar

Date	Time	Company	Event
16-Sep		Enea	Q2'21 earnings announcement
16-Sep		GPW	Q2'21 earnings announcement
16-Sep	10:30	Śnieżka	Q2'21 earnings teleconference (Nobili)
16-Sep	11:00	Tauron	Q2'21 earnings teleconference (https://tauronwyniki.pl)
16-Sep		Wielton	Q2'21 earnings teleconference (M+G)
17-Sep	10:00	Enea	Q2'21 earnings teleconference (GPW, Ksiazeca 4)
17-Sep	13:00	Seco/Warwick	Q2'21 earnings teleconference (cc group)
22-Sep		TIM	Q2'21 earnings announcement
23-Sep		CD Projekt	Lock-up expiration for 4.5m shares from the Incentive Program.
23-Sep		Ciech	Q2'21 earnings announcement
24-Sep		Amica	Q2'21 earnings announcement
24-Sep		Boryszew	Q2'21 earnings announcement

Economic Calendar

Thursday, 16 September 2021

Time	Region	Data	Period	Forecast	Previous
01:50	Japan	Exports	August		37.00%
01:50	Japan	Imports	August		28.50%
01:50	Japan	Trade Balance	August		441.02bn
11:00	EU	Exports	July		209.90bn
11:00	EU	Imports	July		191.80bn
11:00	EU	Trade Balance	July		18.10bn
14:00	Poland	Core CPI	August	0.40% m/m; 3.70% y/y	
14:30	USA	Continuing Claims	11 September		2783 tys.
14:30	USA	Philadelphia Fed Index	September		19.40
14:30	USA	Initial Jobless Claims	11 September		310.000
14:30	USA	Retail Sales	August	1.10% m/m; 15.80% y/y	
14:30	USA	Retail Sales Less Autos	August	0.40% m/m; 15.80% y/y	
15:15	USA	Capacity Utilization	August		76.10% m/m
15:15	USA	Industrial Production	August	0.90% m/m; 5.80% y/y	
16:00	USA	Business Inventories	July	0.80% m/m; 6.60% y/y	
16:30	USA	Natural Gas Inventory	10 September		2923bn
22:00	USA	TIC Net Long-term Flows	July		110.90bn
22:00	USA	TIC Net Flows	July		31.50bn

Friday, 17 September 2021

Time	Region	Data	Period	Forecast	Previous
08:00	UK	Retail Sales	August	-2.50% m/m; 2.40% y/y	
08:00	UK	Retail Sales Less Autos	August	-2.40% m/m; 1.80% y/y	
10:00	EU	Current Account Balance	July		21.80bn
10:00	Poland	Wages	August	0.90% m/m; 8.70% y/y	
11:00	EU	Construction Orders	July	-1.70% m/m; 2.80% y/y	
11:00	EU	Core CPI	August	0.70% y/y	
11:00	EU	CPI	August	-0.10% m/m; 2.20% y/y	

Monday, 20 September 2021

Time	Region	Data	Period	Forecast	Previous
16:00	USA	NAHB Housing Market Index	September		75

Tuesday, 21 September 2021

Time	Region	Data	Period	Forecast	Previous
14:30	USA	Current Account Balance	Q2		-195.70bn
	Japan	Interest Rate			-0.10%

Wednesday, 22 September 2021

Time	Region	Data	Period	Forecast	Previous
16:00	USA	Existing Home Sales	August		5.99m
20:00	USA	Interest Rate			0.00%+J7G2:L36

Source: Stooq

Current Recommendations of Biuro maklerskie mBanku

Company	Recommendation	Issued On	Price At Reco.	Target Price	Current Price	Upside/Downside	P/E		EV/EBITDA	
							2021	2022	2021	2022
Financials										
Alior Bank	buy	2021-09-01	43.72	55.00	46.62	+5.9%	13.4	11.0	-	-
BNP Paribas Polska	buy	2021-09-01	70.00	102.48	81.00	+18.0%	17.2	10.8	-	-
Handlowy	buy	2021-09-01	45.90	55.00	46.45	+18.4%	9.9	14.2	-	-
ING BSK	accumulate	2021-09-01	231.50	250.00	231.00	+8.2%	15.7	13.7	-	-
Millennium	accumulate	2021-09-01	6.60	7.30	6.70	+9.0%	-	8.8	-	-
Pekao	buy	2021-09-01	107.20	130.00	103.70	+25.4%	17.7	10.8	-	-
PKO BP	buy	2021-09-01	42.05	50.65	42.76	+18.5%	11.6	10.5	-	-
Santander Bank Polska	buy	2021-09-01	302.00	345.80	298.00	+16.0%	-	12.1	-	-
Komercni Banka	accumulate	2021-07-06	779.00	804.77 CZK	846.00	-4.9%	17.1	12.5	-	-
Moneta Money Bank	buy	2021-04-09	78.20	95.50 CZK	88.75	+7.6%	15.5	12.2	-	-
Erste Group	accumulate	2021-07-06	31.57	34.06 EUR	35.02	-2.7%	11.4	9.6	-	-
RBI	accumulate	2021-04-09	18.52	21.00 EUR	21.48	-2.2%	11.2	9.5	-	-
OTP Bank	hold	2021-06-02	15,865	15,143 HUF	18,290	-17.2%	12.4	11.2	-	-
PZU	accumulate	2021-06-02	37.29	40.63	37.99	+6.9%	10.3	10.3	-	-
Kruk	accumulate	2021-07-06	267.00	288.46	338.00	-14.7%	14.3	13.8	-	-
GPW	hold	2021-04-09	45.76	44.48	43.52	+2.2%	11.6	12.3	-	-
Chemicals						-18.6%	14.9	12.3	7.0	8.7
Ciech	hold	2021-06-02	46.70	47.47	51.70	-8.2%	11.6	12.3	6.1	5.9
Grupa Azoty	sell	2021-08-04	29.64	20.97	30.40	-31.0%	18.2	-	8.0	11.4
Mining						+35.2%	10.4	5.2	3.6	2.4
JSW	buy	2021-09-07	48.87	62.42	56.20	+11.1%	15.3	4.3	4.0	1.9
KGHM	buy	2021-06-02	208.80	245.39	176.80	+38.8%	5.6	6.1	3.1	3.0
Oil & Gas						+8.7%	7.9	15.0	3.7	4.7
Lotos	buy	2021-08-04	52.52	67.20	60.08	+11.9%	6.5	13.2	3.8	4.7
MOL	buy	2021-07-06	2,378	2,816 HUF	2,444	+15.2%	7.6	16.7	3.7	4.7
PGNiG	accumulate	2021-07-06	6.58	7.45	6.36	+17.1%	8.6	9.3	3.6	3.5
PKN Orlen	reduce	2021-07-06	77.80	70.59	79.30	-11.0%	8.3	25.6	4.9	7.2
Power Utilities						+4.0%	10.3	17.4	5.0	5.3
CEZ	buy	2021-07-06	598.00	722.14 CZK	696.00	+3.8%	20.6	17.4	8.6	8.2
Enea	suspended	2021-06-02	8.76	-	10.22	-	4.1	5.0	3.4	3.1
PGE	suspended	2021-06-02	9.94	-	10.01	-	10.3	45.2	3.5	3.7
Polenergia	hold	2021-06-02	70.20	78.59	72.90	+7.8%	27.6	28.6	14.4	14.1
Tauron	suspended	2021-06-02	3.40	-	3.76	-	4.9	6.9	5.0	5.3
Telecoms						-11.2%	25.1	18.6	6.5	6.4
Cyfrowy Polsat	hold	2020-12-08	27.84	27.90	34.80	-19.8%	14.9	14.4	7.9	7.8
Orange Polska	buy	2020-12-08	6.52	8.20	7.96	+3.0%	35.3	22.9	5.1	5.0
Media						+11.6%	25.9	21.0	13.9	10.2
Agora	hold	2021-07-06	10.40	10.60	9.28	+14.2%	-	-	13.3	8.4
Wirtualna Polska	buy	2021-08-25	129.00	150.00	134.80	+11.3%	25.9	21.0	14.5	12.0
IT						-0.9%	17.4	16.8	8.2	6.2
Ailleron	neutral	2020-05-05	6.26	-	15.20	-	23.6	-	8.7	-
Asseco BS	neutral	2020-09-02	36.00	-	35.00	-	15.2	-	9.9	-
Asseco Poland	hold	2021-09-07	85.65	80.70	85.50	-5.6%	17.9	16.8	5.3	5.0
Asseco SEE	overweight	2020-08-07	43.70	-	41.00	-	16.2	-	8.2	-
Atende	overweight	2020-11-27	3.44	-	5.28	-	17.9	-	8.5	-
Comarch	buy	2021-03-30	219.00	267.00	237.00	+12.7%	17.4	16.9	6.9	6.6
Sygnity	buy	2021-09-03	9.78	11.70	10.90	+7.3%	5.8	9.8	5.1	6.2
Gaming						+22.7%	35.4	23.9	25.8	17.9
11 bit studios	suspended	2021-05-07	501.00	-	440.20	-	-	-	-	-
CD Projekt	buy	2021-09-07	188.00	238.00	190.86	+24.7%	48.4	31.1	32.3	21.8
PlayWay	suspended	2021-05-07	430.20	-	445.80	-	-	-	-	-
Ten Square Games	accumulate	2021-09-07	545.00	612.00	545.50	+12.2%	22.5	16.6	19.3	14.1
Industrials						+12.0%	10.5	11.2	6.3	6.4
AC	overweight	2021-04-29	37.00	-	35.00	-	13.5	11.3	8.8	7.7
Alumetal	neutral	2021-05-31	68.00	-	64.60	-	7.8	11.8	6.1	8.6
Amica	underweight	2021-04-09	153.20	-	158.00	-	11.6	11.4	6.5	6.5
Apator	neutral	2021-04-29	23.90	-	22.40	-	8.5	11.7	5.2	6.7
Astarta	neutral	2021-08-27	53.80	-	50.60	-	2.8	3.6	2.0	1.9
Boryszew	neutral	2021-05-31	3.29	-	3.62	-	22.1	14.9	7.3	6.3
Cognor	accumulate	2021-08-31	4.52	5.05	4.22	+19.8%	3.0	6.4	2.3	3.9
Famur	buy	2021-09-07	2.59	3.01	2.88	+4.7%	14.5	11.1	4.1	3.8
Forte	overweight	2021-07-30	57.50	-	57.20	-	10.4	8.8	6.7	6.1
Grupa Kęty	hold	2021-07-06	679.00	599.16	662.00	-9.5%	12.5	14.4	8.8	9.9
Kernel	buy	2021-07-06	54.10	75.85	59.30	+27.9%	3.6	4.2	3.3	3.6
Mangata	neutral	2021-05-31	87.80	-	81.40	-	10.5	11.2	6.9	7.1
Mo-BRUK	accumulate	2021-09-07	355.00	397.63	356.00	+11.7%	12.8	12.2	9.3	8.6
PKP Cargo	sell	2021-04-09	19.08	16.21	19.60	-17.3%	-	-	4.5	4.0
Pozbud	hold	2021-09-06	5.16	5.24	5.14	+1.9%	11.4	9.9	7.6	7.2
Stalprodukt	hold	2021-06-02	382.00	403.06	299.00	+34.8%	6.7	9.2	3.0	3.3
E-commerce						-11.2%	45.5	36.1	27.8	22.7
Allegro	sell	2020-11-18	67.89	54.00	62.30	-13.3%	59.1	47.5	33.6	28.5
Answer	buy	2021-08-04	33.40	51.20	34.80	+47.1%	27.6	22.5	14.6	12.5
Shoper	hold	2021-08-24	74.98	71.50	66.00	+8.3%	61.8	55.1	57.9	39.2
Vercom	accumulate	2021-07-09	54.20	59.30	53.60	+10.6%	31.9	24.7	22.1	16.9
Retail						+0.1%	22.8	22.2	12.0	12.1
AmRest	suspended	2020-12-08	25.80	-	30.72	-	-	-	-	-
CCC	suspended	2021-05-07	111.80	-	119.80	-	-	-	-	-
Dino	hold	2021-09-07	339.00	322.70	332.20	-2.9%	36.8	28.3	24.3	18.6
Eurocash	suspended	2021-05-07	14.32	-	12.25	-	-	-	-	-
Jeronimo Martins	hold	2021-09-07	18.22	18.10 EUR	17.77	+1.9%	22.8	20.0	9.4	8.2
LPP	suspended	2021-05-07	10,640.00	-	14,030.00	-	-	-	-	-
TIM	overweight	2020-12-08	18.90	-	38.70	-	21.6	22.2	12.0	12.1
VRG	suspended	2021-07-06	3.64	-	3.62	-	-	-	-	-

Valuation Multiples by Industry, Polish & European Equities

Banks

	Price	2021	P/E 2022	2023	2021	ROE 2022	2023	2021	P/BV 2022	2023	2021	DY 2022	2023
Polish banks													
Alior Bank	46.62	17.2	10.8	6.9	5%	8%	11%	0.9	0.8	0.7	0.0%	0.0%	0.0%
BNP Paribas BP	81.00	18.5	9.5	7.8	5%	10%	11%	0.9	0.9	0.8	0.0%	2.3%	4.5%
Handlowy	46.45	9.9	14.2	11.0	8%	5%	7%	0.8	0.8	0.8	2.6%	11.5%	9.2%
ING BSK	231.00	15.7	13.7	12.7	10%	11%	11%	1.5	1.5	1.4	2.2%	4.2%	4.6%
Millennium	6.70	-	8.8	7.7	-32%	13%	13%	1.2	1.1	1.0	0.0%	0.0%	0.0%
Pekao	103.70	17.7	10.8	8.9	6%	9%	10%	1.0	1.0	0.9	3.1%	4.2%	6.9%
PKO BP	42.76	11.6	10.5	8.8	11%	11%	13%	1.2	1.2	1.1	0.0%	7.7%	8.6%
Santander BP	298.00	-	12.1	9.6	-2%	9%	11%	1.2	1.1	1.0	5.5%	5.8%	5.8%
median		16.4	10.8	8.9	6%	9%	11%	1.1	1.0	0.9	1.1%	4.2%	5.2%
Investors in Polish Banks													
BCP	0.13	9.2	6.4	4.9	3%	5%	6%	0.3	0.3	0.3	0.8%	3.9%	5.4%
Citigroup	70.45	9.6	8.6	7.8	8%	9%	9%	0.8	0.7	0.6	3.0%	3.2%	3.5%
Commerzbank	5.40	120.0	11.8	7.2	-1%	2%	4%	0.3	0.3	0.3	0.0%	1.1%	4.9%
ING	11.65	12.1	10.7	9.9	7%	8%	8%	0.8	0.8	0.8	6.6%	5.2%	5.6%
UCI	10.60	12.2	8.5	6.9	3%	5%	5%	0.4	0.4	0.4	3.4%	4.5%	5.6%
median		12.1	8.6	7.2	3%	5%	6%	0.4	0.4	0.4	3.0%	3.9%	5.4%
Foreign Banks													
Erste Group	35.02	11.4	9.6	8.7	7%	8%	9%	0.8	0.8	0.7	1.4%	4.6%	5.5%
Komerční Banka	846.00	17.1	12.5	10.9	8%	11%	12%	1.3	1.3	1.3	2.7%	5.8%	6.0%
Moneta Money	88.75	15.5	12.2	9.9	9%	11%	13%	1.3	1.4	1.3	3.4%	9.0%	6.6%
OTP Bank	18,290	12.4	11.2	10.4	15%	15%	14%	1.8	1.6	1.4	1.2%	1.3%	1.3%
RBI	21.48	11.2	9.5	8.9	5%	5%	5%	0.5	0.5	0.5	2.2%	2.7%	3.2%
Akbank	5.56	3.6	2.7	2.7	12%	15%	13%	0.4	0.4	0.3	6.6%	9.4%	7.6%
Alpha Bank	1.13	15.5	6.7	4.6	3%	4%	6%	0.3	0.3	0.2	0.0%	0.0%	-
Banco Santander	3.09	10.2	8.2	7.4	6%	7%	8%	0.6	0.6	0.6	3.9%	5.2%	6.6%
Deutsche Bank	11.02	21.8	10.5	9.0	1%	4%	5%	0.4	0.4	0.4	0.7%	2.1%	3.1%
NB of Greece	2.52	9.0	6.7	5.8	6%	6%	8%	0.4	0.4	0.4	0.0%	1.8%	0.6%
Sberbank	333.24	7.6	6.9	6.2	18%	18%	18%	1.3	1.2	1.1	6.6%	7.2%	8.1%
Türkiye Garanti B	9.43	4.7	3.3	3.4	13%	15%	13%	0.6	0.5	0.5	3.9%	7.4%	-
Türkiye Halk Bank	4.66	2.9	1.7	1.7	9%	12%	12%	0.2	0.2	0.2	2.1%	2.6%	-
Türkiye Vakıflar B	3.46	3.2	2.0	-	9%	12%	-	0.3	0.2	-	-	-	-
VTB Bank	0.05	4.3	4.7	3.5	11%	11%	12%	0.4	0.4	0.4	7.7%	7.7%	7.7%
Yapi ve Kredi B	2.47	3.3	2.3	-	13%	15%	-	0.4	0.3	-	1.3%	6.1%	-
median		9.6	6.8	6.8	9%	11%	12%	0.5	0.4	0.5	2.2%	5.2%	6.0%

Source: Bloomberg, mBank

Insurance

	Price	2021	P/E 2022	2023	2021	ROE 2022	2023	2021	P/BV 2022	2023	2021	DY 2022	2023
Insurance Companies													
PZU	37.99	10.3	10.3	10.3	18%	18%	17%	1.8	1.8	1.8	11.0%	8.8%	8.7%
Aegon	4.16	7.2	6.8	6.5	5%	5%	6%	0.4	0.3	0.3	3.7%	4.6%	5.8%
Allianz	192.82	9.6	9.1	8.6	10%	10%	10%	1.0	0.9	0.9	5.2%	5.5%	5.9%
Assicurazioni Gen	17.72	10.4	9.8	9.6	9%	9%	9%	1.1	0.9	0.9	5.8%	6.1%	6.4%
Aviva	4.02	7.6	7.6	7.3	11%	10%	9%	0.7	0.7	0.6	5.7%	6.0%	6.5%
AXA	23.26	8.5	8.1	7.7	11%	11%	12%	0.8	0.8	0.7	6.5%	6.9%	7.4%
Baloise	143.10	10.9	10.5	10.5	8%	8%	8%	0.9	0.8	0.8	4.9%	5.2%	5.6%
Helvetia	99.50	10.6	10.2	9.6	8%	8%	8%	0.8	0.8	0.8	5.3%	5.5%	5.7%
Mapfre	1.80	7.5	8.3	8.3	8%	7%	7%	0.6	0.6	0.6	7.6%	7.8%	7.8%
RSA Insurance	6.84	16.1	15.2	12.8	10%	10%	-	1.7	1.6	-	3.4%	4.2%	4.5%
Uniq	7.80	10.8	8.7	-	6%	8%	-	0.8	0.7	-	6.3%	6.9%	-
Vienna Insu Group	24.70	8.5	8.0	-	7%	7%	8%	0.6	0.6	0.6	4.7%	5.0%	5.5%
Zurich Financial	395.30	13.3	12.0	11.4	12%	13%	14%	1.5	1.5	1.4	5.8%	6.1%	6.4%
median		10.3	9.1	9.6	9%	9%	9%	0.8	0.8	0.8	5.7%	6.0%	6.2%

Source: Bloomberg, mBank

Conventional Energy

		EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
	Price	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Generators																
CEZ	696.00	8.6	8.2	7.9	2.6	2.8	2.6	20.6	17.4	16.0	30%	34%	33%	7.5%	4.9%	5.8%
Enea	10.22	3.4	3.1	2.9	0.7	0.5	0.4	4.1	5.0	4.9	20%	15%	15%	0.0%	0.0%	4.0%
PGE	10.01	3.5	3.7	3.6	0.6	0.4	0.4	10.3	45.2	19.9	17%	10%	11%	0.0%	0.0%	1.1%
Tauron	3.76	5.0	5.3	5.0	1.1	0.9	0.8	4.9	6.9	6.4	21%	17%	17%	0.0%	0.0%	0.0%
median		4.2	4.5	4.3	0.9	0.7	0.6	7.6	12.2	11.2	21%	16%	16%	0.0%	0.0%	2.6%
Vertically Integrated Utilities																
EDF	10.79	5.4	5.1	4.8	1.3	1.2	1.2	14.5	13.3	11.0	24%	25%	25%	3.2%	4.0%	4.3%
EDP	4.70	9.4	8.9	8.5	2.4	2.3	2.3	20.9	19.1	18.1	26%	26%	27%	4.1%	4.3%	4.5%
Endesa	18.17	7.0	6.7	6.5	1.4	1.4	1.4	11.2	10.8	10.6	20%	21%	21%	7.0%	6.5%	6.6%
Enel	7.03	7.2	6.9	6.6	1.8	1.7	1.6	13.1	12.3	11.4	24%	25%	25%	5.4%	5.7%	6.1%
Engie	11.77	5.9	5.8	5.6	1.0	1.0	1.0	11.8	11.1	10.2	17%	18%	18%	6.2%	6.6%	7.1%
Fortum	26.87	10.8	11.2	10.8	0.5	0.5	0.5	18.5	19.6	18.0	5%	4%	5%	4.2%	4.3%	4.4%
median		7.1	6.8	6.6	1.3	1.3	1.3	13.8	12.8	11.2	22%	23%	23%	4.8%	5.0%	5.3%
Transmission System Operators																
EON	11.07	10.0	9.4	9.5	1.1	1.1	1.1	15.9	12.6	12.3	11%	12%	11%	4.5%	4.6%	4.8%
Elia Group	105.40	15.0	14.0	13.1	6.1	5.8	5.5	28.7	25.9	24.8	40%	41%	42%	1.7%	1.7%	1.7%
EVN	24.50	9.8	9.4	8.6	2.6	2.6	2.4	19.8	19.6	18.1	27%	27%	28%	2.0%	2.1%	2.1%
IREN	2.65	7.3	6.9	6.6	1.7	1.7	1.6	14.5	12.7	11.9	23%	24%	24%	3.8%	4.2%	4.5%
National Grid	959.70	13.0	11.6	10.9	4.4	4.2	4.1	18.3	16.3	15.4	34%	36%	38%	0.0%	0.0%	0.0%
Red Electrica	17.21	10.0	9.9	9.8	7.8	7.8	7.7	13.8	13.6	13.6	78%	78%	78%	5.9%	5.8%	5.1%
Redes Energeticas	2.53	9.5	9.4	9.4	5.8	5.8	6.0	14.6	14.4	13.8	61%	61%	64%	6.7%	6.7%	6.7%
SSE	1650.50	12.8	12.1	11.8	3.0	3.1	3.0	19.2	18.0	17.7	23%	26%	26%	0.0%	0.0%	0.0%
Terna	6.57	12.4	12.4	11.8	8.9	8.8	8.5	16.7	17.2	16.5	72%	71%	72%	4.4%	4.7%	5.2%
median		10.0	9.9	9.8	4.4	4.2	4.1	16.7	16.3	15.4	34%	36%	38%	3.8%	4.2%	4.5%

Source: Bloomberg, mBank

Renewable Energy

		EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
	Price	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Renewables																
Polenergia	72.90	14.4	14.1	10.8	1.8	1.6	1.5	27.6	28.6	18.1	12%	11%	14%	0.0%	0.0%	0.0%
Wind																
Abo Wind	50.40	12.0	10.6	9.8	2.6	2.2	2.0	28.6	23.8	21.3	21%	20%	20%	0.9%	1.0%	2.0%
Avangrid	51.71	12.6	11.1	10.4	4.1	4.0	3.8	23.0	21.3	20.0	33%	36%	36%	3.4%	3.5%	3.5%
Boralex	39.20	14.0	13.5	12.4	10.4	9.8	8.1	48.3	44.1	22.4	74%	72%	66%	1.7%	1.8%	1.9%
Edp Renovaveis	21.86	14.6	13.4	12.2	12.1	10.9	9.9	42.2	36.9	33.1	83%	82%	81%	0.4%	0.5%	0.5%
Eolus Vind	183.85	10.9	63.7	15.3	0.9	3.5	1.5	18.3	-	25.0	8%	5%	10%	2.9%	1.4%	4.2%
Falck Renewables	6.93	14.3	13.2	12.4	7.2	6.4	6.6	52.5	40.8	35.2	51%	49%	54%	1.0%	1.0%	1.0%
Iberdrola	9.50	10.5	9.6	9.0	3.1	2.9	2.8	16.1	14.8	13.9	30%	30%	31%	4.6%	4.9%	5.2%
Orsted	888.60	17.1	17.8	15.5	6.6	6.4	6.0	40.7	46.0	37.3	39%	36%	39%	1.4%	1.5%	1.6%
PNE	7.15	23.1	17.5	15.5	5.5	5.1	3.8	-	-	-	24%	29%	24%	0.6%	0.6%	0.6%
Terna Energy	11.90	11.7	10.5	8.2	7.4	6.6	5.4	21.6	18.4	11.9	63%	63%	65%	2.8%	3.3%	4.0%
Tilt Renewables	8.01	44.8	29.9	30.1	24.1	17.1	17.1	-	1.8	-	54%	57%	57%	0.0%	0.3%	0.3%
Transalta Ren	19.83	11.8	11.4	11.4	11.8	11.4	11.7	26.8	25.7	25.3	100%	100%	103%	4.7%	4.7%	4.8%
Xcel Energy	65.45	12.8	12.1	11.4	4.8	4.6	4.5	22.0	20.6	19.4	37%	38%	39%	2.8%	3.0%	3.1%
median		12.8	13.2	12.2	6.6	6.4	5.4	26.8	23.8	22.4	39%	38%	39%	1.7%	1.5%	2.0%
Solar																
Azure Power	21.54	15.6	11.3	9.5	10.8	9.2	7.9	-	-	38.4	69%	82%	83%	-	-	-
Clearway Energy	31.53	10.4	9.8	10.5	8.7	8.2	8.0	40.7	-	26.9	84%	83%	76%	4.2%	4.5%	4.7%
Neoen	34.40	17.4	13.8	11.1	14.2	11.3	9.2	-	59.6	42.6	82%	82%	82%	0.0%	0.2%	0.8%
Renova	5970	47.4	32.7	29.2	22.7	17.0	15.6	-	-	-	48%	52%	53%	0.0%	0.0%	0.0%
Solaria Energia	14.50	32.5	18.0	13.3	25.5	14.4	10.7	55.3	29.4	20.8	78%	80%	80%	-	-	-
median		17.4	13.8	11.1	14.2	11.3	9.2	48.0	44.5	32.7	78%	82%	80%	0.0%	0.2%	0.8%
Mixed																
Erg	25.06	10.4	9.6	9.3	4.9	4.7	4.6	32.2	27.9	28.5	47%	49%	49%	3.0%	3.0%	3.0%
Innervex	20.94	14.2	13.7	12.9	11.7	11.2	10.9	-	58.5	66.5	82%	82%	85%	3.5%	3.5%	3.6%
Nextera	79.63	10.1	9.2	8.7	10.5	9.4	8.2	28.9	35.9	43.4	104%	102%	94%	3.3%	3.8%	4.3%
Northland Power	41.59	13.6	13.5	12.4	7.5	7.5	7.2	26.6	25.5	20.2	56%	56%	58%	2.9%	2.9%	2.9%
Brookfield Ren	38.75	20.7	19.3	18.6	11.4	10.7	10.6	-	-	-	55%	55%	57%	3.1%	3.3%	3.4%
Meridian Energy	5.15	20.2	20.0	20.1	4.0	4.3	4.5	57.9	55.4	52.0	20%	22%	22%	3.3%	3.4%	3.4%
Verbund	93.80	14.2	12.4	11.7	5.0	4.8	4.7	54.4	45.6	42.5	35%	39%	40%	0.9%	1.1%	1.2%
median		14.2	13.5	12.4	7.5	7.5	7.2	32.2	40.8	43.0	55%	55%	57%	3.1%	3.3%	3.4%

Source: Bloomberg, mBank

Gas & Oil

		EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
	Price	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Oil																
Lotos	60.08	3.8	4.7	3.8	0.5	0.5	0.4	6.5	13.2	8.6	13%	10%	11%	0.0%	5.0%	5.0%
MOL	2,444	3.7	4.7	3.9	0.6	0.6	0.6	7.6	16.7	10.0	16%	13%	15%	4.0%	4.2%	4.2%
PKN Orlen	79.30	4.9	7.2	6.4	0.5	0.6	0.6	8.3	25.6	15.3	11%	8%	10%	4.4%	4.4%	4.4%
Hellenic Petrol	5.88	7.7	6.1	5.7	0.5	0.5	0.5	17.6	9.0	7.6	7%	8%	8%	4.4%	5.5%	5.9%
HollyFrontier	31.05	10.0	5.8	5.4	0.6	0.6	0.6	-	10.1	8.5	6%	10%	12%	4.5%	4.6%	4.5%
Marathon Petrol	59.57	11.3	8.6	8.0	0.9	0.9	1.0	-	24.9	17.9	8%	10%	13%	3.9%	3.9%	4.1%
Motor Oil	13.21	5.4	4.4	4.7	0.3	0.3	0.3	8.7	6.2	7.8	6%	7%	7%	6.1%	8.1%	8.7%
Neste Oil	53.36	21.3	17.8	14.8	3.3	3.0	2.8	34.9	27.6	22.3	15%	17%	19%	1.5%	1.8%	2.2%
OMV	50.64	4.9	4.6	4.6	1.1	1.1	1.1	11.0	9.4	9.1	23%	24%	25%	3.8%	4.0%	4.3%
Phillips 66	66.03	11.1	7.1	6.6	0.5	0.4	0.4	27.7	10.0	8.7	5%	6%	6%	5.5%	5.7%	6.1%
Saras SpA	0.73	8.9	5.8	4.6	0.2	0.2	0.2	-	-	21.4	2%	3%	3%	1.1%	1.0%	2.5%
Tupras	109.20	9.3	6.2	6.0	0.4	0.4	0.3	18.9	8.5	7.8	4%	6%	6%	4.9%	7.9%	10.9%
Valero Energy	66.51	10.5	6.1	6.3	0.5	0.4	0.4	66.6	12.2	10.7	4%	6%	7%	5.9%	6.1%	6.1%
median		8.9	6.1	5.7	0.5	0.5	0.5	14.3	11.2	9.1	7%	8%	10%	4.4%	4.6%	4.5%
Gas																
PGNiG	6.36	3.6	3.5	3.5	0.7	0.7	0.7	8.6	9.3	10.2	20%	21%	21%	3.3%	3.5%	3.2%
A2A SpA	1.75	8.2	7.4	7.0	1.4	1.3	1.3	18.3	15.8	15.9	17%	18%	18%	4.6%	4.9%	4.9%
BP	309.25	5.0	4.6	4.6	0.6	0.5	0.6	11.1	9.0	8.2	11%	12%	12%	0.0%	0.0%	0.0%
Centrica	50.94	3.1	3.0	2.9	0.3	0.3	0.3	13.1	8.5	7.6	9%	10%	10%	0.0%	0.0%	0.0%
Enagas	18.94	10.2	10.3	10.7	8.9	9.2	9.6	12.9	13.0	13.1	88%	89%	90%	9.0%	8.9%	8.9%
Endesa	18.17	7.0	6.7	6.5	1.4	1.4	1.4	11.2	10.8	10.6	20%	21%	21%	7.0%	6.5%	6.6%
Engie	11.77	5.9	5.8	5.6	1.0	1.0	1.0	11.8	11.1	10.2	17%	18%	18%	6.2%	6.6%	7.1%
Eni	10.99	3.9	3.5	3.4	0.9	0.9	0.9	16.7	12.1	10.6	23%	25%	25%	5.8%	6.4%	6.6%
Equinor	208.95	3.8	3.6	3.6	1.5	1.4	1.4	15.1	15.1	15.0	38%	39%	39%	0.0%	0.0%	0.0%
Gas Natural SDG	21.75	9.9	9.7	9.5	2.1	2.0	2.1	17.5	17.5	17.5	21%	20%	22%	6.9%	7.2%	5.9%
Gazprom	342.60	5.6	5.0	5.0	1.5	1.4	1.4	6.7	5.8	5.5	27%	28%	28%	6.7%	8.5%	9.1%
Hera SpA	3.60	7.6	7.4	7.1	1.2	1.1	1.1	16.4	16.0	14.9	15%	15%	15%	3.3%	3.3%	3.6%
NovaTek	1,914	18.6	16.5	15.6	6.7	5.9	5.7	17.9	18.1	17.8	36%	36%	36%	2.7%	2.9%	2.8%
ROMGAZ	32.00	4.3	3.8	3.8	2.2	2.0	1.8	8.2	7.6	7.6	51%	52%	48%	6.5%	7.4%	7.4%
Shell	17.44	3.1	2.9	2.9	0.5	0.5	0.5	9.8	8.5	7.1	17%	18%	17%	4.7%	4.9%	5.3%
Snam SpA	4.91	13.4	13.3	12.7	10.5	10.3	9.8	14.1	14.5	14.0	79%	78%	77%	5.3%	5.7%	5.7%
median		5.7	5.4	5.3	1.4	1.4	1.3	13.0	11.6	10.6	21%	21%	22%	5.0%	5.3%	5.5%

Source: Bloomberg, mBank

Fertilizers and Chemicals

		EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
	Price	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Fertilizer Producers																
Grupa Azoty	30.40	8.0	11.4	9.2	0.7	0.8	0.8	18.2	-	-	9%	7%	8%	0.0%	0.0%	0.0%
Acron	6,806	9.0	8.7	8.1	2.8	2.6	2.5	13.9	12.6	10.2	31%	30%	30%	5.6%	5.4%	5.3%
CF Industries	48.44	9.5	10.1	9.8	3.3	3.4	3.4	21.0	22.5	21.0	35%	33%	34%	2.5%	2.5%	2.5%
K+S	12.88	8.9	7.8	7.0	1.4	1.3	1.3	-	43.8	37.1	15%	16%	18%	0.3%	0.9%	1.4%
Phosagro	5,009	7.3	7.3	7.2	2.6	2.6	2.5	17.7	19.2	21.8	36%	35%	35%	2.9%	3.4%	3.4%
The Mosaic Co	33.64	6.7	7.2	7.2	1.6	1.6	1.6	14.2	16.1	16.1	24%	22%	22%	0.6%	0.8%	0.8%
Yara International	413.10	6.7	6.5	6.3	1.2	1.2	1.2	12.4	12.2	11.4	18%	19%	19%	0.1%	0.1%	0.1%
median		8.0	7.8	7.2	1.6	1.6	1.6	15.9	17.7	18.5	24%	22%	22%	0.6%	0.9%	1.4%
Chemical Producers																
Ciech	51.70	6.1	5.9	5.7	1.3	1.2	1.1	11.6	12.3	12.7	21%	20%	20%	5.8%	5.2%	5.7%
Akzo Nobel	99.96	13.4	12.5	11.6	2.3	2.2	2.1	22.0	19.5	17.9	17%	18%	18%	2.1%	2.3%	2.4%
BASF	64.81	7.8	7.5	7.1	1.2	1.1	1.1	14.2	13.6	12.7	15%	15%	16%	5.2%	5.3%	5.4%
Croda	9,072	27.9	26.0	24.8	7.9	7.6	7.4	45.2	41.3	38.9	28%	29%	30%	0.0%	0.0%	0.0%
Sisecam	8.38	5.3	4.5	3.8	1.1	1.0	0.9	8.8	7.3	6.0	21%	22%	23%	2.5%	3.0%	3.5%
Soda Sanayii	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solvay	107.60	6.6	6.2	5.9	1.5	1.4	1.3	16.0	13.6	11.9	22%	23%	23%	3.5%	3.6%	3.7%
Tata Chemicals	858.80	15.5	11.9	10.1	2.6	2.3	2.0	47.6	26.2	21.2	16%	19%	20%	1.1%	1.3%	1.4%
Tessenderlo Chem	33.10	4.7	4.5	4.5	0.8	0.8	0.8	10.2	9.6	9.0	18%	18%	18%	-	-	-
Wacker Chemie	155.65	7.4	8.3	8.1	1.5	1.4	1.4	24.7	23.3	21.0	20%	17%	18%	2.1%	2.0%	2.2%
median		7.4	7.5	7.1	1.5	1.4	1.3	16.0	13.6	12.7	20%	19%	20%	2.3%	2.6%	3.0%

Source: Bloomberg, mBank

Machinery & Equipment

	Price	EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Industrials																
Famur	2.88	4.1	3.8	3.8	1.3	0.9	0.8	14.5	11.1	9.8	31%	24%	22%	0.0%	0.0%	5.4%
Caterpillar	205.73	13.6	11.5	10.4	2.6	2.3	2.1	25.0	19.3	15.8	19%	20%	20%	2.2%	2.3%	2.5%
Epiroc	192.65	14.8	13.6	12.8	4.0	3.7	3.5	35.5	32.1	30.0	27%	27%	27%	1.4%	1.5%	1.7%
Komatsu	2,822	11.8	9.0	7.7	1.6	1.5	1.4	27.2	17.0	13.0	14%	16%	18%	1.6%	2.7%	3.4%
Sandvig AG	216.00	11.6	10.6	10.2	2.9	2.7	2.6	20.3	18.0	16.8	25%	25%	25%	2.4%	2.5%	2.7%
median		11.8	10.6	10.2	2.6	2.3	2.1	25.0	18.0	15.8	25%	24%	22%	1.6%	2.3%	2.7%

Source: Bloomberg, mBank

Metals Mining

	Price	EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Metals																
KGHM	176.80	3.1	3.0	2.9	1.0	0.9	0.9	5.6	6.1	6.4	33%	31%	30%	0.8%	5.7%	9.8%
Anglo American	2,954	3.6	4.4	4.7	1.5	1.6	1.7	7.4	9.4	10.3	42%	37%	36%	0.0%	0.0%	0.0%
Antofagasta	1,466	6.0	6.3	6.6	3.5	3.7	3.8	17.0	18.0	20.3	60%	58%	57%	0.0%	0.0%	0.0%
BHP Group LTD	40.26	3.1	3.3	3.6	1.8	1.9	2.0	10.1	10.5	12.1	60%	58%	57%	4.6%	4.7%	3.9%
Boliden	299.40	5.2	5.5	5.7	1.3	1.4	1.4	10.4	11.4	12.3	26%	25%	24%	4.7%	4.2%	4.1%
First Quantum	24.47	6.2	5.4	5.7	3.1	3.0	3.1	16.6	11.6	12.1	50%	55%	54%	0.1%	0.3%	0.4%
F-McMoRan	36.74	7.3	6.5	6.8	3.2	3.0	3.1	14.9	13.2	16.4	43%	46%	46%	0.7%	1.3%	1.1%
Fresnillo	848.00	5.9	5.0	6.2	3.1	2.8	3.1	15.8	13.2	17.1	52%	56%	51%	0.0%	0.0%	0.0%
Gold Fields	12,646	3.4	3.4	3.2	2.0	2.0	1.8	7.7	7.5	7.0	59%	58%	57%	0.0%	0.0%	0.0%
Hudbay Min	7.93	4.0	3.3	3.3	1.6	1.5	1.5	28.9	9.9	8.6	40%	45%	47%	0.1%	0.1%	0.2%
KAZ Minerals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lundin Min	9.59	3.5	3.5	3.8	1.9	1.9	2.0	8.3	8.5	8.8	55%	54%	53%	1.5%	1.6%	1.9%
MMC Norilsk Nickel	32.91	5.9	5.7	6.0	3.6	3.5	3.6	8.9	8.9	9.9	61%	61%	60%	8.1%	6.8%	6.4%
OZ Minerals	24.35	10.0	8.9	9.1	4.9	4.7	4.6	20.8	17.8	17.6	50%	53%	51%	1.1%	1.2%	1.3%
Polymetal Intl	1,345	5.6	5.0	4.9	3.3	3.0	3.0	7.9	7.8	6.9	59%	61%	61%	0.0%	0.0%	0.0%
Polyus	12,630	6.4	5.9	5.9	4.6	4.3	4.2	8.9	7.8	8.0	71%	72%	71%	5.1%	5.4%	5.6%
Sandfire Res	6.36	1.5	1.7	13.2	0.9	1.0	2.8	6.9	7.0	-	57%	56%	21%	4.4%	3.6%	0.3%
Southern CC	62.34	9.4	9.9	9.6	5.3	5.5	5.2	17.9	17.9	17.0	56%	55%	54%	3.5%	3.5%	3.3%
median		5.6	5.0	5.7	3.1	2.8	3.0	10.1	9.9	11.2	55%	55%	53%	0.8%	1.3%	1.1%

Source: Bloomberg, mBank

Coal Mining

	Price	EV/EBITDA				EV/S			P/E			EBITDA margin			DY		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	
Coal																	
JSW	56.20	4.0	1.9	2.5	0.7	0.6	0.6	15.3	4.3	7.6	18%	31%	25%	0.0%	0.0%	11.6%	
Alliance Res Par	9.93	3.1	3.1	3.2	0.9	0.9	0.9	11.1	17.1	18.4	29%	30%	29%	6.0%	8.1%	8.1%	
Banpu	12.70	10.0	9.7	9.1	2.4	2.4	2.5	14.8	13.1	13.1	24%	25%	27%	3.6%	3.6%	4.1%	
BHP Group	60.29	3.1	3.3	3.7	1.9	2.0	2.1	10.3	10.8	12.3	60%	58%	57%	8.4%	8.6%	7.1%	
China Coal Energy	6.28	3.3	3.3	3.2	0.6	0.6	0.6	10.1	9.9	9.7	19%	19%	19%	1.9%	1.8%	2.0%	
LW Bogdanka	42.80	2.2	2.2	2.0	0.6	0.6	0.5	14.2	14.1	-	26%	26%	25%	-	-	-	
Peabody Energy C	16.91	6.4	6.1	5.6	0.9	0.9	0.9	-	-	-	14%	14%	16%	0.0%	0.0%	-	
PT Bukit Asam T	2,410	5.2	4.8	4.5	1.2	1.1	1.0	8.2	7.5	7.0	23%	23%	23%	8.0%	10.2%	10.0%	
Rio Tinto	5,219	2.9	3.7	4.5	1.7	2.0	2.1	6.4	8.8	11.1	59%	53%	47%	0.0%	0.0%	0.0%	
Semirara Min&Po	18.90	6.3	5.1	-	2.4	2.1	1.9	12.1	9.3	10.5	38%	41%	-	3.3%	6.0%	10.6%	
Shougang Fush R	2.67	6.3	6.3	6.9	3.3	3.4	3.5	10.6	11.2	11.9	53%	53%	51%	7.9%	7.2%	7.1%	
Stanmore Coal	0.94	7.5	4.8	3.4	0.7	0.7	0.9	46.8	15.6	8.5	10%	16%	27%	-	-	16.0%	
Teck Resources	26.80	6.0	5.6	5.0	2.3	2.2	2.0	11.5	11.1	10.5	38%	40%	40%	1.0%	1.0%	1.0%	
Warrior Met Coal	24.69	6.2	5.9	4.7	1.4	1.4	1.3	13.8	11.0	10.9	23%	23%	29%	0.8%	0.8%	0.8%	
Yanzhou Coal Min	16.32	4.5	4.5	4.3	1.2	1.2	1.1	7.0	7.4	7.3	26%	26%	26%	5.3%	5.2%	5.5%	
median		5.2	4.8	4.4	1.2	1.2	1.1	11.3	10.9	10.5	26%	26%	27%	3.3%	3.6%	7.1%	

Source: Bloomberg, mBank

Construction

		EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
	Price	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Construction																
Acciona	146.00	10.7	9.6	8.7	1.9	1.8	1.7	27.1	21.7	18.9	17%	18%	19%	2.5%	2.7%	3.1%
Budimex	311.00	6.0	8.5	8.8	0.7	0.7	0.7	16.4	18.6	23.7	12%	8%	8%	4.9%	4.6%	4.4%
Ferrovial	24.37	40.3	33.6	28.4	3.3	3.2	3.1	-	-	53.2	8%	10%	11%	2.3%	2.6%	2.8%
Hochtief	69.68	3.9	3.7	3.4	0.2	0.2	0.2	10.8	9.5	8.3	5%	5%	6%	6.0%	6.8%	7.8%
Mota Engil	1.39	4.7	3.8	3.4	0.7	0.6	0.5	7.9	9.9	6.6	15%	16%	16%	4.7%	7.9%	7.9%
NCC	144.00	5.3	5.1	4.9	0.3	0.3	0.3	10.5	10.5	9.5	6%	6%	6%	4.5%	5.0%	5.4%
Skanska	238.00	9.7	8.8	7.3	0.6	0.5	0.5	16.6	15.4	14.7	6%	6%	7%	3.2%	3.4%	3.4%
Strabag	39.75	3.3	3.1	-	0.2	0.2	-	12.9	11.7	-	7%	7%	-	3.3%	3.7%	-
median		5.6	6.8	7.3	0.6	0.6	0.5	12.9	11.7	14.7	8%	8%	8%	3.9%	4.1%	4.4%

Source: Bloomberg, mBank

Real Estate

		EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
	Price	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Property Developers																
Develia	3.59	10.5	10.4	11.6	1.1	1.0	1.0	12.0	12.0	13.8	26%	26%	22%	6.4%	6.1%	6.1%
Echo Investment	4.45	12.9	12.9	-	1.0	1.0	0.9	9.0	8.0	5.1	31%	26%	-	7.8%	7.9%	12.1%
GTC	7.15	15.6	14.6	13.9	0.7	0.7	0.7	-	-	10.4	67%	70%	66%	0.1%	0.5%	0.8%
CA Immobilien Anl	36.60	27.5	25.8	22.7	1.1	1.0	0.9	21.4	19.1	17.0	76%	76%	90%	3.0%	3.2%	3.7%
Deutsche Eurosh	18.61	14.4	14.7	14.1	0.6	0.6	0.6	-	13.2	8.3	83%	85%	89%	4.4%	5.0%	5.0%
Immofinanz AG	20.74	25.4	24.6	22.2	0.8	0.8	0.8	22.9	17.9	13.0	56%	57%	49%	3.9%	4.1%	4.3%
Klepierre	18.91	22.3	20.3	18.9	0.7	0.7	0.7	9.9	8.1	8.2	79%	84%	88%	6.6%	8.1%	8.2%
Segro	1,257.50	47.3	39.2	34.9	1.5	1.5	1.4	45.6	42.1	38.6	81%	92%	105%	0.0%	0.0%	0.0%
median		18.9	17.5	18.9	0.9	0.9	0.8	16.7	13.2	11.7	72%	73%	88%	4.1%	4.6%	4.7%

Source: Bloomberg, mBank

Telecommunications

		EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
	Price	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Poland																
Netia	6.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Orange Polska	7.96	5.1	5.0	4.8	1.6	1.6	1.5	35.3	22.9	19.2	31%	31%	31%	0.0%	3.1%	6.3%
median		5.1	5.0	4.8	1.6	1.6	1.5	35.3	22.9	19.2	31%	31%	31%	0.0%	3.1%	6.3%
Mid Caps																
Proximus	16.83	4.6	4.5	4.6	1.5	1.5	1.5	10.8	10.8	12.8	33%	34%	33%	7.1%	7.1%	7.6%
Telefonica CP	262.50	6.7	6.9	6.9	2.2	2.2	2.2	13.6	14.2	15.0	33%	32%	32%	8.0%	8.0%	8.0%
Hellenic Telekom	16.41	6.4	6.2	6.1	2.5	2.4	2.5	15.9	14.4	13.1	39%	39%	41%	4.9%	5.9%	5.6%
Matav	436.00	4.2	4.1	4.2	1.4	1.4	1.4	10.5	9.7	10.0	34%	34%	34%	5.0%	5.4%	4.6%
Telecom Austria	7.40	4.8	4.8	4.7	1.7	1.7	1.6	10.9	10.2	9.2	35%	35%	35%	3.6%	4.2%	4.3%
median		4.8	4.8	4.7	1.7	1.7	1.6	10.9	10.8	12.8	34%	34%	34%	5.0%	5.9%	5.6%
Big Caps																
BT	154.85	4.5	4.5	4.3	1.6	1.6	1.6	8.2	7.7	7.3	35%	36%	37%	0.0%	0.0%	0.0%
DT	17.47	6.6	6.2	5.8	2.3	2.2	2.2	15.2	13.5	12.6	35%	36%	38%	3.4%	3.7%	4.0%
KPN	2.78	7.3	7.1	7.0	3.4	3.4	3.3	21.4	19.0	17.0	47%	47%	48%	5.0%	5.1%	5.4%
Orange France	9.37	4.1	4.0	3.9	1.2	1.2	1.2	8.9	8.2	7.7	30%	30%	31%	7.7%	7.9%	8.2%
Swisscom	532.20	8.3	8.3	8.3	3.2	3.3	3.3	19.3	19.3	19.2	39%	39%	40%	4.1%	4.2%	4.1%
Telefonica S.A.	4.14	5.2	5.2	5.0	1.7	1.7	1.8	10.8	9.9	8.9	33%	33%	35%	7.4%	7.3%	7.3%
Telia Company	36.81	7.3	7.2	7.1	2.6	2.6	2.6	21.0	18.9	17.0	35%	36%	36%	5.5%	5.6%	5.8%
TI	0.36	4.1	4.1	4.0	1.8	1.8	1.7	9.1	7.9	7.1	43%	43%	43%	2.8%	2.8%	3.6%
median		5.9	5.7	5.4	2.0	2.0	2.0	13.0	11.7	10.7	35%	36%	37%	4.6%	4.6%	4.7%

Source: Bloomberg, mBank

Media

	Price	EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Polish Media Groups																
Agora	9.28	13.3	8.4	7.1	1.5	1.2	1.1	-	-	-	11%	15%	15%	0.0%	0.0%	0.0%
Wirtualna Polska	134.80	14.5	12.0	10.7	5.1	4.3	3.9	25.9	21.0	19.0	35%	36%	36%	1.1%	1.6%	1.9%
median		13.9	10.2	8.9	3.3	2.8	2.5	25.9	21.0	19.0	23%	25%	26%	0.6%	0.8%	1.0%
Daily Mail																
Arnolgo Mond	1.82	5.2	4.8	4.2	0.6	0.6	0.6	17.5	14.0	13.0	12%	13%	14%	2.1%	3.5%	4.9%
Daily Mail	1,108.00	14.6	12.6	11.0	1.7	1.6	1.6	46.6	35.4	29.5	11%	13%	15%	0.0%	0.0%	0.0%
New York Times	49.54	29.3	23.8	20.7	4.1	3.8	3.6	54.0	41.5	34.8	14%	16%	17%	0.5%	0.6%	0.6%
Promotora de Inf	0.59	10.4	7.8	6.4	1.5	1.4	1.3	-	-	14.7	14%	18%	21%	-	-	-
median		12.5	10.2	8.7	1.6	1.5	1.5	46.6	35.4	22.1	13%	14%	16%	0.5%	0.6%	0.6%
TV																
Atresmedia Corp	3.54	6.3	5.8	5.7	1.0	0.9	0.9	8.8	7.8	7.6	15%	16%	16%	8.1%	9.7%	9.8%
Gestevision Telecin	4.85	5.5	5.4	5.3	1.6	1.6	1.6	8.1	7.9	7.8	29%	29%	29%	4.8%	6.2%	8.4%
ITV PLC	108.95	7.8	6.8	6.6	1.6	1.5	1.4	10.1	8.8	8.7	20%	22%	22%	0.0%	0.0%	0.0%
M6-Metropole Tel	18.72	6.7	6.5	6.0	1.8	1.7	1.7	13.9	12.5	11.6	26%	27%	29%	5.9%	5.9%	4.8%
Mediaset SPA	2.50	9.0	8.0	9.9	1.6	1.6	1.6	16.8	14.5	11.6	18%	20%	16%	2.3%	3.4%	4.0%
Prosieben	16.55	7.6	7.1	6.7	1.4	1.3	1.2	12.3	10.9	10.1	18%	19%	19%	3.9%	4.7%	5.4%
TF1-TV Francaise	8.61	3.8	3.8	3.3	0.8	0.8	0.8	13.6	12.5	10.7	21%	20%	24%	5.0%	5.3%	6.8%
median		6.7	6.5	6.0	1.6	1.5	1.4	12.3	10.9	10.1	20%	20%	22%	4.8%	5.3%	5.4%
Pay TV																
Cogeco	114.83	5.6	5.4	5.6	2.7	2.7	2.7	13.7	12.8	14.5	48%	49%	48%	2.2%	2.4%	2.7%
Comcast	57.00	10.6	9.3	8.7	3.1	2.9	2.9	20.0	15.9	13.6	29%	32%	33%	1.7%	1.9%	2.1%
Dish Network	42.99	7.2	7.8	8.4	1.4	1.4	1.5	14.2	16.6	27.8	19%	18%	17%	0.0%	0.0%	0.0%
Liberty Global	28.65	5.2	5.7	5.8	2.0	2.2	2.4	34.1	27.4	18.2	39%	39%	41%	0.0%	0.0%	-
Shaw Comm	28.83	9.5	9.3	9.1	4.2	4.1	4.0	27.4	25.5	24.6	44%	44%	44%	5.2%	5.2%	5.4%
median		7.2	7.8	8.4	2.7	2.7	2.7	20.0	16.6	18.2	39%	39%	41%	1.7%	1.9%	2.4%

Source: Bloomberg, mBank

IT

	Price	EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Poland																
Asseco Poland	85.50	5.3	5.0	4.8	0.8	0.8	0.8	17.9	16.8	16.2	16%	16%	16%	3.6%	3.5%	3.5%
Comarch	237.00	6.9	6.6	6.2	1.1	1.0	0.9	17.4	16.9	16.5	16%	15%	15%	0.6%	0.6%	0.6%
Sygnity	10.90	5.1	6.2	5.7	1.5	1.3	1.2	5.8	9.8	9.7	29%	21%	21%	0.0%	0.0%	0.0%
median		5.3	6.2	5.7	1.1	1.0	0.9	17.4	16.8	16.2	16%	16%	16%	0.6%	0.6%	0.6%
International																
Atos Origin	44.72	3.2	2.9	2.8	0.4	0.4	0.4	6.4	5.8	5.3	14%	15%	15%	2.7%	3.2%	3.4%
CapGemini	189.80	14.1	13.0	12.1	2.1	2.0	1.9	24.5	21.5	19.0	15%	16%	16%	1.1%	1.2%	1.4%
IBM	137.20	9.2	9.2	9.9	2.3	2.2	2.2	12.4	11.3	10.6	25%	24%	22%	4.9%	5.2%	5.1%
Indra Sistemas	8.91	6.2	5.6	5.1	0.6	0.6	0.6	13.4	10.8	9.2	10%	11%	11%	0.9%	1.5%	1.4%
Microsoft	304.82	28.7	25.7	21.9	13.6	12.2	10.8	41.3	37.6	33.0	47%	47%	49%	0.7%	0.8%	0.9%
Oracle	87.73	14.2	13.8	13.2	7.2	7.0	6.8	19.6	18.3	17.0	50%	51%	51%	1.2%	1.4%	1.4%
SAP	122.02	17.6	16.6	15.5	5.8	5.6	5.2	25.8	24.6	22.5	33%	34%	34%	1.5%	1.5%	1.7%
TietoEVRY	27.28	8.5	7.6	7.4	1.4	1.4	1.3	11.7	10.9	10.2	17%	18%	18%	5.2%	5.5%	5.9%
median		11.6	11.1	11.0	2.2	2.1	2.1	16.5	14.8	13.8	21%	21%	20%	1.3%	1.5%	1.6%

Source: Bloomberg, mBank

Gaming

	Price	EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Gaming																
11 bit studios	440.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CD Projekt	190.86	32.3	21.8	25.3	15.6	13.0	14.0	48.4	31.1	35.5	48%	60%	55%	2.6%	0.0%	1.6%
PlayWay	445.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ten Square Games	545.50	19.3	14.1	13.7	5.4	4.7	4.3	22.5	16.6	16.3	28%	33%	31%	1.8%	3.3%	4.5%
Activision Blizzard	78.25	14.2	12.1	11.6	6.3	5.6	5.5	21.4	18.3	17.2	45%	46%	47%	0.6%	0.7%	0.6%
Capcom	3,460	24.8	19.2	17.4	9.2	7.8	7.3	34.0	27.7	24.7	37%	41%	42%	0.9%	1.0%	1.1%
Take Two	152.69	15.9	16.1	12.4	4.2	4.0	3.0	25.4	25.5	18.6	26%	25%	24%	-	-	-
Ubisoft	55.80	7.6	7.1	5.8	3.2	2.9	2.6	22.4	20.8	17.7	41%	41%	46%	0.0%	0.0%	0.0%
Electronic Arts	137.04	16.2	14.7	13.9	5.7	5.4	5.1	25.3	22.6	20.4	36%	37%	37%	0.1%	0.2%	0.2%
Paradox Interactive	151.10	13.9	10.4	9.7	8.1	6.3	5.9	30.0	22.9	21.0	59%	61%	60%	0.7%	0.9%	1.0%
median		16.0	14.4	13.1	6.0	5.5	5.3	25.4	22.8	19.5	39%	41%	44%	0.7%	0.7%	1.0%

Source: Bloomberg, mBank

Steam Global Top Sellers

2021-09-16	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	791	-172	-131	917	110	0%	0%	110
Frostpunk: SP	11 bit studios	891	+105	-236	919	88	0%	0%	88
Frostpunk: GOTY	11 bit studios	780	+38	-217	748	165	0%	0%	165
Blair Witch VR	Bloober Team		-	-	2,952		-	-	108
Cyberpunk 2077	CD Projekt	92	+10	+2	98	199	0%	0%	199
The Witcher 3: WH	CD Projekt	523	-56	+53	479	100	0%	0%	100
The Witcher 3: WH (GOTY)	CD Projekt	276	-31	+35	304	150	0%	0%	150
Green Hell	Creepy Jar	395	-86	-21	391	90	0%	0%	90
CMS 2021	PlayWay Group	160	+3	+1	211	90	0%	0%	90
CMS 2021 (+DLCs)	PlayWay Group	185	+2	-28	194	117	0%	0%	117
CMS 2021 (+CMS18)	PlayWay Group	1,054	-4	-75	1,111	146	0%	0%	146
CMS 2021 (+House Flipper)	PlayWay Group	1,290	+228	-355	1,379	146	0%	0%	146
Dying Light EE	Techland	237	-13	-23	231	90	0%	0%	90
Dying Light 2	Techland	543	+840	-405	412	200	0%	0%	200
Chernobylite	The Farm 51	579	-31	-197	571	120	0%	0%	120

Source: Steam (Valve Corporation), mBank

Steam Wishlist

2021-09-16	Company	Position	D/D change	W/W change	1-week average	Release date
Frostpunk 2	11 bit studios	23	-	+1	23	TBA
Builder Simulator	PlayWay Group	69	+1	+4	70	TBA
Builders of Egypt	PlayWay Group	42	+1	+3	43	Q3'21
Contraband Police	PlayWay Group	85	+1	-	84	Q4'21
I am Your President	PlayWay Group	136	+1	+3	136	Soon
Junkyard Simulator	PlayWay Group	86	+1	-	85	2021
Occupy Mars	PlayWay Group	59	+1	+2	59	Soon
Prison Simulator	PlayWay Group	94	+1	-1	93	TBA
Succubus	PlayWay Group	41	+1	+3	42	2021-10-05
Dying Light 2	Techland	1	-	-	1	2022-02-04

Source: Steam (Valve Corporation), mBank

Clothing & Footwear

	Price	EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Poland																
CCC	119.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LPP	14,030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VRG	3.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
median		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
International																
ABC Mart	5,850	13.0	8.5	7.7	1.5	1.3	1.3	28.7	19.9	18.0	12%	16%	16%	2.9%	2.9%	2.9%
Adidas	284.90	17.6	14.6	12.9	2.6	2.4	2.2	37.1	28.5	24.0	15%	16%	17%	1.1%	1.5%	1.8%
Assoc Brit Foods	1,853	7.1	5.6	5.3	1.0	0.8	0.8	21.1	13.4	12.3	13%	15%	15%	0.0%	0.0%	0.0%
Caleries	22.35	50.7	4.9	4.7	0.4	0.3	0.3	-	12.8	12.3	1%	6%	7%	1.3%	1.3%	1.3%
Crocs	153.68	28.0	25.0	22.6	5.8	5.4	5.0	39.3	35.4	31.3	21%	22%	22%	-	-	-
Foot Locker	49.76	6.9	4.7	4.5	0.5	0.5	0.5	18.9	10.6	9.6	7%	10%	11%	1.4%	2.3%	2.4%
H&M	169.56	6.8	6.2	5.9	1.3	1.2	1.1	27.7	18.8	16.9	18%	19%	19%	3.4%	4.4%	4.7%
Hugo Boss	49.13	8.1	6.6	6.0	1.6	1.5	1.4	50.8	25.2	19.7	20%	22%	23%	1.8%	3.0%	4.1%
Inditex	29.68	17.8	12.5	11.4	4.0	3.3	3.0	67.8	28.8	24.9	23%	26%	27%	2.1%	3.1%	3.3%
Lululemon	418.95	50.4	37.7	31.0	11.9	9.0	7.8	-	64.7	52.3	24%	24%	25%	0.0%	0.0%	0.0%
Nike	157.91	28.9	23.8	20.9	4.6	4.1	3.8	50.3	39.7	33.9	16%	17%	18%	0.7%	0.7%	0.8%
Under Armour	21.46	10.9	8.2	6.5	0.7	0.7	0.7	-	62.7	41.8	7%	8%	10%	0.0%	0.0%	0.0%
median		15.3	8.4	7.1	1.6	1.4	1.3	37.1	26.8	21.9	15%	17%	18%	1.3%	1.5%	1.8%

Source: Bloomberg, mBank

Luxury, e-Commerce, Grocery Retail

	Price	EV/EBITDA			EV/S			P/E			EBITDA margin			DY		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Luxury Goods																
Estee Lauder	326.25	21.2	17.9	15.9	4.7	4.2	3.8	54.9	46.9	40.5	22%	23%	24%	0.6%	0.7%	0.8%
Hermes Inter	1,248	40.4	35.6	31.1	16.2	14.5	13.1	-	64.0	56.5	40%	41%	42%	0.5%	0.5%	0.6%
Kering	631.40	14.6	13.0	11.9	5.2	4.8	4.4	28.0	24.0	21.6	36%	37%	37%	1.6%	1.8%	2.0%
LVMH	621.20	20.2	17.9	16.0	5.8	5.3	4.9	40.5	34.7	30.8	29%	30%	31%	1.1%	1.3%	1.4%
Moncler	51.78	19.0	15.6	13.9	7.3	6.2	5.6	37.5	30.3	26.5	39%	40%	40%	1.0%	1.3%	1.6%
median		20.2	17.9	15.9	5.8	5.3	4.9	39.0	34.7	30.8	36%	37%	37%	1.0%	1.3%	1.4%
e-Commerce																
Allegro	62.30	33.6	28.5	23.3	14.4	11.4	9.0	59.1	47.5	37.6	43%	40%	39%	0.0%	0.0%	0.0%
Answear	34.80	14.6	12.5	10.0	1.0	0.8	0.7	27.6	22.5	16.7	7%	6%	7%	0.0%	0.0%	0.0%
Alibaba	157.86	13.5	11.1	8.8	3.9	3.0	2.5	15.2	13.3	10.7	29%	27%	29%	0.0%	0.0%	0.0%
Amazon	3,476	25.9	20.9	16.8	3.9	3.3	2.8	57.0	43.5	32.5	15%	16%	17%	0.0%	0.0%	0.0%
Asos	3,066	9.4	8.1	7.0	0.8	0.6	0.6	21.8	19.2	15.9	8%	8%	8%	0.0%	0.0%	0.0%
Boohoo	258.60	17.5	14.3	11.4	1.7	1.3	1.1	30.1	23.7	19.0	10%	9%	9%	0.0%	0.0%	0.0%
Ebay	73.99	12.8	11.7	11.0	4.4	4.1	3.9	18.2	16.1	14.4	35%	35%	36%	1.0%	1.0%	1.0%
Etsy	217.42	42.6	34.0	25.8	12.7	10.6	8.6	68.0	52.1	41.6	30%	31%	33%	0.0%	0.0%	0.0%
Jd.Com	76.63	22.5	15.4	11.2	0.6	0.5	0.4	37.1	27.5	20.1	3%	3%	4%	0.0%	0.0%	0.0%
Lojas Americanas	5.82	1.7	1.4	1.3	0.2	0.2	0.2	11.2	8.0	7.4	14%	15%	18%	3.1%	4.5%	5.8%
Magazine Luiza	16.62	50.5	35.7	26.5	3.0	2.5	2.0	-	-	56.0	6%	7%	8%	0.2%	0.3%	0.5%
Mercadolibre	1,889	-	-	-	15.6	11.1	8.2	-	-	-	3%	6%	11%	0.0%	0.0%	0.3%
Overstock.Com	70.21	28.5	20.0	16.7	1.2	1.0	1.0	50.4	30.9	24.5	4%	5%	6%	0.2%	0.2%	-
Via Varejo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vipshop Holdings	13.17	3.9	3.2	2.8	0.3	0.3	0.2	7.6	6.3	5.5	8%	8%	8%	0.0%	0.0%	0.0%
Zalando	94.38	36.4	30.0	24.3	2.4	2.0	1.7	-	-	61.8	7%	7%	7%	0.0%	0.0%	0.0%
Zozo	4,290	29.1	25.8	23.1	9.0	8.2	7.5	44.6	39.6	35.3	31%	32%	33%	0.9%	1.0%	1.2%
median		22.5	15.4	11.4	2.7	2.2	1.9	30.1	23.7	20.1	9%	9%	10%	0.0%	0.0%	0.0%
Retail																
Dino	332.20	24.3	18.6	14.6	2.5	1.9	1.5	36.8	28.3	22.4	10%	10%	10%	0.0%	0.0%	0.0%
Eurocash	12.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jeronimo Martins	17.77	9.4	8.2	7.5	0.5	0.5	0.4	22.8	20.0	18.6	6%	6%	6%	1.8%	2.0%	2.3%
Carrefour	15.14	4.2	3.9	3.7	0.3	0.3	0.2	11.1	10.0	9.1	6%	7%	7%	3.6%	4.0%	4.3%
AXFood	216.20	10.5	10.2	10.1	0.9	0.9	0.9	23.5	23.1	23.2	9%	9%	9%	3.5%	3.6%	3.5%
Tesco	254.70	7.3	6.4	6.2	0.5	0.5	0.5	19.3	12.8	11.6	6%	7%	7%	0.0%	0.0%	0.0%
Ahold	28.32	7.2	7.1	6.9	0.6	0.6	0.6	15.3	14.6	13.8	8%	8%	8%	3.2%	3.3%	3.4%
X 5 Retail	2,317	5.7	4.8	4.5	0.7	0.6	0.5	15.1	12.8	12.7	12%	12%	12%	8.3%	9.2%	10.4%
Magnit	5,504	3.9	3.5	3.8	0.4	0.4	0.4	13.6	13.0	11.7	11%	11%	10%	9.6%	9.1%	9.7%
Sonae	0.89	8.0	7.4	6.8	0.7	0.7	0.7	13.7	12.7	14.8	9%	10%	10%	5.6%	5.6%	6.7%
median		7.3	7.1	6.8	0.6	0.6	0.5	15.3	13.0	13.8	9%	9%	9%	3.5%	3.6%	3.5%

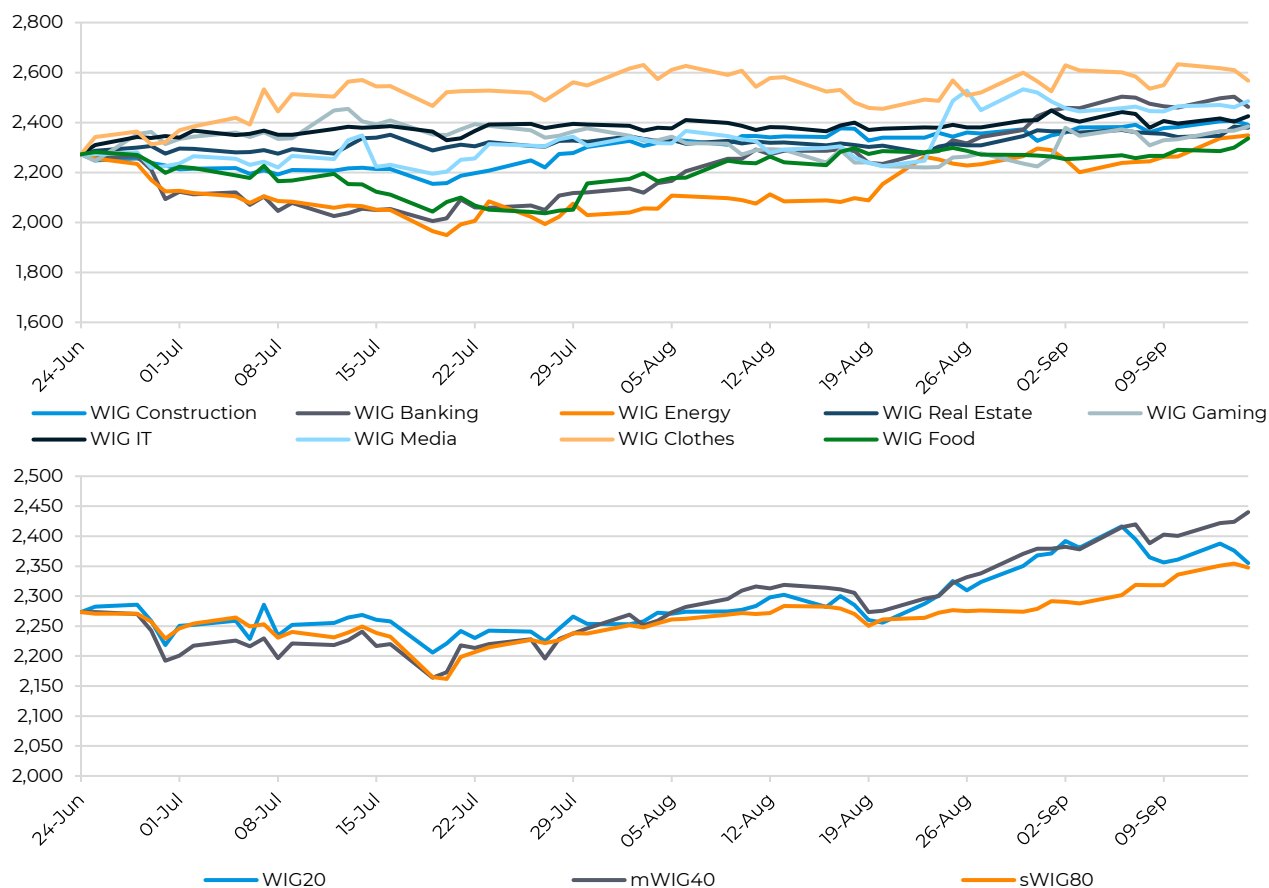
Source: Bloomberg, mBank

Global Markets Overview

Index	Date	Open	Maximum	Minimum	Close	Change
DJIA	2021-09-15	34,580.95	34,880.77	34,522.03	34,814.39	+0.68%
S&P 500	2021-09-15	4,447.49	4,486.87	4,438.37	4,480.70	+0.85%
NASDAQ	2021-09-15	15,071.34	15,174.38	14,984.68	15,161.53	+0.82%
DAX	2021-09-15	15,731.48	15,740.01	15,613.72	15,616.00	-0.68%
CAC 40	2021-09-15	6,654.83	6,659.27	6,577.02	6,583.62	-1.04%
FTSE 100	2021-09-15	7,034.06	7,047.27	7,016.49	7,016.49	-0.25%
WIG20	2021-09-15	2,365.73	2,368.41	2,348.33	2,355.23	-0.87%
BUX	2021-09-15	52,397.40	52,575.06	52,144.81	52,317.91	-0.14%
PX	2021-09-15	1,298.31	1,302.11	1,295.16	1,295.16	-0.24%
RTS	2021-09-15	2,309.43	2,345.39	2,308.43	2,334.82	+0.90%
SOFIX	2021-09-15	566.07	567.17	559.92	566.90	+0.15%
BET	2021-09-15	12,373.71	12,455.37	12,282.81	12,288.12	-0.69%
XUI00	2021-09-15	1,433.86	1,440.90	1,420.38	1,423.97	-0.73%
BETELES	2021-09-15	128.03	128.18	127.37	127.46	-0.49%
NIKKEI	2021-09-15	30,464.17	30,573.41	30,347.30	30,511.71	-0.52%
SHCOMP	2021-09-15	3,651.16	3,677.53	3,638.32	3,656.22	-0.17%
Copper (LME)	2021-09-15	9,428.50	9,646.00	9,394.00	9,627.00	+1.96%
Crude Oil (Brent)	2021-09-15	73.72	75.83	73.52	75.26	+2.14%
USD/PLN	2021-09-15	3.853	3.869	3.845	3.863	+0.24%
EUR/PLN	2021-09-15	4.548	4.568	4.545	4.566	+0.40%
EUR/USD	2021-09-15	1.180	1.183	1.180	1.182	+0.12%
US 10Y Yield	2021-09-15	1.284	1.319	1.258	1.299	+0.015
German 10Y Yield	2021-09-15	-0.339	-0.306	-0.350	-0.306	+0.034
Polish 10Y Yield	2021-09-15	1.996	1.998	1.957	1.991	-0.006

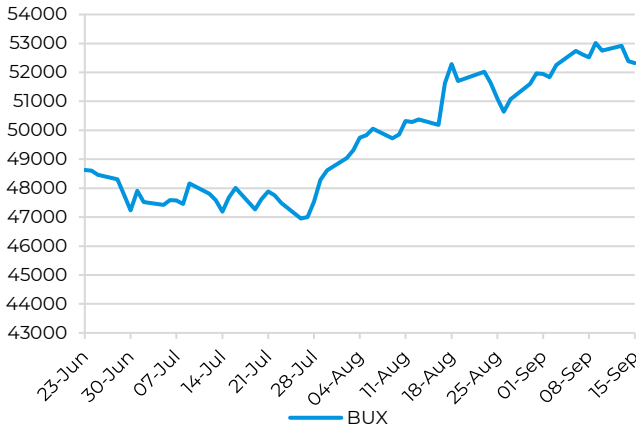
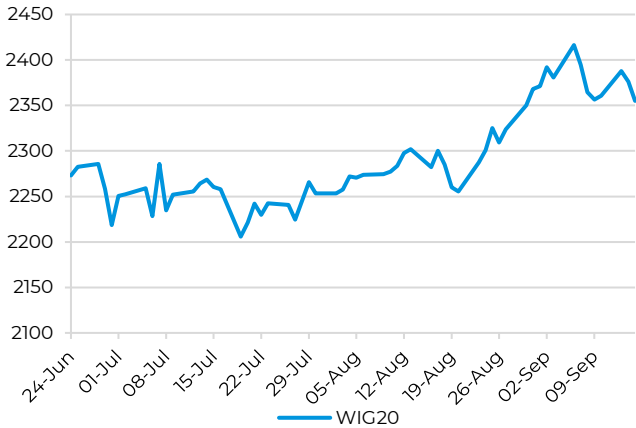
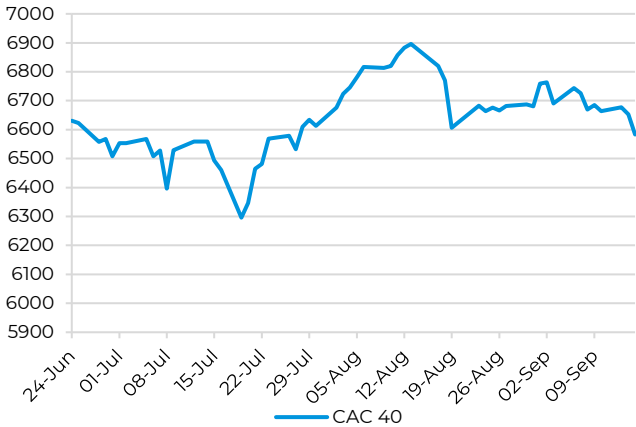
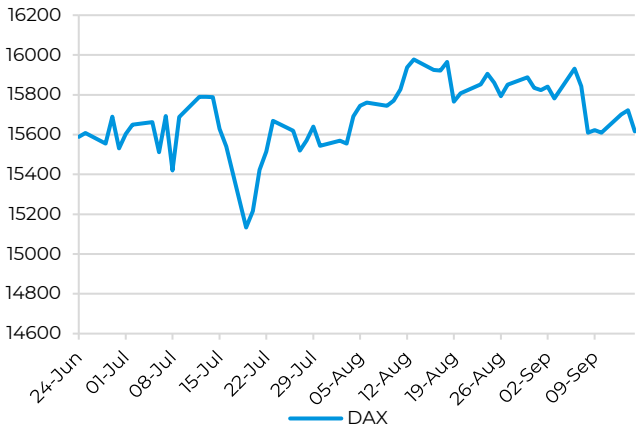
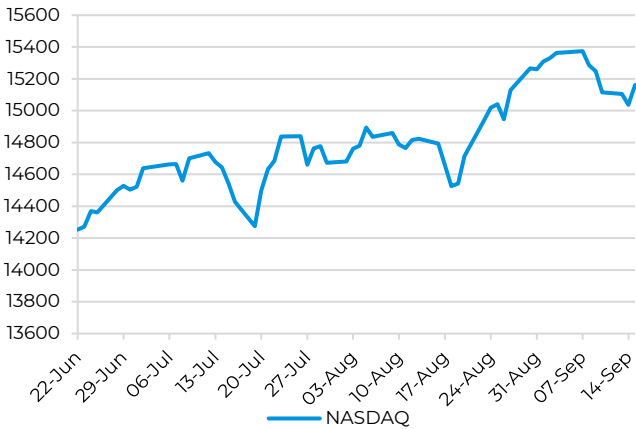
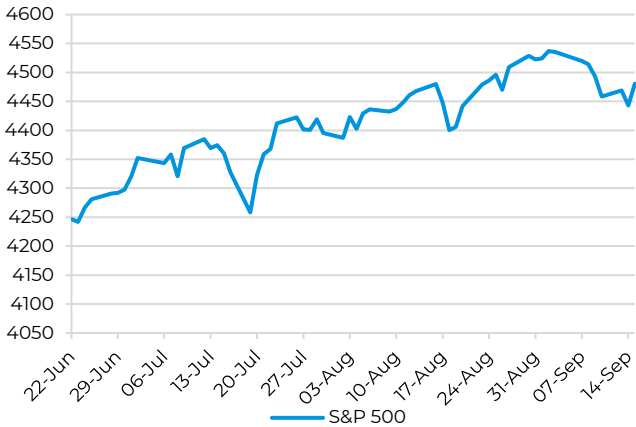
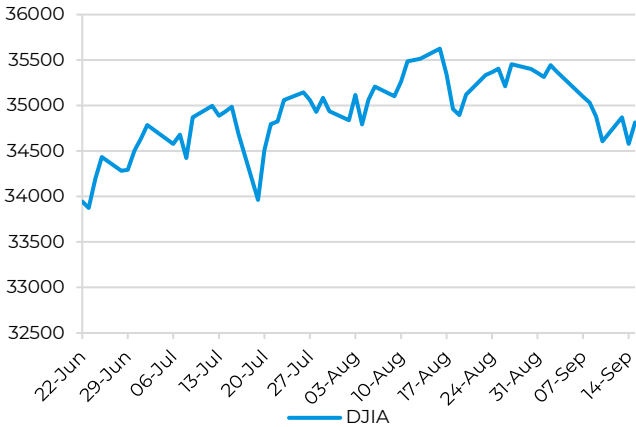
Source: Bloomberg, mBank

WIG Sector Index Performance (relative to WIG20)



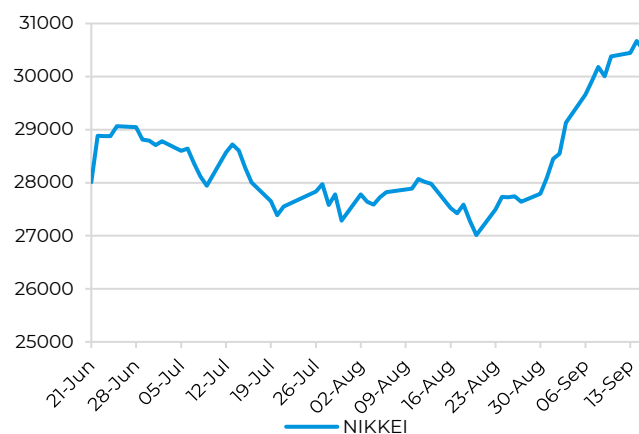
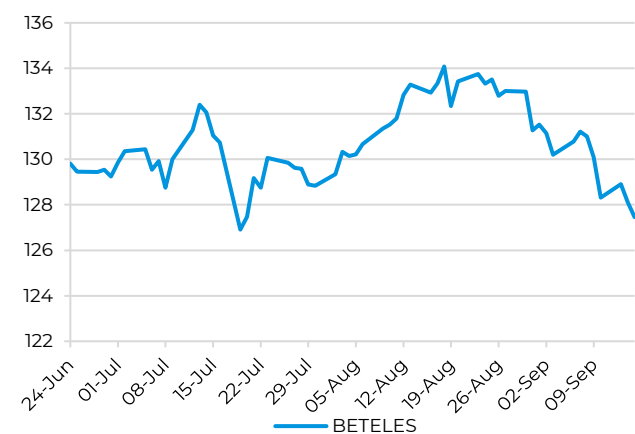
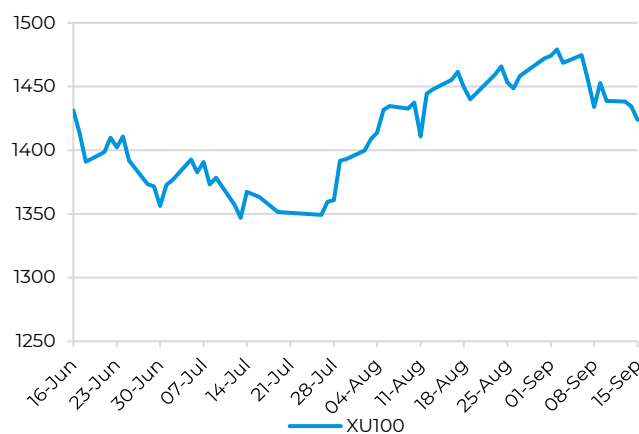
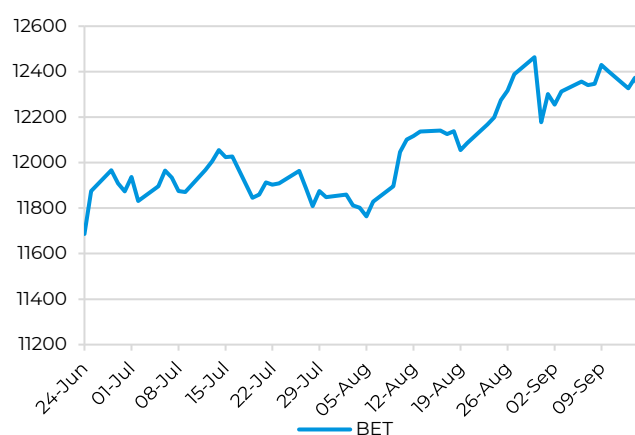
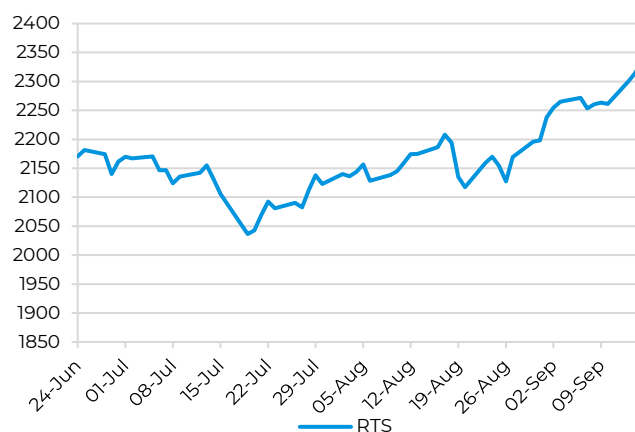
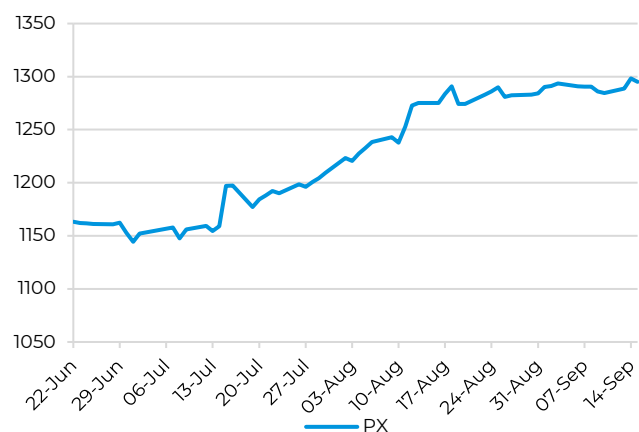
Source: Bloomberg

World Indices Performance



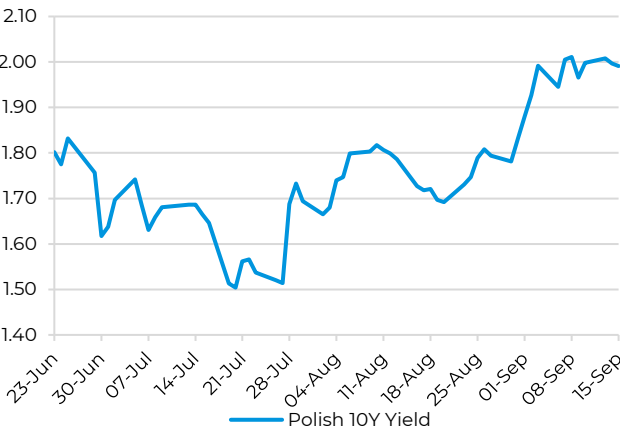
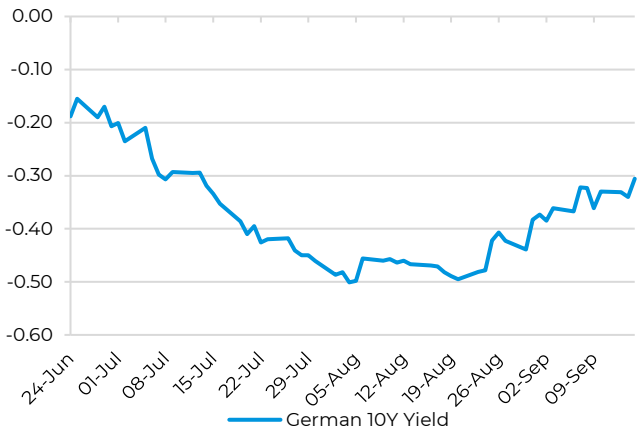
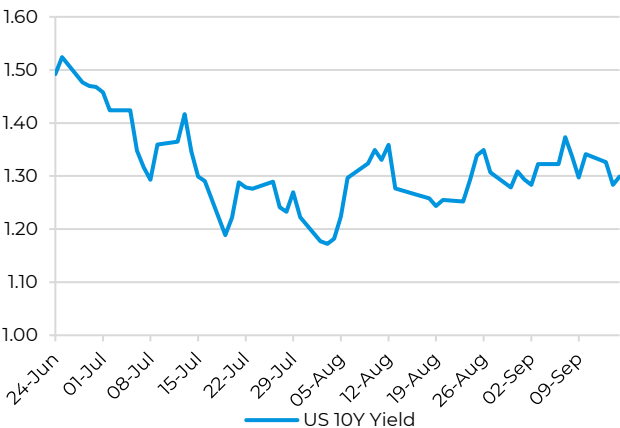
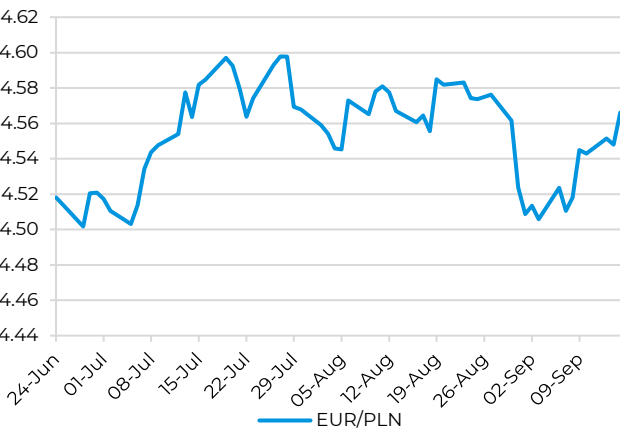
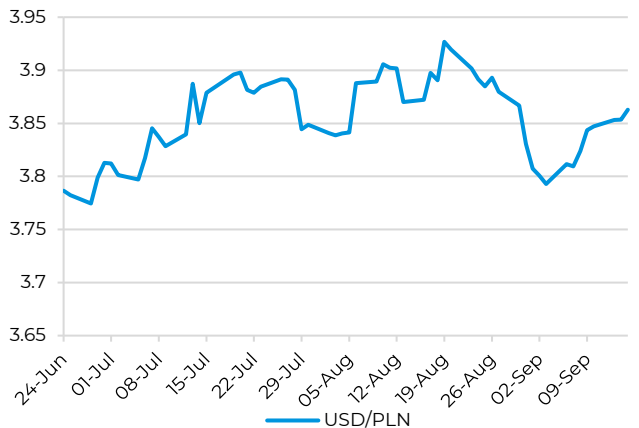
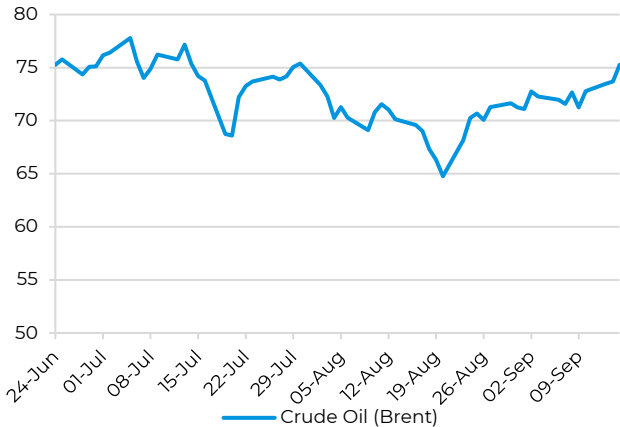
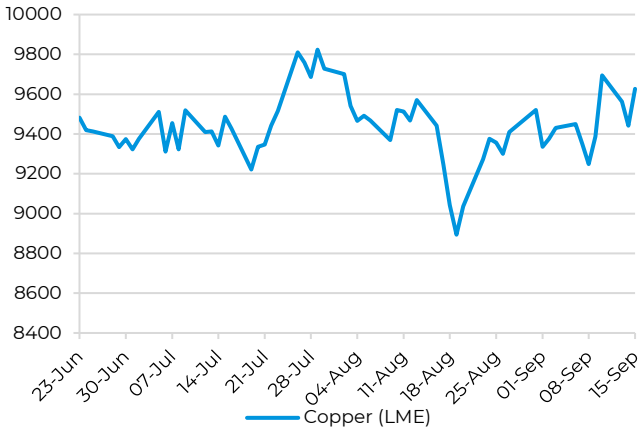
Source: Bloomberg

World Indices Performance



Source: Bloomberg

Commodities, FX Rates and Government 10Y Bond Yields



Source: Bloomberg

**List of abbreviations and ratios contained in the report:**

EV (Enterprise Value) – Equity Value + Net Debt; **EBIT** – Earnings Before Interest and Taxes; **EBITDA** – EBIT + Depreciation & Amortisation; **Net Debt** – Borrowings + Debt Securities + Interest-Bearing Loans - Cash and Cash Equivalents; **P/E** (Price/Earnings) – Price Per Share Divided by Earnings Per Share; **P/CE** (Price to Cash Earnings) – Price Per Share Divided by Earnings + Depreciation & Amortisation; **P/B** (Price to Book Value) – Price Per Share Divided by Book Value Per Share; **P/CF** (Price to Cash Flow) – Price Divided by Cash Flow from Operations; **ROE** (Return on Equity) – Earnings Divided by Shareholders' Equity; **ROCE** (Return on Capital Employed) – EBIT x (Average Assets - Current Liabilities); **ROIC** (Return on Invested Capital) – EBIT x (1-Tax Rate) / (Average Equity + Minority Interest + Net Debt); **FCFF** (Free Cash Flow to Firm) – Cash Flow from Operations - CAPEX - Lease Payments; **FCFE** (Free Cash Flow to Equity) – Free Cash Flow to Firm - Net Interest Expense (incl. Debt + Leases) - Lease Payments

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 Biuro maklerskie 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 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 Prosta 18 renders brokerage services via a dedicated organisational unit, the Brokerag Bureau, which uses the Polish name Biuro maklerskie 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, Pozbud, Sygnity. These documents are prepared at the request of Giełda 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 Biuro maklerskie 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 Biuro maklerskie mBanku considers reliable, including information published by issuers, shares of which are subject to recommendations. However, Biuro maklerskie mBanku, in no 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 present report.

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 Japan, 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, Pozbud, Sygnity, 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 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 of 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 Biuro maklerskie mBanku or as of the date of the most recent recommendation issued for an Issuer, as applicable.

This document was not transferred to the issuers prior to its publication.

mBank S.A. may have received compensation from the following companies in the last 12 months: Alchemia, Alior Bank, Ambra, Amica, Answear, Asseco Poland, ATM, Bank Handlowy, Bank Millennium, Bank Pekao, BNP Paribas Bank Polska, Boryszew, BOŚ, Capital Park, CD Projekt, Centrum Nowoczesnych Technologii, Ceramika Nowa Gala, Cognor, Echo Investment, Elemental Holding, Elzab, Enea, Energoaparatúra, Erbud, Ergis, Ferrum, GetBack, Getin Holding, Getin Noble Bank, GPW, Groclin, I2 Development, ING BSK, Kruk, Lokum Deweloper, LW Bogdanka, Mennica Polska, Mo-BRUK, Netia, Neuca, NWA! Dom Maklerski, Oponeo.pl, OTP Bank, PA Nova, PBKM, PGNiG, PKO BP, Polimex-Mostostal, Polnord, Polwax, Poznańska Korporacja Budowlana PEKABEX, Prochem, Projprzem, PZU, Raiffeisen Bank International, Rawlplug, Rubicon Partners NFI, Santander Bank Polska, Seco/Warwick, Skarbiec Holding, Solar Company, Sygnity, Tarczyński, Ten Square Games, TIM, Unibep, Vercom, Vistal Gdynia, Wittchen, Work Service, YOLO, Zastal, ZUE.

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 Biuro maklerskie mBanku.

Recommendations are addressed to all Clients of Biuro maklerskie 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 Biuro maklerskie 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 Biuro maklerskie mBanku is disseminated. With that being said, since one of the factors taken into 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.

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.

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.

mBank S.A.

Prosta 18
00-850 Warszawa
<http://www.mbank.pl/>

Research Department

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

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

Piotr Poniatowski
+48 22 438 24 09
piotr.poniatowski@mbank.pl
industrials, gaming

Antoni Kania
antoni.kania@mbank.pl
industrials

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

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

Michał Konarski
+48 22 438 24 05
michal.konarski@mbank.pl
banks, financials

Aleksandra Szklarczyk
+48 22 438 24 04
aleksandra.szklarczyk@mbank.pl
construction, real-estate development

Janusz Pięta
+48 22 438 24 08
janusz.pieta@mbank.pl
retail

Sales and Trading

Traders

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

Magdalena Bernacik
+48 22 697 47 35
magdalena.bernacik@mbank.pl

Krzysztof Bodek
+48 22 697 48 89
krzysztof.bodek@mbank.pl

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

Tomasz Jakubiec
+48 22 697 47 31
tomasz.jakubiec@mbank.pl

Sales, Foreign Markets

Marzena Łempicka-Wilim
deputy director
+48 22 697 48 82
marzena.lemnicka-wilim@mbank.pl

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

Piotr Brożyna
+48 22 697 48 47
piotr.brozyna@mbank.pl

Private Client Sales

Kamil Szymański
director
kamil.szymanski@mbank.pl

Jarosław Banasiak
deputy director
jaroslaw.banasiak@mbank.pl