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Morning Comments

Equity Market, Poland

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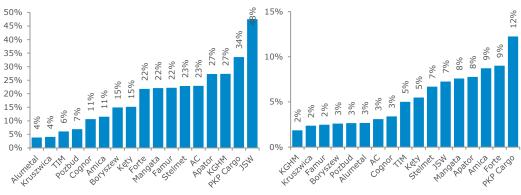
DJIA	29,196.0	-0.52% F	FTSE 100	7,610.7	-0.53%	Copper (LME)	6,160.0	-1.58%
S&P 500	3,320.8	-0.27% V	WIG20	2,158.0	-0.92%	Crude Oil (Brent)	63.92	-1.19%
NA SDA Q	9,370.8	-0.19% B	BUX	44,132.0	-0.76%	USD/PLN	3.8171	-0.20%
DAX	13,555.9	+0.05% P	РХ	1,130.1	-0.12%	EUR/PLN	4.2298	-0.34%
CA C 40	6,046.0	-0.54% P	PLBonds10	2.289	-0.053	EUR/USD	1.1082	-0.12%

Company & Sector News

Banks	Eurozone banks didn't change credit standards in 4Q'19 According to periodical bank lending survey conducted by ECB, terms and conditions in loan contracts remained unchanged, when it comes to mortgages and loans to enterprises, while they get less strict for consumer credit. It's interesting that demand for enterprise loans has declined across the Eurozone. TLTRO III is mainly used according to its purpose, which is granting loans to non-financial private sector and has net easing impact on loans terms and conditions. Banks expect that in next six months lending volumes should increase considerably in all segments. (M. Lemańczyk, M. Konarski)
Debt collection companies	Marshall Wace reduced its short position in Hoist Finance Marshall Wace reduced its net short position in Hoist Finance by 6.35% to 1.05m shares (1.18% of total shares). According to regulatory disclosures at least 2 investors disclosed short positions in Hoist Finance, which represent 1.70% of total shares. The news is slightly positive as the overall short position in debt collection sector is once again gradually coming down. (M. Konarski, M. Lemańczyk)
Asset Management	Amundi to acquire Sabadell Asset Management According to FT, Amundi won the race with Allianz for EUR 21.8bn Sabadell Asset Management. The deal has been valued at EUR 430m, paid in cash (P/AUM at 2,0%). According to Amundi CEO, the acquisition of Sabadell Asset Management will significantly reinforce Amundi's position in Spain. Sabadell Asset Management and Amundi's existing Spanish operations will remain two separate legal entities. (M. Konarski, M. Lemańczyk)
Enea Buy – 2019-11-06 Target price: PLN 11.53	Bogdanka's preliminary FY2019 results According to the statement issued yesterday in the morning (after our daily report publication), Bogdanka FY2019 net profit amounted to PLN 309m and EBITDA to PLN 769m which implies Q4 EBITDA at 158m. Preliminary results are broadly in line with our FY estimates. (K. Kliszcz)
Apator Neutral – 2019-12-05	Apator Powogaz has a letter of intent to sell the property for PLN 61m Apator Powogaz concluded a letter of intent with the developer regarding the sale of property belonging to the company in the center of Poznań for PLN 61 million. The transaction may be finalized by the end of Q1'20. In November Apator decided to relocate the production activity of Apator Powogaz and then sell its current location. The relocation is planned for mid-2021, and the new factory will be located on the outskirts of the city of Poznań. The first information about the potential sale of real estate in Poznań appeared around 12 months earlier. Positive information, because freeing cash will keep dividends flowing despite the challenges of rising labor costs. (J. Szkopek)
Industrials, Poland	The salary in the enterprise sector in December increased by 6.2% y/y The average gross salary in the enterprise sector in December 2019 amounted to PLN 5,604.25, which means an increase by 6.2% y/y - the Central Statistical Office (GUS) stated. Employment in this sector yoy increased by 2.6% yoy. In our forecasts, we assume that the average salary in industrial companies in 2020 will increase between 3-7% depending on the company. The highest impact from wage increase on EBITDA we enfisage in PKP Cargo, Forte, Amica, Apator, Mangata, JSW and Stelmet. In the case of KGHM, an increase of 6.2% in December means that, under the collective agreement, wages in 2020 will increase by at least 5% y/y (80% of average growth in December 2019). In our forecasts for KGHM, we assumed a 5.2% increase y/y. (J. Szkopek)



Labor (left) as a percentage of total costs and wage hike impact on EBITDA 2019 (right)



Source: mBank

Precious metals

11 bit studios Buy - 2019-12-05

Target price: PLN 454.00

Gold eases as markets assess risks from China virus

Gold prices fell on Wednesday, as the dollar firmed and investors assessed the risk of a global epidemic from a coronavirus outbreak from China that could have an impact on economic growth. For more information please visit <u>https://tinvurl.com/rsupwgg</u> (J. Szkopek)

Good reception of the Frostpunk add-on by players

The latest add-on to the game Frostpunk (Frostpunk: The Last Autumn) was rated very positively by Steam users (92% positive feedback based on 62 reviews). The ratings for the add-on on other videogame related sites are also mostly positive. The good reception of the add-on by the players translates into a high position of Frostpunk, Frostpunk: Season Pass and Frostpunk: Game Of The Year on the Steam Global Top Sellers list (details in table). **A good reception of the add-on should positively support the company's performance and should allow for building better recognition of the 11B studio in the player environment. (P. Bogusz)**

Steam Global Top Sellers

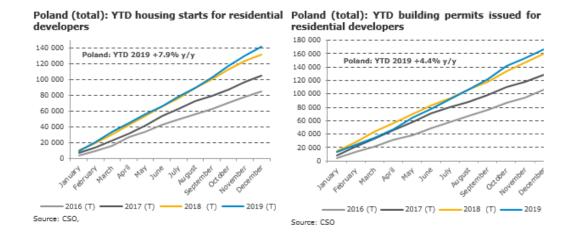
2020-01-22	Company	Position	D/D	w/w	1-week	Price	D/D	w/w	1-week
Frostpunk	11 bit studios	12	-1	-	116	44	0%	-	83.60
Frostpunk: SP	11 bit studios	5	+39	+163	71	88	0%	0%	88.00
Frostpunk: GOTY	11 bit studios	10	+11	-	16	119	0%	-	119.00
Blair Witch	Bloober Team	200+	-	-	-	-	-	-	-
Cyberpunk 2077	CD Projekt	89	-12	-74	60	199	0%	0%	199.00
The Witcher 3: WH	CD Projekt	102	-64	-40	87	100	0%	0%	100.00
The Witcher 3: WH (GOTY)	CD Projekt	39	-2	-23	34	150	0%	0%	150.00
Green Hell	Creepy Jar	200+	-	-	-	-	-	-	-
Chernobylite	The Farm 51	200+	-	-	-	-	-	-	-
Dying Light	Techland	186	-25	-	174	100	0%	-	100.00

Source: Steam (Valve Corporation), mBank

Residential Real Estate

CSO home delivery, housing starts and building permits statistics

According CSO date the number of housing starts increased by 6.9% y/y in 2019. The number of homes delivered was also on the rise (+12.0% y/y). At the same time, the number of building permits for more new housing projects issued increased by 4.4% y/y. Looking at statistics for developers only (units for sale or rent), 2019 result brought another home delivery record, exceeding the level of 130k homes handed over (+16.6% y/y in 2019 and +18% y/y in Q4). Growth dynamics of new housing starts and building permits for developers in 2019 were close to those one reported for the sector, +7.9% y/y and +4.6% respectively. (A. Szklarczyk)



Murapol, Awbud

Conditional preliminary agreement to sell 98% stake in Murapol

Murapol's shareholders inked a conditional preliminary deal to sell a 98.04% stake in the company. Murapol is to be taken over by Luxembourg-based AEREF V PL Investment. Awbud a company controlled by Murapol (90%) informed about the planned transaction and notification to Poland's anti-trust authority (UOKiK) by AEREF V PL Investment mid-December. **(A. Szklarczyk)**

Quarterly Earnings Results

Apator	Apator reduced its net profit estimates for '19 to PLN 56m
Neutral – 2019-12-05	• Apator reduced its consolidated net profit estimates for 2019 to PLN 56 million from PLN 67
	million forecast in November. Sales revenues are expected to amount to PLN 877 million.
	• The results of Q4'19 and the decrease in the estimated consolidated net profit are affected by
	the settlement of projects in the Water and Heat Segment and the decision of the issuer's

- the settlement of projects in the Water and Heat Segment and the decision of the issuer's management board to establish a provision in the amount of PLN 5 million net. The provision covers the coverage of any costs of removing the defect in the electricity meters delivered in the years 2014 2017, as part of complaints submitted.
- In March, Apator forecast that in 2019 total consolidated sales revenues will amount to PLN 880-920 million, and consolidated net profit PLN 72-75 million. With Q3'19 results, the net result was reduced by PLN 67m. In our opinion, the reasons for the decline in results will cause a cash outflow in the future, so they affect the valuation. Negative information. (J. Szkopek)

2019 Q4 actu	2019 Q4 actuals vs. expectations													
(m PLN)	4Q'19	4Q'18	Change	4Q'19E	Diff.	Consensus	Diff.	2019	2018	Change				
Revenues	233.2	242.0	-3.6%	254.1	-8.2%	243.5	-4.2%	877.0	828.7	5.8%				
Net income	11.7	17.1	-31.3%	22.0	-46.7%	22.2	-47.2%	56.0	69.0	-18.8%				

Source: Apator, E - estimates by mBank; Consensus estimates provided by PAP

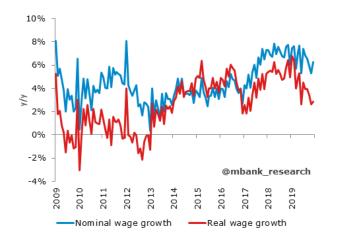
More News	
IMS	IMS got shareholders' approval to run buyback of up to 890k of shares at PLN 3-6 apiece, the company said in resolutions from the Tuesday EGM.
MCI Capital	PE fund company MCI Capital is launching a buyback of 1.8 mln of shares at PLN 11 apiece as it seeks to redeem them, the company said in a market filing. MCI Capital will run subscriptions from January 22 to February 5, according to the filing.
MOL	MOL does not expect the petrochemical margins to rebound quickly and expects further volatility on petchem margins, MOL deputy CEO for downstream Ferenc Horvath told PAP.
PBG	PBG saw a court annul firm's arrangement with creditors, as the company sought to exit arrangement and enter recovery procedure, the company said in a market filing.
PGG	PGG has no plans to cut employment in the near future, the company said in a statement.



Macroeconomics

Labor market is cooling, as expected

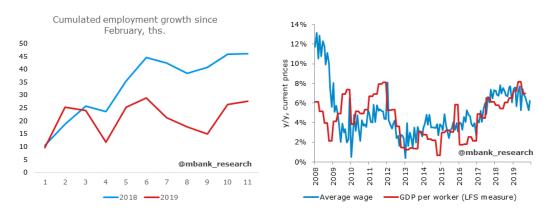
Average gross wage rose by 6.2% y/y in December, beating forecasts by a slim margin (market consensus 6.0% y/y, our forecast 5.8% y/y). The acceleration vis-à-vis weak November (5.3% y/y) was mainly due to favorable working day difference and shifts in mining bonus payments. The latter can also easily explain the slight upside surprise in the data.



Our view of cyclical developments in wage growth has not changed. Nominal wage growth is slowing down (this pertains especially to manufacturing) and the culprit is weakening labor demand, seen in a plethora of soft and hard indicators. Weaker wage pressure is also reported by companies themselves, as reflected in business surveys. The upcoming January print will by primarily influenced by the major minimum wage hike (by 15%), but we do not see it as a game changer. It might offer a one-time shift to average wage, but it will not change the negative trend. The extent to which the static effect of the minimum wage hike (ca. 2 p.p.) will be apparent from the headline wage number in January is in addition very uncertain.

Employment growth proved to be a bit worse than our forecast: 2.6% vs 2.7%. However, enterprise sector added more than 1k jobs on monthly basis. Therefore 2.7% was one of those forecasts that were fairly close to the reality. December stays under the heavy influence of seasonal factors so without the details it is really hard to judge on the merit of the reading with respect to macro picture. We still think that the trend is pointing downwards.

The data are not going to bother MPC. They are pointing in the direction they already bet on. However, it may be an interesting curiosity to show that wages are already running below broadest productivity measures, contrary to what was happening in 2018. It strengthens the MPC's view that inflation is inevitably heading towards target after the jump in early 2020.



mBank Research (E. Pytlarczyk, M. Mazurek, P. Bartkiewicz, K. Klimas) research@mBank.pl

Corporate Action Calendar

Date	Time	Company	Event
22-Jan		PointPack	Investor meeting (mBank HQ, ul. Senatorska 18, Warsaw) - registration required
23-Jan		Stelmet	Q3'19 earnings announcement
24-Jan	10:00	Amica	Management meeting (Sheraton Hotel, Warsaw)
24-Jan	10:30	Stelmet	Q4'19 earnings announcement and conference (Novotel Warsaw Center Hotel, Warsaw)
28-Jan			Meeting with mBank Head of Economics (mBank HQ, Senatorska 18, Warsaw) - registration required
30-Jan		PKN Orlen	Q4'19 earnings announcement

Economic Calendar

Wedne	esday, 22 J	anuary 2020			
Time	Region	Data	Period	Forecast	Previous
10:00	Poland	Industrial Production	December		-5.80% m/m; 1.40% y/y
10:00	Poland	Manufacturing Production	December		-7.60% m/m; 0.20% y/y
10:00	Poland	PPI	December		-0.30% m/m; -0.10% y/y
12:00	UK	CBI Industrial Trends	January		-28
15:00	USA	House Price Index	November		0.20% m/m
16:00	USA	Existing Home Sales	December		5.35m
16:30	USA	Crude Oil Inventory	17 January		428.50m
Thurso	day, 23 Jar	nuary 2020			
Time	Region	Data	Period	Forecast	Previous
00:50	Japan	Exports	December		-7.90%
00:50	Japan	Imports	December		-15.70%
00:50	Japan	Trade Balance	December		-82.10bn
05:30	Japan	Industry Activity Index	November		-4.30% m/m
10:00	Poland	Retail Sales	December		5.90% y/y
13:45	EU	Interest Rate			0.00%
14:30	USA	Continuing Claims	11 January		1,767,000
14:30	USA	Initial Jobless Claims	18 January		204,000
16:00	EU	Consumer Confidence Index (P)	January		-8.10
16:00	USA	Leading Indicators Index	December		0.00%
16:30	USA	Natural Gas Inventory	17 January		3039bn
	Japan	Leading Indicators Index (F)	November		90.90
Fridav	, 24 Janua				
Time	Region	Data	Period	Forecast	Previous
00:30	Japan	Core CPI	December		0.20% m/m; 0.50% y/y
00:30	Japan	CPI	December		0.50% y/y
01:30	Japan	PMI Manufacturing (P)	January		48.40
09:15	France	PMI Manufacturing (P)	January		50.40
09:30	Germany	PMI Manufacturing (P)	January		43.70
10:00	Germany	IFO Business Climate	January		96.30
10:00	EU	PMI Manufacturing (P)	January		46.30
10:30	UK	PMI Services (P)	January		50.00
12:00	UK	CBI Distributive Trades Report	January		0%
14:00	Poland	M3 Money Supply	December		1.20% m/m; 6.70% y/y
15:45	USA	PMI Composite (P)	January		52.70
15:45	USA	PMI Services (P)	January		52.80
16:00	USA	University of Michigan Consumer Confidence Index	January		99.30
10.00	Poland	Unemployment Rate	December		5.10%
Saturd		uary 2020	December		5.10 %
Time	Region	Data	Period	Forecast	Previous
03:00	China	Industrial Production	December	FOIECast	6.20% y/y
03:00	China	Retail Sales	December		
			December		8.00% y/y
	iy, 27 Janu		Devied	Ferreret	Duessieure
Time	Region	Data	Period	Forecast	Previous
08:00	UK	Nationwide House Prices	January		0.10% m/m
16:00	USA	New Home Sales	December		719,000
	ay, 28 Janı		Devied	E	
Time	Region	Data	Period	Forecast	Previous
14:30	USA	Durable Goods Orders Less Transportation	December		0.00% m/m
14:30	USA	Durable Goods Orders	December		-2.00% m/m
15:00	USA	S&P/Case-Shiller Composite 20	November		2.20% y/y
		Conformer on Decard Index	January		126.50
16:00 16:00	USA USA	Conference Board Index Richmond Fed Index	January		-5

Current Recommendations by mBank

Company	Recommendation	Issued On	Price At	Target	Current	Upside/	P/I		EV/EBI	
			Reco.	Price	Price	Downside	2019	2020	2019	2020
Financial Sector		2010 11 00	20.24	24.00	27.54	+6.2%	10.1	10.6		
Alior Bank Handlowy	hold accumulate	2019-11-06 2019-12-05	29.34 51.70	31.00 57.44	27.54 54.00	+12.6% +6.4%	8.6 15.7	8.0 11.4		
ING BSK	hold	2019-12-05	190.80	187.77	206.00	-8.8%	16.8	11.4		
Millennium	hold	2019-12-05	5.49	5.47	5.88	-6.9%	10.8	12.8		
Pekao	buy	2019-12-05	96.34	115.20	100.90	+14.2%	10.2	12.0		
PKO BP	accumulate	2019-12-05	34.99	39.50	34.98	+12.9%	9.7	10.7		
Santander Bank Polska	hold	2019-12-05	279.00	265.50	289.80	-8.4%	13.6	12.2		
Komercni Banka	buy	2019-12-05	792.00	928.20 CZK	804.00	+15.4%	10.0	12.2		
Moneta Money Bank		2019-12-03	75.95	928.20 CZK 94.33 CZK	84.85	+11.2%	10.0	10.6		
Erste Group	buy accumulate	2019-08-28	32.20	36.61 EUR	33.46	+11.2%	9.3	8.9		
RBI	accumulate	2019-12-05	21.24	23.05 EUR	21.93	+5.1%	9.3 6.2	5.9		
OTP Bank	hold	2019-12-05	14,870	14,681 HUF	14,320	+2.5%	9.9	9.0		
PZU	accumulate	2019-12-05	36.47	41.91	41.31	+1.5%	11.3	10.7		
Kruk	buy	2019-12-05	150.90	210.31	166.70	+26.2%	9.4	9.4		
Skarbiec Holding	buy	2019-12-05	17.20	210.31	21.30	+37.7%	6.7	6.3		
GPW	buy	2019-12-03	40.85	47.82	41.50	+15.2%	13.6	15.6		
Chemicals	buy	2020-01-10	40.05	47.02	41.50	+17.9%	9.9	16.0	5.2	6.0
Ciech	buy	2019-12-05	36.40	44.41	36.50	+21.7%	9.9 14.0	8.6	6.4	5.5
Grupa Azoty	hold	2019-12-05	30.00	32.75	28.44	+15.2%	5.8	23.5	4.0	6.5
Oil & Gas	noiu	2019-12-03	50.00	32.73	20.44	+19.0%	10.6	8.8	4.0	4.8
Lotos	reduce	2019-12-05	9E 20	77.80	85.40	-8.9%	13.8	9.9	4.5	5.1
MOL	accumulate	2019-12-05	85.20 2,926	3,302 HUF	2,700	+22.3%	9.0	9.9 8.2	4.2	4.6
PGNiG		2019-11-27	2,920	5,502 HUF	4.08		9.0 12.3	8.0	4.2	4.6 3.4
PGNG PKN Orlen	buy hold	2019-11-08	88.50	94.17	4.08 84.94	+38.2% +10.9%	7.6	8.0 9.5	4.5	3.4 4.9
Power Utilities	noiu	2019-12-03	00.30	94.17	04.94	+32.9%	5.1	5.7	4.5 3.7	3.8
CEZ	buy	2019-12-05	502.00	597.80 CZK	518.00	+15.4%	15.5	13.4	7.4	6.9
Enea	buy	2019-12-03	8.59	11.53	7.51	+53.6%	3.1	3.1	3.1	3.1
Energa	buy	2019-11-06	6.37	11.55	7.51	+54.9%	5.9	5.7	3.7	4.3
PGE	buy	2019-11-00	8.42	12.20	7.54	+60.9%	5.1	6.6	3.2	3.6
Tauron	buy	2019-10-24	1.73	2.45	1.59	+54.6%	3.1	2.6	4.1	3.8
Telecoms, Media, IT	buy	2019-11-00	1.75	2.43	1.55	-2.3%	29.8	18.3	6.7	6.8
Netia	hold	2019-12-05	4.44	4.70	4.46	+5.4%	31.2	31.9	4.5	4.6
Orange Polska	accumulate	2019-12-05	6.46	7.40	7.62	-2.9%	35.9	39.3	5.6	5.8
Play	buy	2019-11-29	31.30	36.00	37.58	-4.2%	10.8	9.9	6.7	6.5
Agora	buy	2019-10-30	9.50	17.00	12.80	+32.8%	61.0	32.6	7.5	7.1
Cyfrowy Polsat	reduce	2019-11-14	28.86	26.10	28.74	-9.2%	16.4	13.9	7.3	7.1
Wirtualna Polska	hold	2019-12-05	68.20	70.00	77.00	-9.1%	29.8	20.6	13.4	10.6
Asseco Poland	hold	2019-12-05	57.35	59.20	65.45	-9.5%	16.5	16.0	5.4	5.1
Comarch	buy	2019-11-25	189.50	250.00	207.00	+20.8%	15.0	14.4	6.5	6.3
11 bit studios	buy	2019-12-05	360.50	454.00	425.50	+6.7%	42.7	50.9	27.1	30.4
CD Projekt	accumulate	2019-12-05	260.30	281.30	278.80	+0.9%	-	11.9	-	10.3
Industrials, Mining	accumulate	2019 12 05	200.00	201.50	270.00	-3.4%	7.3	11.5	4.7	5.3
Cognor	hold	2019-12-06	1.20	1.25	1.30	-3.5%	7.0	40.2	4.5	6.2
Famur	buy	2019-12-05	2.98	5.18	3.51	+47.6%	5.4	8.2	4.2	4.4
Grupa Kęty	hold	2019-12-05	338.50	335.44	347.00	-3.3%	11.8	13.6	8.1	8.8
JSW	hold	2020-01-20	22.68	23.32	21.14	+10.3%	5.3	- 15.0	0.9	3.1
Kemel	hold	2019-12-05	41.20	41.60	47.40	-12.2%	5.4	9.1	5.0	6.8
KGHM	hold	2019-12-05	88.66	85.54	97.76	-12.5%	9.7	10.2	4.9	5.3
PKP Cargo	reduce	2019-12-05	20.00	18.13	20.05	-9.6%	7.6	- 10.2	2.9	3.4
Stelmet	hold	2019-12-05	8.20	8.78	8.25	+6.4%	12.9	12.9	5.6	5.3
Property Developers	noid	2015 12 05	0.20	0.70	0.25	-2.1%	10.5	9.1	9.4	8.2
Atal	buy	2019-12-05	37.20	44.90	42.00	+6.9%	11.2	9.2	10.9	8.6
Dom Development	hold	2019-12-05	93.00	88.92	97.80	-9.1%	9.7	9.0	7.9	7.9
Retail		2017 12 05	55.00	00.72	57.00	+4.2%	37.8	20.1	9.6	8.7
AmRest	hold	2019-12-05	46.35	47.00	46.15	+1.8%	37.8	36.4	12.5	11.6
CCC	buy	2019-12-05	108.10	157.00	95.70	+64.1%	90.2	20.1	5.5	4.3
Dino	accumulate	2019-12-05	134.00	148.60	159.60	-6.9%	38.5	28.6	22.7	17.3
Eurocash	reduce	2019-11-25	22.22	148.00	20.76	-4.6%	70.4	41.9	7.6	7.2
Jeronimo Martins	hold	2019-11-23	14.92	14.30 EUR	15.41	-7.2%	21.9	19.6	9.6	8.7
	noru	2010 IU-0/	17.72	14.30 LOK	10.41	- / . 2 /0	<-1.J	12.0	5.0	0.7
LPP	buy	2019-12-05	8,575.00	10,100.00	8,600.00	+17.4%	25.5	18.8	10.8	9.2

Current Calls by mBank

Compony	Relative	Rated On	Price At	Current	Change	P/I	E	EV/EBITDA	
Company	Positioning	Kated On	Rating	Price	Change	2019	2020	2019	2020
IT						15.5	13.0	6.9	5.7
Ailleron	neutral	2019-10-31	7.16	9.00	+25.7%	16.2	12.3	6.4	5.0
Asseco BS	neutral	2019-12-05	27.60	30.80	+11.6%	15.7	15.2	10.2	9.6
Asseco SEE	overweight	2019-12-05	25.60	24.80	-3.1%	15.3	13.8	7.4	6.4
Atende	neutral	2019-12-05	3.06	3.62	+18.3%	12.8	12.0	5.3	5.0
Industrials						12.1	11.4	6.7	6.8
AC	neutral	2019-12-05	43.20	47.80	+10.6%	12.0	12.1	8.4	8.0
Alumetal	neutral	2019-12-05	39.30	44.60	+13.5%	14.0	14.4	8.0	8.2
Amica	neutral	2019-12-05	133.20	147.20	+10.5%	10.0	9.3	6.3	6.4
Apator	neutral	2019-12-05	21.10	21.40	+1.4%	11.3	11.5	6.6	6.9
Astarta	overweight	2019-12-05	15.90	18.20	+14.5%	-	3.2	6.7	3.0
Boryszew	neutral	2019-12-05	4.09	4.41	+8.0%	14.6	11.5	6.9	7.0
Forte	neutral	2019-12-05	28.15	28.20	+0.2%	22.8	13.1	9.5	8.0
Kruszwica	overweight	2019-12-05	45.80	52.80	+15.3%	12.2	11.0	6.3	5.9
Mangata	neutral	2019-12-05	72.00	73.00	+1.4%	8.8	10.4	6.3	6.8
Pozbud	neutral	2019-12-05	1.80	1.74	-3.3%	4.1	4.0	4.5	5.5
TIM	overweight	2019-12-05	10.90	11.50	+5.5%	12.9	11.4	6.7	6.2

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	27.54	8.6	8.0	7.6	6%	6%	6%	0.5	0.5	0.5	0.0%	0.0%	0.0%
Handlowy	54.00	15.7	11.4	10.9	6%	9%	9%	1.0	1.0	1.0	6.9%	7.1%	6.6%
ING BSK	206.00	16.8	15.0	13.7	12%	12%	12%	1.9	1.8	1.6	1.7%	1.8%	2.0%
Millennium	5.88	10.2	12.8	15.7	8%	6%	5%	0.8	0.8	0.7	0.0%	0.0%	0.0%
Pekao	100.90	11.7	10.7	10.0	10%	10%	11%	1.1	1.1	1.1	6.5%	6.4%	7.0%
РКО ВР	34.98	9.7	10.0	9.7	11%	10%	10%	1.0	1.0	1.0	3.8%	9.0%	10.1%
Santander BP	289.80	13.6	12.2	12.0	9%	9%	9%	1.2	1.1	1.0	6.8%	1.8%	2.0%
Median		11.7	11.4	10.9	9%	9%	9%	1.0	1.0	1.0	3.8%	1.8%	2.0%
Investors in Polish ba	nks												
BCP	0.189	6.8	6.1	5.1	6%	7%	8%	0.5	0.4	0.4	2.1%	4.8%	6.9%
Citigroup	79.900	10.5	9.4	8.9	10%	10%	9%	1.0	0.9	0.8	2.4%	2.7%	3.0%
Commerzbank	5.123	7.8	6.6	6.3	3%	3%	3%	0.2	0.2	0.2	4.1%	4.7%	5.4%
ING	10.428	8.0	8.2	8.1	10%	9%	9%	0.8	0.7	0.7	6.6%	6.7%	6.8%
UCI	12.994	7.2	7.4	7.1	8%	7%	6%	0.5	0.5	0.5	4.6%	5.3%	5.9%
Median		7.8	7.4	7.1	8%	7%	8%	0.5	0.5	0.5	4.1%	4.8%	5.9%
Foreign banks													
Erste Group	33.46	9.3	8.9	8.8	11%	11%	10%	1.0	0.9	0.9	3.9%	4.5%	4.7%
Komercni Banka	804.00	10.0	10.6	10.2	15%	13%	13%	1.4	1.4	1.3	6.3%	6.3%	6.3%
Moneta Money	84.85	11.4	10.6	10.5	15%	16%	16%	1.7	1.6	1.6	7.2%	6.6%	7.1%
OTP Bank	14,320	9.9	9.0	8.8	20%	18%	17%	1.8	1.5	1.4	1.6%	1.7%	3.8%
RBI	21.93	6.2	5.9	5.9	10%	9%	9%	0.6	0.5	0.5	5.3%	4.8%	5.1%
Akbank	8.85	8.3	5.3	4.3	11%	16%	16%	0.9	0.8	0.7	2.3%	3.5%	5.2%
Alpha Bank	1.86	16.7	12.7	8.8	2%	3%	4%	0.3	0.4	0.4	0.0%	0.0%	0.0%
Banco Santander	3.62	7.5	7.1	6.8	8%	8%	8%	0.6	0.6	0.6	6.2%	6.5%	6.8%
Deutsche Bank	7.45	26.4	16.0	10.2	-1%	1%	3%	0.3	0.3	0.3	0.0%	0.7%	2.2%
Eurobank Ergasias	0.91	12.8	8.0	6.9	4%	8%	9%	0.6	0.6	0.6	0.0%	0.0%	0.0%
National Bank of Greece	3.03	12.3	12.7	9.4	5%	4%	6%	0.5	0.5	0.5	-	0.0%	0.0%
Piraeus Bank	3.31	16.2	11.1	7.6	2%	3%	4%	0.3	0.3	0.3	-	0.0%	0.0%
Sberbank	268.06	6.8	6.0	5.5	21%	21%	21%	1.3	1.2	1.1	7.0%	8.4%	9.3%
Turkiye Garanti Bank	12.48	7.5	5.6	4.5	13%	15%	16%	1.0	0.9	0.7	1.2%	1.6%	1.6%
Turkiye Halk Bank	6.93	5.6	3.0	2.1	5%	7%	10%	0.3	0.3	0.2	0.7%	1.3%	1.9%
Turkiye Vakiflar Bankasi	6.86	6.2	3.7	3.0	9%	13%	13%	0.5	0.5	0.4	-	-	-
VTB Bank	0.05	3.6	3.6	3.1	12%	12%	12%	0.4	0.4	0.3	6.0%	6.0%	8.0%
Yapi ve Kredi Bankasi	3.03	6.1	4.6	3.6	10%	13%	13%	0.6	0.5	0.5	0.0%	0.0%	0.0%
Median		8.8	7.5	6.9	10%	11%	11%	0.6	0.6	0.5	2.3%	1.7%	3.8%

Insurance company valuations

			P/E			ROE			P/BV			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Insurers													
PZU	41.31	11.3	10.7	10.6	21%	22%	22%	2.4	2.3	2.3	7.2%	7.1%	7.4%
Aegon	3.93	6.2	5.7	5.5	7%	8%	7%	0.4	0.4	0.4	7.8%	8.2%	8.6%
Allianz	220.45	11.6	10.9	10.3	12%	12%	12%	1.4	1.3	1.2	4.3%	4.6%	4.9%
Assicurazioni Generali	18.26	11.6	10.6	10.1	11%	10%	10%	1.1	1.0	1.0	5.3%	5.6%	5.9%
Aviva	4.09	6.8	6.8	6.5	13%	13%	14%	0.9	0.9	0.9	7.6%	7.9%	8.3%
AXA	24.55	9.3	8.5	8.3	10%	11%	11%	0.9	0.9	0.9	6.0%	6.4%	6.8%
Baloise	177.70	12.4	12.7	12.6	10%	9%	9%	1.2	1.2	1.1	3.6%	3.8%	4.0%
Helvetia	140.30	13.8	13.8	13.4	11%	10%	10%	1.2	1.1	1.1	3.5%	3.7%	3.8%
Mapfre	2.42	9.8	9.0	8.6	9%	10%	10%	0.9	0.8	0.8	6.4%	6.6%	6.8%
RSA Insurance	5.50	13.6	11.6	10.9	11%	12%	13%	1.5	1.4	1.3	4.5%	5.1%	5.8%
Uniqa	8.92	12.7	11.9	11.3	7%	7%	7%	0.9	1.0	1.0	6.1%	6.4%	6.6%
Vienna Insurance G.	25.75	10.5	9.9	9.3	6%	7%	7%	0.6	0.6	0.6	4.0%	4.3%	4.6%
Zurich Financial	407.70	14.8	13.4	12.8	13%	13%	13%	1.8	1.7	1.7	5.0%	5.3%	5.6%
Median		11.6	10.7	10.3	11%	10%	10%	1.1	1.0	1.0	5.3%	5.6%	5.9%

Source: mBank (stocks marked with bold), Bloomberg

Gas & Oil valuations

		EV	/EBITD	4		EV/S			P/E		EBI1	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Oil companies																
Lotos	85.40	6.5	5.1	5.0	0.6	0.6	0.6	13.8	9.9	11.0	10%	12%	12%	3.5%	3.5%	3.5%
MOL	2700.00	4.2	4.6	4.2	0.5	0.7	0.6	9.0	8.2	7.5	13%	15%	15%	5.3%	5.5%	5.8%
PKN Orlen	84.94	4.5	4.9	5.4	0.4	0.4	0.4	7.6	9.5	11.8	9%	8%	7%	4.1%	4.1%	4.1%
Hellenic Petroleum	8.49	6.3	4.9	5.2	0.5	0.4	0.4	11.1	6.5	6.9	7%	9%	8%	5.9%	6.7%	6.5%
HollyFrontier	46.84	5.6	5.6	5.9	0.6	0.6	0.6	9.7	9.1	9.9	10%	10%	10%	2.9%	2.9%	3.0%
Marathon Petroleum	56.18	7.8	5.9	6.2	0.6	0.5	0.5	13.7	7.5	8.1	7%	9%	9%	3.8%	4.2%	4.7%
Motor Oil	20.36	4.7	4.0	4.6	0.3	0.3	0.3	7.8	6.2	7.2	6%	7%	7%	6.7%	6.9%	7.1%
Neste Oil	34.43	13.2	12.0	11.5	1.7	1.8	1.7	21.1	18.6	17.6	13%	15%	15%	2.5%	2.8%	3.0%
OMV	47.85	3.9	3.7	3.6	1.0	1.0	1.0	9.1	8.4	7.9	25%	26%	27%	4.1%	4.5%	4.9%
Phillips 66	102.34	7.9	6.9	7.2	0.5	0.5	0.5	12.9	9.9	10.2	7%	7%	7%	3.4%	3.7%	4.0%
Saras SpA	1.34	3.7	2.3	3.2	0.1	0.1	0.1	12.7	4.5	7.5	4%	6%	4%	5.0%	10.4%	6.9%
Tupras	121.50	7.0	4.6	4.9	0.4	0.4	0.4	11.8	5.5	5.3	6%	8%	8%	8.4%	15.5%	16.2%
Valero Energy	90.25	8.6	5.9	6.4	0.4	0.4	0.4	18.7	9.4	10.3	5%	7%	7%	4.0%	4.3%	4.6%
Median		6.3	4.9	5.2	0.5	0.5	0.5	11.8	8.4	8.1	7%	9%	8%	4.1%	4.3%	4.7%
Gas companies																
PGNiG	4.08	4.5	3.4	3.0	0.6	0.6	0.5	12.3	8.0	7.1	14%	17%	18%	2.7%	3.3%	5.0%
A2A SpA	1.77	7.8	7.2	6.9	1.4	1.4	1.3	17.2	14.7	14.0	18%	19%	19%	4.4%	4.5%	4.6%
BP	490.35	4.8	4.5	4.5	0.6	0.6	0.6	12.5	11.2	10.6	14%	14%	14%	0.0%	0.0%	0.0%
Centrica	92.42	4.6	4.4	4.8	0.3	0.3	0.3	13.4	9.7	9.4	7%	7%	7%	0.0%	0.0%	0.0%
Enagas	24.04	10.7	10.4	11.4	8.6	8.7	9.4	13.5	12.6	13.7	80%	84%	82%	6.7%	6.9%	6.8%
Endesa	24.35	8.9	8.8	8.6	1.6	1.6	1.5	16.9	16.6	16.3	18%	18%	18%	5.9%	6.0%	5.1%
Engie	15.29	6.9	6.5	6.2	1.1	1.0	1.0	14.8	13.2	12.0	16%	16%	16%	5.1%	5.5%	5.9%
Eni	13.71	3.6	3.5	3.3	0.9	0.9	0.9	12.8	10.6	9.7	24%	26%	28%	6.2%	6.4%	6.5%
Equinor	179.30	3.4	3.1	2.8	1.2	1.1	1.1	12.5	10.9	10.0	35%	36%	37%	0.1%	0.1%	0.1%
Gas Natural SDG	22.76	9.1	8.8	8.6	1.5	1.5	1.5	16.4	15.1	14.4	17%	17%	18%	6.0%	6.3%	6.6%
Gazprom	252.99	3.9	3.9	3.7	1.1	1.1	1.0	4.0	4.3	4.1	28%	28%	28%	6.5%	7.2%	9.4%
Hera SpA	3.93	8.1	7.7	7.5	1.4	1.3	1.2	19.3	18.7	18.6	17%	17%	17%	2.6%	2.8%	2.9%
NovaTek	1242.00	11.7	11.8	12.1	4.4	4.3	3.9	8.9	12.4	11.1	38%	37%	32%	2.3%	2.9%	3.1%
ROMGAZ	37.40	5.7	5.7	5.4	2.8	2.7	2.6	9.8	9.8	9.2	49%	47%	48%	8.9%	8.9%	10.2%
Shell	26.00	3.5	3.2	3.1	0.6	0.5	0.5	12.5	10.3	9.7	16%	17%	17%	8.0%	8.1%	8.3%
Snam SpA	4.79	13.0	12.7	12.3	10.5	10.3	10.0	15.0	14.8	14.1	81%	81%	81%	5.0%	5.3%	5.5%
Total	48.12	5.5	5.1	4.8	1.0	1.0	0.9	12.3	10.8	10.3	17%	19%	19%	6.2%	6.4%	6.8%
Median		5.7	5.7	5.4	1.2	1.1	1.1	12.8	11.2	10.6	18%	19%	19%	5.1%	5.5%	5.5%

Power generation company valuations

		EV	//EBITD	A		EV/S			P/E		EBI	TDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Power generation																
CEZ	518.00	7.4	6.9	6.7	2.1	1.9	1.8	15.5	13.4	13.5	29%	28%	27%	4.6%	5.8%	6.7%
Enea	7.51	3.1	3.1	2.8	0.6	0.6	0.6	3.1	3.1	2.4	20%	18%	21%	0.0%	0.0%	3.3%
Energa	7.54	3.7	4.3	4.6	0.7	0.7	0.8	5.9	5.7	5.1	19%	17%	17%	0.0%	0.0%	0.0%
PGE	7.58	3.2	3.6	2.8	0.7	0.6	0.6	5.1	6.6	4.3	21%	17%	21%	0.0%	4.9%	3.8%
Tauron	1.59	4.1	3.8	3.3	0.7	0.6	0.6	3.1	2.6	2.0	18%	17%	19%	0.0%	0.0%	0.0%
EDF	11.44	5.5	5.0	4.9	1.3	1.2	1.2	16.9	13.6	12.9	23%	24%	24%	2.9%	3.4%	3.6%
EDP	4.13	9.4	9.0	8.6	2.1	2.1	2.0	18.7	17.1	15.8	22%	23%	23%	4.6%	4.7%	4.9%
Endesa	24.35	8.9	8.8	8.6	1.6	1.6	1.5	16.9	16.6	16.3	18%	18%	18%	5.9%	6.0%	5.1%
Enel	7.61	7.8	7.5	7.2	1.7	1.7	1.7	16.2	14.8	14.0	22%	23%	23%	4.3%	4.7%	5.0%
EON	10.23	9.8	7.3	7.2	1.5	0.8	0.7	15.0	16.1	14.9	16%	11%	10%	4.5%	4.7%	4.8%
Fortum	22.00	14.8	13.7	13.1	4.6	4.5	4.4	15.4	14.6	13.7	31%	33%	33%	5.0%	5.0%	5.0%
Iberdola	9.43	10.3	9.6	9.2	2.7	2.6	2.5	17.9	16.8	16.0	27%	27%	28%	4.0%	4.2%	4.5%
National Grid	987.30	12.2	11.6	10.9	4.0	4.0	3.8	17.0	16.9	16.0	32%	34%	35%	0.0%	0.0%	0.0%
Red Electrica	17.96	9.4	9.5	9.6	7.4	7.4	7.4	13.5	14.4	14.8	78%	78%	77%	5.9%	5.7%	5.6%
RWE	31.26	11.2	6.3	5.4	1.4	1.0	0.9	28.3	18.2	13.5	12%	15%	16%	2.6%	3.0%	3.5%
SSE	1482.50	12.5	12.1	11.2	0.9	3.3	3.2	22.1	16.9	14.6	7%	28%	29%	0.0%	0.0%	0.0%
Verbund	46.00	8.5	7.1	6.7	3.0	2.7	2.6	28.2	22.1	20.8	36%	38%	39%	1.5%	2.1%	2.6%
Median		8.9	7.3	7.2	1.6	1.7	1.7	16.2	14.8	14.0	22%	23%	23%	2.9%	4.2%	3.8%

Machine and equipment manufacturers

		E\	//EBITD/	A		EV/S			P/E		EBI	TDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Industrials																
Famur	3.51	4.2	4.4	4.8	1.1	1.2	1.2	5.4	8.2	9.5	25%	28%	26%	15.1%	11.2%	9.3%
Caterpillar	145.85	8.6	9.0	8.9	1.8	1.8	1.8	12.4	12.2	11.7	21%	20%	20%	2.6%	2.9%	3.1%
Epiroc	120.80	9.6	9.1	8.7	2.4	2.3	2.2	22.1	20.7	19.6	25%	25%	25%	2.1%	2.3%	2.4%
Komatsu	2646.50	6.1	6.6	6.5	1.2	1.2	1.2	10.0	11.4	11.2	19%	18%	19%	4.0%	4.2%	4.3%
Sandvig AG	191.25	10.6	10.2	9.8	2.4	2.3	2.3	18.0	17.1	16.2	23%	23%	23%	2.4%	2.6%	2.8%
Median		8.6	9.0	8.7	1.8	1.8	1.8	12.4	12.2	11.7	23%	21%	22%	2.6%	2.9%	3.1%

Source: mBank (stocks marked with bold), Bloomberg

Fertilizer producers and chemical companies

		EV	/ 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
Fertilizer producers																
Grupa Azoty	28.44	4.0	6.5	8.1	0.6	0.7	0.8	5.8	23.5	-	14%	10%	10%	0.0%	0.0%	0.0%
Acron	4740.00	7.1	6.5	6.5	2.3	2.1	2.0	9.0	8.5	8.7	33%	33%	31%	7.1%	7.4%	8.1%
CF Industries	44.25	9.3	8.4	8.0	3.4	3.3	3.2	18.7	15.4	13.8	37%	39%	40%	2.7%	2.7%	2.8%
Israel Chemicals	1534.00	6.2	6.0	5.9	1.4	1.4	1.3	10.5	9.7	9.3	23%	23%	22%	0.0%	0.0%	0.0%
K+S	10.12	7.4	6.5	5.8	1.3	1.2	1.2	10.9	8.2	6.5	17%	19%	20%	3.5%	4.8%	5.9%
Phosagro	2487.00	6.1	5.7	5.4	1.9	1.8	1.7	9.0	9.0	8.8	31%	31%	31%	7.3%	6.1%	6.2%
The Mosaic Company	21.15	7.0	5.9	5.3	1.3	1.2	1.2	19.5	11.9	9.1	19%	21%	23%	0.9%	1.0%	1.3%
Yara International	346.90	45.7	39.6	37.5	7.3	6.8	6.6	-	-	-	16%	17%	18%	0.6%	0.7%	0.6%
ZA Police	10.70	5.2	4.2	4.2	1.1	1.0	1.0	1.3	0.9	0.9	21%	24%	24%	77.7%	84.1%	93.5%
ZCh Puławy	91.40	1.3	1.8	1.8	0.3	0.3	0.3	4.2	6.8	7.1	21%	16%	16%	5.5%	5.5%	5.5%
Median		6.6	6.3	5.9	1.4	1.3	1.3	9.0	9.0	8.8	21%	22%	22%	3.1%	3.8%	4.1%
Chemical companies																
Ciech	36.50	6.4	5.5	5.3	1.0	1.1	1.0	14.0	8.6	8.6	16%	20%	19%	0.0%	0.0%	5.8%
Akzo Nobel	87.77	14.6	12.8	12.0	2.1	2.0	1.9	27.4	21.2	19.0	14%	16%	16%	2.1%	2.4%	2.7%
BASF	64.70	9.6	8.4	7.8	1.3	1.2	1.2	16.9	14.4	12.9	13%	15%	15%	4.9%	5.0%	5.2%
Croda	5100.00	17.3	16.2	15.4	5.0	4.8	4.7	26.7	25.0	23.4	29%	30%	30%	0.0%	0.0%	0.0%
Sisecam	5.41	4.1	3.5	3.0	0.8	0.7	0.6	6.4	6.2	5.6	20%	20%	20%	4.3%	4.7%	5.1%
Soda Sanayii	6.56	4.9	4.1	3.5	1.2	1.0	0.8	5.1	5.2	4.6	24%	25%	24%	5.2%	5.2%	5.9%
Solvay	95.30	5.4	5.2	4.9	1.2	1.1	1.1	10.9	11.1	10.0	22%	22%	22%	4.0%	4.2%	4.4%
Tata Chemicals	749.45	10.2	9.0	8.1	1.9	1.8	1.6	18.2	16.4	14.5	18%	20%	20%	1.6%	2.0%	1.7%
Tessenderlo Chemie	30.60	6.1	5.7	5.3	0.8	0.8	0.7	15.8	12.5	10.9	13%	14%	14%	-	-	-
Wacker Chemie	64.16	5.4	4.9	4.5	0.8	0.8	0.8	23.0	16.2	12.9	15%	16%	17%	3.3%	3.9%	4.4%
Median		6.2	5.6	5.3	1.2	1.1	1.0	16.3	13.4	11.9	17%	20%	20%	3.3%	3.9%	4.4%

Mining company valuations

		EV	/ EBITD	A		EV/S			P/E		EBIT	DA marg	gin _	_	DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Metals																
KGHM	97.76	4.9	5.3	5.5	1.2	1.2	1.1	9.7	10.2	11.9	24%	22%	20%	0.0%	1.5%	2.9%
Anglo American	2200.00	4.5	4.8	5.1	1.6	1.6	1.6	9.5	10.4	11.3	36%	34%	31%	0.0%	0.0%	0.0%
Antofagasta	950.00	6.2	6.4	5.8	3.0	3.0	2.9	20.6	22.1	18.0	49%	47%	50%	0.0%	0.0%	0.0%
BHP Group LTD	41.20	4.0	4.0	4.3	2.2	2.1	2.2	14.9	13.5	15.3	53%	53%	51%	3.7%	2.8%	2.3%
Boliden	259.10	5.9	5.5	5.7	1.4	1.4	1.4	12.4	11.4	11.6	24%	25%	24%	4.3%	4.6%	4.6%
First Quantum	12.14	8.8	6.1	5.7	3.5	2.6	2.5	22.4	16.0	11.1	40%	42%	44%	0.1%	0.1%	0.1%
Freeport-McMoRan	12.27	12.6	9.0	5.2	2.3	2.2	1.8	-	21.9	8.9	18%	25%	35%	1.6%	2.4%	3.0%
Fresnillo	636.20	8.3	6.6	5.4	3.1	2.9	2.6	31.4	22.3	15.8	37%	44%	49%	0.0%	0.0%	0.0%
Gold Fields	9099.00	5.3	4.5	4.2	2.4	2.2	2.1	24.7	15.5	14.2	45%	49%	49%	0.0%	0.0%	0.0%
Hudbay Min	4.62	3.8	3.4	2.8	1.2	1.2	1.1	-	38.4	10.8	32%	35%	40%	0.3%	0.3%	0.2%
KAZ Minerals	537.40	5.2	5.3	5.0	2.9	2.8	2.7	7.2	7.2	6.5	55%	52%	53%	0.0%	0.0%	0.0%
Lundin Min	7.46	7.3	4.4	3.9	2.5	1.9	1.8	23.6	10.6	8.7	35%	43%	46%	1.0%	1.1%	1.3%
MMC Norilsk Nickel	34.73	8.7	8.3	8.2	4.9	4.9	4.7	15.7	15.4	15.1	56%	59%	57%	6.9%	7.9%	8.3%
OZ Minerals	10.84	7.8	6.2	5.1	3.4	2.8	2.4	21.5	17.7	10.2	43%	44%	48%	1.9%	2.1%	2.6%
Polymetal Intl	1253.50	9.0	7.7	7.8	4.2	3.9	3.9	14.4	11.2	11.2	47%	50%	49%	0.0%	0.0%	0.0%
Polyus	7374.50	7.5	6.8	6.8	4.9	4.5	4.4	10.0	9.2	9.2	65%	66%	66%	4.4%	5.0%	5.0%
Sandfire Resources	6.14	2.5	2.1	1.9	1.2	1.1	1.1	8.6	7.2	6.0	51%	54%	56%	4.1%	4.4%	5.1%
Southern CC	42.26	10.8	10.6	9.8	5.3	5.1	4.8	20.4	19.6	18.8	49%	49%	49%	3.6%	3.5%	3.3%
Median		6.7	5.8	5.3	2.7	2.4	2.3	15.3	14.4	11.3	44%	46%	49%	0.6%	1.3%	1.8%
			/ EBITD			EV/S			P/E			DA marg			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Coal																
JSW	21.14	0.9	3.1	2.7	0.2	0.3	0.3	5.3	-	-	19%	9%	11%	8.1%	0.0%	0.0%
Alliance Res Partners	10.53	2.1	2.5	2.6	0.6	0.7			7.2	9.2	30%	27%			1 / 70/	14.7%
Arch Cool							0.7	3.4					28%	20.2%	14.7%	
Arch Coal	62.45	2.4	2.7	2.6	0.4	0.5	0.4	3.4 4.2	5.1	5.1	18%	17%	17%	2.9%	2.9%	2.9%
Banpu	62.45 11.10	2.4 10.5	11.0	10.2	0.4 2.0	0.5 2.1	0.4 2.2	4.2 11.4	5.1 10.6	5.1 9.7	18% 19%	17% 19%	17% 22%	2.9% 4.3%	2.9% 4.6%	2.9% 5.0%
	62.45 11.10 55.61	2.4 10.5 4.0	11.0 3.9	10.2 4.3	0.4 2.0 2.1	0.5 2.1 2.1	0.4 2.2 2.2	4.2 11.4 14.6	5.1 10.6 13.3	5.1 9.7 15.1	18% 19% 53%	17% 19% 53%	17% 22% 51%	2.9% 4.3% 8.0%	2.9% 4.6% 6.1%	2.9% 5.0% 5.0%
Banpu	62.45 11.10 55.61 2.92	2.4 10.5 4.0 4.7	11.0 3.9 4.8	10.2 4.3 5.1	0.4 2.0 2.1 0.9	0.5 2.1 2.1 0.9	0.4 2.2 2.2 1.0	4.2 11.4 14.6 6.0	5.1 10.6 13.3 6.4	5.1 9.7 15.1 6.3	18% 19% 53% 20%	17% 19% 53% 20%	17% 22% 51% 19%	2.9% 4.3% 8.0% 3.9%	2.9% 4.6% 6.1% 3.6%	2.9% 5.0% 5.0% 3.3%
Banpu BHP Group	62.45 11.10 55.61 2.92 34.40	2.4 10.5 4.0 4.7 1.2	11.0 3.9 4.8 1.2	10.2 4.3 5.1 1.3	0.4 2.0 2.1	0.5 2.1 2.1	0.4 2.2 2.2	4.2 11.4 14.6 6.0 4.1	5.1 10.6 13.3 6.4 5.0	5.1 9.7 15.1 6.3 5.7	18% 19% 53% 20% 35%	17% 19% 53% 20% 33%	17% 22% 51% 19% 31%	2.9% 4.3% 8.0% 3.9% 3.2%	2.9% 4.6% 6.1% 3.6% 5.4%	2.9% 5.0% 5.3% 3.3% 5.8%
Banpu BHP Group China Coal Energy	62.45 11.10 55.61 2.92	2.4 10.5 4.0 4.7	11.0 3.9 4.8	10.2 4.3 5.1	0.4 2.0 2.1 0.9	0.5 2.1 2.1 0.9	0.4 2.2 2.2 1.0	4.2 11.4 14.6 6.0	5.1 10.6 13.3 6.4	5.1 9.7 15.1 6.3	18% 19% 53% 20%	17% 19% 53% 20%	17% 22% 51% 19%	2.9% 4.3% 8.0% 3.9%	2.9% 4.6% 6.1% 3.6%	2.9% 5.0% 5.0% 3.3%
Banpu BHP Group China Coal Energy LW Bogdanka	62.45 11.10 55.61 2.92 34.40	2.4 10.5 4.0 4.7 1.2	11.0 3.9 4.8 1.2	10.2 4.3 5.1 1.3	0.4 2.0 2.1 0.9 0.4	0.5 2.1 2.1 0.9 0.4	0.4 2.2 2.2 1.0 0.4	4.2 11.4 14.6 6.0 4.1	5.1 10.6 13.3 6.4 5.0	5.1 9.7 15.1 6.3 5.7	18% 19% 53% 20% 35%	17% 19% 53% 20% 33%	17% 22% 51% 19% 31%	2.9% 4.3% 8.0% 3.9% 3.2%	2.9% 4.6% 6.1% 3.6% 5.4%	2.9% 5.0% 5.3% 3.3% 5.8%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners	62.45 11.10 55.61 2.92 34.40 21.54	2.4 10.5 4.0 4.7 1.2 1.3	11.0 3.9 4.8 1.2 1.4	10.2 4.3 5.1 1.3 1.4	0.4 2.0 2.1 0.9 0.4 1.0	0.5 2.1 2.1 0.9 0.4 1.1	0.4 2.2 1.0 0.4 1.1	4.2 11.4 14.6 6.0 4.1 4.3	5.1 10.6 13.3 6.4 5.0 4.0	5.1 9.7 15.1 6.3 5.7 3.9	18% 19% 53% 20% 35% 77%	17% 19% 53% 20% 33% 78%	17% 22% 51% 19% 31% 78%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4%	2.9% 4.6% 6.1% 3.6% 5.4% 8.4%	2.9% 5.0% 5.0% 3.3% 5.8% 8.4%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp	62.45 11.10 55.61 2.92 34.40 21.54 8.10	2.4 10.5 4.0 4.7 1.2 1.3 1.4	11.0 3.9 4.8 1.2 1.4 1.7	10.2 4.3 5.1 1.3 1.4 1.7	0.4 2.0 2.1 0.9 0.4 1.0 0.3	0.5 2.1 2.1 0.9 0.4 1.1 0.3	0.4 2.2 1.0 0.4 1.1 0.3	4.2 11.4 14.6 6.0 4.1 4.3 8.6	5.1 10.6 13.3 6.4 5.0 4.0	5.1 9.7 15.1 6.3 5.7 3.9	18% 19% 53% 20% 35% 77% 18%	17% 19% 53% 20% 33% 78% 16%	17% 22% 51% 19% 31% 78% 16% 26% 43%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4% 26.9%	2.9% 4.6% 6.1% 3.6% 5.4% 8.4% 6.8%	2.9% 5.0% 3.3% 5.8% 8.4% 7.0%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk	62.45 11.10 55.61 2.92 34.40 21.54 8.10 2560.00	2.4 10.5 4.0 4.7 1.2 1.3 1.4 4.0	11.0 3.9 4.8 1.2 1.4 1.7 4.1	10.2 4.3 5.1 1.3 1.4 1.7 3.9	0.4 2.0 2.1 0.9 0.4 1.0 0.3 1.1	0.5 2.1 2.1 0.9 0.4 1.1 0.3 1.1	0.4 2.2 2.2 1.0 0.4 1.1 0.3 1.0	4.2 11.4 14.6 6.0 4.1 4.3 8.6 6.6	5.1 10.6 13.3 6.4 5.0 4.0 - 7.1	5.1 9.7 15.1 6.3 5.7 3.9 - 6.9 13.1 7.2	18% 19% 53% 20% 35% 77% 18% 28%	17% 19% 53% 20% 33% 78% 16% 26%	17% 22% 51% 19% 31% 78% 16% 26%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4% 26.9% 10.8%	2.9% 4.6% 6.1% 3.6% 5.4% 6.8% 10.3%	2.9% 5.0% 5.0% 3.3% 5.8% 8.4% 7.0% 9.7%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto	62.45 11.10 55.61 2.92 34.40 21.54 8.10 2560.00 4608.50	2.4 10.5 4.0 4.7 1.2 1.3 1.4 4.0 4.0	11.0 3.9 4.8 1.2 1.4 1.7 4.1 4.4	10.2 4.3 5.1 1.3 1.4 1.7 3.9 5.0	0.4 2.0 2.1 0.9 0.4 1.0 0.3 1.1 1.9	0.5 2.1 2.1 0.9 0.4 1.1 0.3 1.1 2.1	0.4 2.2 1.0 0.4 1.1 0.3 1.0 2.2	4.2 11.4 14.6 6.0 4.1 4.3 8.6 6.6 9.4	5.1 10.6 13.3 6.4 5.0 4.0 - 7.1 10.8	5.1 9.7 15.1 6.3 5.7 3.9 - 6.9 13.1	18% 19% 53% 20% 35% 77% 18% 28% 49%	17% 19% 53% 20% 33% 78% 16% 26% 46%	17% 22% 51% 19% 31% 78% 16% 26% 43%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4% 26.9% 10.8% 0.0%	2.9% 4.6% 6.1% 3.6% 5.4% 6.8% 10.3% 0.0%	2.9% 5.0% 3.3% 5.8% 8.4% 7.0% 9.7% 0.0%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power	62.45 11.10 55.61 2.92 34.40 21.54 8.10 2560.00 4608.50 21.50	2.4 10.5 4.0 4.7 1.2 1.3 1.4 4.0 4.0 5.4	11.0 3.9 4.8 1.2 1.4 1.7 4.1 4.4 4.9	10.2 4.3 5.1 1.3 1.4 1.7 3.9 5.0 4.6	0.4 2.0 2.1 0.9 0.4 1.0 0.3 1.1 1.9 2.5	0.5 2.1 2.1 0.9 0.4 1.1 0.3 1.1 2.1 2.3	0.4 2.2 1.0 0.4 1.1 0.3 1.0 2.2 2.2	4.2 11.4 14.6 6.0 4.1 4.3 8.6 6.6 9.4 8.1	5.1 10.6 13.3 6.4 5.0 4.0 - 7.1 10.8 7.4	5.1 9.7 15.1 6.3 5.7 3.9 - 6.9 13.1 7.2	18% 19% 53% 20% 35% 77% 18% 28% 49% 46%	17% 19% 53% 20% 33% 78% 16% 26% 46% 46%	17% 22% 51% 19% 31% 78% 16% 26% 43% 47%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4% 26.9% 10.8% 0.0% 7.5%	2.9% 4.6% 6.1% 3.6% 5.4% 6.8% 10.3% 0.0% 7.9%	2.9% 5.0% 5.0% 3.3% 5.8% 8.4% 7.0% 9.7% 0.0% 8.1%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shanxi Xishan Coal&Ele	62.45 11.10 55.61 2.92 34.40 21.54 8.10 2560.00 4608.50 21.50 5.80	2.4 10.5 4.0 4.7 1.2 1.3 1.4 4.0 4.0 5.4 5.2	11.0 3.9 4.8 1.2 1.4 1.7 4.1 4.4 4.9 5.3	10.2 4.3 5.1 1.3 1.4 1.7 3.9 5.0 4.6 5.2	0.4 2.0 2.1 0.9 0.4 1.0 0.3 1.1 1.9 2.5 1.0	0.5 2.1 2.9 0.4 1.1 0.3 1.1 2.1 2.3 1.0	0.4 2.2 1.0 0.4 1.1 0.3 1.0 2.2 2.2 1.0	4.2 11.4 14.6 6.0 4.1 4.3 8.6 6.6 9.4 8.1 9.2	5.1 10.6 13.3 6.4 5.0 4.0 - 7.1 10.8 7.4 9.2	5.1 9.7 15.1 6.3 5.7 3.9 - 6.9 13.1 7.2 9.1	18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19%	17% 19% 53% 20% 33% 78% 16% 26% 46% 46% 19%	17% 22% 51% 19% 31% 78% 16% 26% 43% 47% 19%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4% 26.9% 10.8% 0.0% 7.5% 3.3%	2.9% 4.6% 6.1% 3.6% 5.4% 8.4% 6.8% 10.3% 0.0% 7.9% 3.4%	2.9% 5.0% 3.3% 5.8% 8.4% 7.0% 9.7% 0.0% 8.1% 3.2%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shanxi Xishan Coal&Ele Shougang Fushan Res	62.45 11.10 55.61 2.92 34.40 21.54 8.10 2560.00 4608.50 21.50 5.80 1.69	2.4 10.5 4.0 4.7 1.2 1.3 1.4 4.0 4.0 5.4 5.2 0.9	11.0 3.9 4.8 1.2 1.4 1.7 4.1 4.4 4.9 5.3 0.9	10.2 4.3 5.1 1.3 1.4 1.7 3.9 5.0 4.6 5.2 0.9	0.4 2.0 2.1 0.9 0.4 1.0 0.3 1.1 1.9 2.5 1.0 0.5	0.5 2.1 2.1 0.9 0.4 1.1 0.3 1.1 2.1 2.3 1.0 0.5	0.4 2.2 1.0 0.4 1.1 0.3 1.0 2.2 2.2 1.0 0.5	4.2 11.4 14.6 6.0 4.1 4.3 8.6 6.6 9.4 8.1 9.2 7.3	5.1 10.6 13.3 6.4 5.0 4.0 - 7.1 10.8 7.4 9.2 6.8	5.1 9.7 15.1 6.3 5.7 3.9 - 6.9 13.1 7.2 9.1 7.4	18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19% 54%	17% 19% 53% 20% 33% 78% 16% 26% 46% 46% 19% 54%	17% 22% 51% 19% 31% 78% 16% 26% 43% 47% 19% 49%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4% 26.9% 10.8% 0.0% 7.5% 3.3% 7.1%	2.9% 4.6% 6.1% 3.6% 5.4% 6.8% 10.3% 0.0% 7.9% 3.4% 7.0%	2.9% 5.0% 3.3% 5.8% 8.4% 7.0% 9.7% 0.0% 8.1% 3.2% 5.6%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shanxi Xishan Coal&Ele Shougang Fushan Res Stanmore Coal	62.45 11.10 55.61 2.92 34.40 21.54 8.10 2560.00 4608.50 21.50 5.80 1.69 1.01	2.4 10.5 4.0 4.7 1.2 1.3 1.4 4.0 4.0 5.4 5.2 0.9 1.1	11.0 3.9 4.8 1.2 1.4 1.7 4.1 4.4 4.9 5.3 0.9 1.6	10.2 4.3 5.1 1.3 1.4 1.7 3.9 5.0 4.6 5.2 0.9 2.3	0.4 2.0 2.1 0.9 0.4 1.0 0.3 1.1 1.9 2.5 1.0 0.5 0.4	0.5 2.1 2.1 0.9 0.4 1.1 2.1 2.3 1.0 0.5 0.5	0.4 2.2 1.0 0.4 1.1 0.3 1.0 2.2 2.2 1.0 0.5 0.5	4.2 11.4 14.6 6.0 4.1 4.3 8.6 6.6 9.4 8.1 9.2 7.3 2.7	5.1 10.6 13.3 6.4 5.0 4.0 - 7.1 10.8 7.4 9.2 6.8 4.0	5.1 9.7 15.1 6.3 5.7 3.9 - 6.9 13.1 7.2 9.1 7.4 6.1	18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19% 54% 38%	17% 19% 53% 20% 33% 78% 16% 26% 46% 46% 19% 54% 28%	17% 22% 51% 19% 31% 78% 26% 43% 47% 19% 49% 21%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4% 26.9% 10.8% 0.0% 7.5% 3.3% 7.1% 8.7%	2.9% 4.6% 6.1% 3.6% 5.4% 6.8% 10.3% 0.0% 7.9% 3.4% 7.0% 6.6%	2.9% 5.0% 3.3% 5.8% 8.4% 7.0% 9.7% 0.0% 8.1% 3.2% 5.6% 6.3%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shanxi Xishan Coal&Ele Shougang Fushan Res Stanmore Coal Teck Resources	62.45 11.10 55.61 2.92 34.40 21.54 8.10 2560.00 4608.50 21.50 5.80 1.69 1.01 15.43	2.4 10.5 4.0 4.7 1.2 1.3 1.4 4.0 4.0 5.4 5.2 0.9 1.1 3.0	11.0 3.9 4.8 1.2 1.4 1.7 4.1 4.4 4.9 5.3 0.9 1.6 3.2	10.2 4.3 5.1 1.3 1.4 1.7 3.9 5.0 4.6 5.2 0.9 2.3 3.2	0.4 2.0 2.1 0.9 0.4 1.0 0.3 1.1 1.9 2.5 1.0 0.5 0.4 1.2	0.5 2.1 2.1 0.9 0.4 1.1 2.1 2.3 1.0 0.5 0.5 1.2	0.4 2.2 1.0 0.4 1.1 0.3 1.0 2.2 2.2 1.0 0.5 0.5 1.2	4.2 11.4 14.6 6.0 4.1 4.3 8.6 6.6 9.4 8.1 9.2 7.3 2.7 6.1	5.1 10.6 13.3 6.4 5.0 4.0 - 7.1 10.8 7.4 9.2 6.8 4.0 6.5	5.1 9.7 15.1 6.3 5.7 3.9 - 6.9 13.1 7.2 9.1 7.4 6.1 6.7	18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19% 54% 38% 39%	17% 19% 53% 20% 33% 78% 16% 26% 46% 46% 46% 19% 54% 28% 39%	17% 22% 51% 19% 31% 78% 26% 43% 47% 19% 49% 21% 38%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4% 26.9% 10.8% 0.0% 7.5% 3.3% 7.1% 8.7%	2.9% 4.6% 6.1% 3.6% 5.4% 6.8% 10.3% 0.0% 7.9% 3.4% 7.0% 6.6% 2.2%	2.9% 5.0% 3.3% 5.8% 8.4% 7.0% 9.7% 0.0% 8.1% 3.2% 5.6% 6.3% 4.5%
Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shanxi Xishan Coal&Ele Shougang Fushan Res Stanmore Coal Teck Resources Terracom	62.45 11.10 55.61 2.92 34.40 21.54 8.10 2560.00 4608.50 21.50 5.80 1.69 1.01 15.43 0.33	2.4 10.5 4.0 4.7 1.2 1.3 1.4 4.0 4.0 5.4 5.2 0.9 1.1 3.0 1.4	11.0 3.9 4.8 1.2 1.4 1.7 4.1 4.4 4.9 5.3 0.9 1.6 3.2 2.0	10.2 4.3 5.1 1.3 1.4 1.7 3.9 5.0 4.6 5.2 0.9 2.3 3.2 1.7	0.4 2.0 2.1 0.9 0.4 1.0 0.3 1.1 1.9 2.5 1.0 0.5 0.4 1.2 0.4	0.5 2.1 2.1 0.9 0.4 1.1 2.1 2.3 1.0 0.5 0.5 1.2 0.4	0.4 2.2 1.0 0.4 1.1 0.3 1.0 2.2 2.2 1.0 0.5 0.5 1.2 0.4	4.2 11.4 14.6 6.0 4.1 4.3 8.6 6.6 9.4 8.1 9.2 7.3 2.7 6.1 2.5	5.1 10.6 13.3 6.4 5.0 4.0 - 7.1 10.8 7.4 9.2 6.8 4.0 6.5 4.7	5.1 9.7 15.1 6.3 5.7 3.9 - 6.9 13.1 7.2 9.1 7.4 6.1 6.7 3.3	18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19% 54% 38% 39% 30%	17% 19% 53% 20% 33% 78% 16% 26% 46% 46% 46% 19% 54% 28% 39% 22%	17% 22% 51% 19% 31% 78% 26% 43% 47% 19% 49% 21% 38% 23%	2.9% 4.3% 8.0% 3.9% 3.2% 8.4% 26.9% 10.8% 7.5% 3.3% 7.1% 8.7% 1.8%	2.9% 4.6% 6.1% 3.6% 5.4% 6.8% 10.3% 7.9% 3.4% 7.9% 3.4% 7.0% 6.6% 2.2% 6.1%	$\begin{array}{c} 2.9\% \\ 5.0\% \\ 5.0\% \\ 3.3\% \\ 5.8\% \\ 8.4\% \\ 7.0\% \\ 9.7\% \\ 0.0\% \\ 8.1\% \\ 3.2\% \\ 5.6\% \\ 6.3\% \\ 4.5\% \\ 9.1\% \end{array}$

Source: mBank (stocks marked with bold), Bloomberg

European telecom valuations

		EV	/ 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
Polish companies																
Netia	4.46	4.5	4.6	4.7	1.5	1.6	1.6	31.2	31.9	28.7	34%	34%	34%	0.0%	0.0%	9.0%
Orange Polska	7.62	5.6	5.8	5.3	1.6	1.6	1.5	35.9	39.3	21.6	29%	28%	29%	0.0%	0.0%	3.3%
Play	37.58	6.7	6.5	6.0	2.3	2.3	2.2	10.8	9.9	9.9	34%	36%	36%	3.9%	3.9%	3.9%
Median		5.6	5.8	5.3	1.6	1.6	1.6	31.2	31.9	21.6	34%	34%	34%	0%	0.0%	3.9%
Mid Caps																
Proximus	25.28	5.8	5.8	5.8	1.9	1.9	1.9	14.9	14.8	15.0	33%	33%	33%	6.0%	6.1%	6.2%
Telefonica CP	237.00	7.2	7.2	7.3	2.3	2.2	2.2	14.3	14.7	14.8	31%	31%	31%	8.8%	8.8%	8.8%
Hellenic Telekom	13.72	5.6	5.5	5.4	2.0	2.0	1.9	19.1	15.6	13.6	35%	35%	36%	4.1%	4.5%	4.8%
Matav	458.00	4.3	4.3	4.3	1.3	1.3	1.3	10.2	9.5	9.2	31%	31%	31%	5.7%	6.1%	6.6%
Telecom Austria	7.35	5.3	5.2	5.1	1.8	1.8	1.8	11.8	11.0	10.5	34%	34%	35%	2.9%	3.2%	3.8%
Median		5.6	5.5	5.4	1.9	1.9	1.9	14.3	14.7	13.6	33%	33%	33%	5.7%	6.1%	6.2%
Big Caps																
BT	178.58	3.9	3.7	3.7	1.2	1.2	1.2	6.8	7.4	7.2	32%	34%	34%	0.0%	0.0%	0.0%
DT	14.81	5.4	5.1	4.9	1.7	1.7	1.6	14.7	13.4	11.9	32%	33%	33%	4.9%	5.2%	5.5%
KPN	2.77	7.5	7.3	7.0	3.2	3.2	3.3	23.9	20.5	17.4	43%	44%	47%	4.8%	5.0%	5.3%
Orange France	13.10	5.0	4.9	4.8	1.5	1.5	1.5	12.6	11.8	11.0	31%	31%	31%	5.5%	5.7%	6.0%
Swisscom	529.80	8.3	8.3	8.2	3.1	3.1	3.1	18.5	18.8	18.7	38%	38%	38%	4.2%	4.2%	4.2%
Telefonica S.A.	6.33	5.2	5.2	5.0	1.8	1.8	1.8	9.4	8.8	8.1	34%	34%	35%	6.4%	6.4%	6.5%
Telia Company	41.12	8.6	8.4	8.2	3.0	2.9	2.9	17.5	15.9	14.7	35%	35%	36%	5.9%	6.1%	6.2%
TI	0.51	4.6	4.6	4.6	1.9	1.9	1.9	8.2	7.9	7.7	42%	42%	42%	0.0%	0.0%	0.0%
Median		5.3	5.1	4.9	1.9	1.9	1.9	13.7	12.6	11.5	35%	35%	35%	4.8%	5.1%	5.4%

Media company valuations

		EV	/EBITD	A		EV/S			P/E		EBI	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
Agora	12.80	7.5	7.1	6.7	1.0	1.0	1.0	61.0	32.6	21.5	14%	14%	15%	3.9%	3.9%	3.9%
Wirtualna Polska	77.00	13.4	10.6	9.5	3.6	3.1	2.8	29.8	20.6	18.1	27%	29%	29%	1.3%	1.6%	2.5%
Median		10.5	8.9	8.1	2.3	2.1	1.9	45.4	26.6	19.8	20%	22%	22%	2.6%	2.7%	3.2%
Daily Mail																
Arnolgo Mondadori	1.98	6.9	6.4	6.4	0.7	0.7	0.7	14.1	12.8	12.9	10%	11%	11%	2.4%	2.9%	2.5%
Axel Springer	62.65	7.9	8.1	7.2	1.8	1.7	1.7	24.1	25.0	21.5	23%	21%	23%	3.4%	3.5%	3.7%
Daily Mail	838.00	9.5	10.4	9.8	1.3	1.3	1.3	22.2	20.7	19.4	13%	13%	13%	0.0%	0.0%	0.0%
Gruppo Editorial	0.46	6.5	6.2	5.7	0.5	0.6	0.6	-	19.9	14.7	8%	9%	10%	1.1%	2.0%	3.9%
New York Times	33.67	24.3	22.0	18.5	3.0	2.9	2.7	44.7	40.6	32.4	12%	13%	15%	0.6%	0.6%	0.7%
Promotora de Inform	1.38	8.7	7.4	6.8	1.8	1.7	1.6	23.4	15.7	9.6	21%	23%	24%	0.0%	0.0%	-
Median		8.3	7.8	7.0	1.5	1.5	1.5	23.4	20.3	17.1	13%	13%	14%	0.8%	1.3%	2.5%
тv																
Atresmedia Corp	3.29	5.2	5.4	5.6	0.9	0.9	0.9	6.0	6.2	6.4	18%	17%	17%	13.2%	13.0%	12.2%
Gestevision Telecinco	5.49	6.7	7.3	7.6	1.8	1.8	1.8	9.2	9.5	9.7	26%	24%	23%	7.4%	8.3%	7.8%
ITV PLC	144.35	9.6	9.3	8.9	2.1	2.0	2.0	11.3	10.9	10.5	22%	22%	22%	0.0%	0.0%	0.0%
M6-Metropole Tel	15.50	5.3	5.2	5.0	1.3	1.3	1.3	11.2	10.8	10.4	25%	25%	26%	6.3%	6.4%	6.8%
Mediaset SPA	2.57	4.2	4.1	3.8	1.4	1.4	1.4	12.5	10.7	10.3	33%	35%	37%	4.5%	6.1%	6.4%
Prosieben	13.51	6.0	5.8	5.5	1.3	1.3	1.2	6.9	6.7	6.3	23%	22%	22%	7.5%	7.8%	7.4%
TF1-TV Francaise	7.19	3.1	3.0	2.9	0.6	0.6	0.6	8.6	7.9	7.0	20%	20%	21%	6.3%	6.8%	7.5%
Median		5.6	5.5	5.3	1.4	1.4	1.3	10.2	10.1	10.0	24%	23%	23%	6.3%	6.6%	7.1%
Pay TV																
Cogeco	103.60	5.9	5.8	5.6	2.8	2.8	2.7	14.9	13.6	13.5	48%	48%	48%	2.0%	2.2%	2.5%
Comcast	47.30	9.2	8.6	8.4	2.9	2.8	2.7	15.6	14.0	12.9	31%	32%	32%	1.8%	1.9%	2.1%
Dish Network	36.75	9.7	10.7	11.6	1.8	1.9	1.9	15.1	20.6	22.4	19%	18%	16%	0.0%	0.0%	0.0%
Liberty Global	20.34	4.3	4.2	4.2	1.7	1.8	1.8	-	-	-	41%	42%	43%	0.0%	0.0%	0.0%
Shaw Communications	20.02	7.8	7.4	7.1	3.2	3.1	3.0	18.9	19.2	17.9	41%	41%	42%	7.8%	7.8%	7.9%
Median		7.8	7.4	7.1	2.8	2.8	2.7	15.3	16.6	15.7	41%	41%	42%	1.8%	1.9%	2.1%

IT company valuations

		EV	/EBITD	4		EV/S			P/E		EBI1	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
Asseco Poland	65.45	5.4	5.1	4.9	0.8	0.8	0.7	16.5	16.0	15.6	15%	15%	15%	4.7%	4.7%	3.4%
Comarch	207.00	6.5	6.3	5.9	1.1	1.0	0.9	15.0	14.4	13.8	18%	16%	16%	0.7%	0.7%	0.7%
Median		5.9	5.7	5.4	1.0	0.9	0.8	15.8	15.2	14.7	16%	16%	15%	2.7%	2.7%	2.1%
Foreign companies																
Atos Origin	77.90	7.8	7.5	7.0	1.1	1.1	1.1	9.4	8.6	8.1	14%	15%	15%	2.1%	2.3%	2.5%
CapGemini	117.55	9.4	8.9	8.4	1.4	1.4	1.3	18.0	16.4	15.2	15%	15%	15%	1.6%	1.7%	1.9%
IBM	139.17	9.6	9.0	8.6	2.2	2.1	2.1	10.9	10.3	9.6	23%	24%	24%	4.6%	4.8%	5.0%
Indra Sistemas	11.24	7.0	6.6	6.2	0.8	0.7	0.7	15.0	12.9	11.7	11%	11%	11%	0.8%	1.4%	1.8%
Microsoft	166.50	22.6	19.7	17.6	9.7	8.6	7.8	36.3	31.7	28.1	43%	44%	44%	1.1%	1.2%	1.3%
Oracle	55.22	10.7	10.3	10.1	5.0	4.9	4.8	16.0	14.2	13.1	47%	47%	47%	1.5%	1.7%	1.7%
SAP	125.64	19.5	16.8	14.9	6.0	5.6	5.1	25.7	23.1	20.6	31%	33%	34%	1.2%	1.4%	1.5%
TietoEnator	29.24	10.3	9.2	8.8	1.5	1.3	1.3	15.8	15.3	14.6	14%	14%	14%	4.7%	5.0%	5.3%
Median		9.9	9.1	8.7	1.8	1.7	1.7	15.9	14.7	13.9	19%	19%	20%	1.5%	1.7%	1.8%

Source: mBank (stocks marked with bold), Bloomberg

Gaming company valuations

		EV	/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
Gaming																
11 bit studios	425.50	27.1	30.4	6.7	12.3	12.1	4.2	42.7	50.9	10.3	45%	40%	63%	0.0%	0.0%	0.0%
CD Projekt	278.80	-	10.3	11.3	61.0	7.8	9.1	-	11.9	13.3	28%	76%	81%	0.4%	0.0%	0.0%
PlayWay	277.00	22.4	19.8	17.7	14.7	13.2	11.9	33.1	30.4	28.3	65%	67%	67%	0.9%	2.2%	2.4%
Activision Blizzars	61.42	19.8	16.8	15.5	6.9	6.3	5.8	27.9	24.1	21.3	35%	37%	37%	0.6%	0.6%	0.7%
Capcom	2933.00	14.9	13.5	12.1	3.6	3.9	3.5	23.9	20.2	18.9	24%	29%	29%	1.2%	1.3%	1.4%
Take Two	130.39	17.9	18.6	17.4	4.3	4.6	4.6	27.6	27.6	26.5	24%	25%	26%	-	-	-
Ubisoft	63.16	7.4	7.8	7.0	3.7	3.4	3.2	21.3	22.6	19.9	50%	44%	45%	0.0%	0.0%	0.0%
Electronic Arts	112.41	19.5	17.1	15.1	6.2	5.8	5.4	28.7	24.4	22.1	32%	34%	36%	-	0.0%	0.0%
Paradox Interactive	157.00	21.4	16.3	13.7	11.8	9.6	8.4	50.7	39.1	26.5	55%	59%	61%	1.2%	1.5%	1.2%
Mediana		19.6	16.8	13.7	6.9	6.3	5.4	28.3	24.4	21.3	35%	40%	45%	0.6%	0.3%	0.4%

Source: mBank (stocks marked with bold), Bloomberg

Steam Global Top Sellers

2020-01-22	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	12	-1	-	116	44	0%	-	83.60
Frostpunk: SP	11 bit studios	5	+ 39	+163	71	88	0%	0%	88.00
Frostpunk: GOTY	11 bit studios	10	+11	-	16	119	0%	-	119.00
Blair Witch	Bloober Team	200+	-	-	-	-	-	-	-
Cyberpunk 2077	CD Projekt	89	-12	-74	60	199	0%	0%	199.00
The Witcher 3: WH	CD Projekt	102	-64	-40	87	100	0%	0%	100.00
The Witcher 3: WH (GOTY)	CD Projekt	39	-2	-23	34	150	0%	0%	150.00
Green Hell	Creepy Jar	200+	-	-	-	-	-	-	-
Chernobylite	The Farm 51	200+	-	-	-	-	-	-	-
Dying Light	Techland	186	-25	-	174	100	0%	-	100.00

Steam Wishlist

2020-01-22	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	55	+1	-1	54	2020
Bum Simulator	PlayWay	42	-	+1	42	2019
I am Your President	PlayWay	68	+1	-	68	TBA
Junkyard Simulator	PlayWay	50	+1	-	50	2019
Ship Builder Simulator	PlayWay	82	-	-2	81	TBA
Tank Mechanic Simulator	PlayWay	62	+1	+1	62	2019
Dying Light 2	Techland	3	-	-	3	Spring 2020

Source: Steam (Valve Corporation), Biuro maklerskie mBanku

Construction company valuations

		EV	/EBITD	A		EV/S			P/E		EBIT	۲DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Construction																
Acciona	100.20	8.4	8.2	8.0	1.5	1.4	1.4	19.1	18.9	17.7	17%	17%	17%	3.7%	3.9%	4.2%
Astaldi	0.58	0.4	0.4	0.6	0.0	0.0	0.0	0.7	0.7	0.7	9%	9%	6%	-	-	172%
Budimex	190.00	12.2	11.9	13.8	0.5	0.5	0.5	29.1	28.3	26.2	4%	5%	4%	5.1%	3.3%	3.1%
Ferrovial	29.32	-	43.4	39.7	4.5	4.5	4.4	-	47.8	41.9	3%	10%	11%	2.5%	2.6%	2.7%
Hochtief	120.10	4.6	4.5	4.1	0.3	0.3	0.3	12.8	12.1	11.6	6%	6%	7%	5.0%	5.3%	5.5%
Mota Engil	1.78	4.1	3.8	-	0.6	0.6	0.5	13.7	8.9	6.3	15%	15%	-	2.6%	6.2%	-
NCC	163.45	6.9	5.7	5.5	0.3	0.3	0.3	17.3	11.9	11.1	4%	5%	5%	3.8%	4.6%	4.8%
Skanska	225.00	9.3	9.9	9.3	0.5	0.5	0.5	16.6	16.8	15.8	6%	5%	6%	3.0%	3.2%	3.5%
Strabag	30.55	2.9	2.9	2.8	0.2	0.2	0.2	9.6	9.7	9.3	6%	6%	6%	4.3%	4.4%	4.7%
Median		5.7	5.7	6.7	0.5	0.5	0.5	15.1	12.1	11.6	6%	6%	6%	3.8%	4.1%	4.4%

Real-estate developers

	EV/EBITDA				P/BV			P/E EBITDA margin				jin DY				
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
RE Developers																
Atal	42.00	10.9	8.6	7.0	2.0	1.9	1.8	11.2	9.2	7.2	24%	23%	23%	11.2%	8.2%	9.9%
Dom Development	97.80	7.9	7.9	7.8	2.3	2.2	2.2	9.7	9.0	8.5	19%	20%	20%	9.3%	10.3%	11.1%
Develia	2.58	6.4	11.3	11.8	-	-	-	-	-	-	30%	28%	16%	14.7%	17.1%	12.6%
Echo Investment	4.97	9.3	11.8	12.3	1.3	1.2	1.2	7.8	7.8	10.8	55%	43%	36%	8.8%	8.7%	6.4%
GTC	9.71	16.3	15.2	14.5	1.0	1.0	1.0	11.7	10.8	10.3	83%	82%	79%	0.2%	0.2%	0.3%
CA Immobilien Anlagen	38.95	30.1	26.3	24.2	1.3	1.2	1.2	31.1	27.3	24.7	70%	65%	62%	2.5%	2.7%	2.9%
Deutsche Euroshop AG	25.06	15.3	15.3	15.4	0.7	0.7	0.7	14.0	13.6	13.1	88%	88%	88%	6.2%	6.3%	6.4%
Immofinanz AG	24.90	28.8	25.8	25.1	0.9	0.9	0.9	15.5	17.2	16.2	48%	56%	56%	3.6%	3.9%	4.2%
Klepierre	32.71	21.0	20.2	19.8	0.9	0.9	1.0	12.2	11.8	11.5	83%	86%	86%	6.7%	6.9%	7.0%
Segro	893.80	39.1	35.1	32.2	1.3	1.2	1.1	36.3	33.5	31.1	77%	80%	82%	0.0%	0.0%	0.0%
Median		15.8	15.2	14.9	1.3	1.2	1.1	12.2	11.8	11.5	62%	61%	59%	6.4%	6.6%	6.4%

Source: mBank (stocks marked with bold), Bloomberg

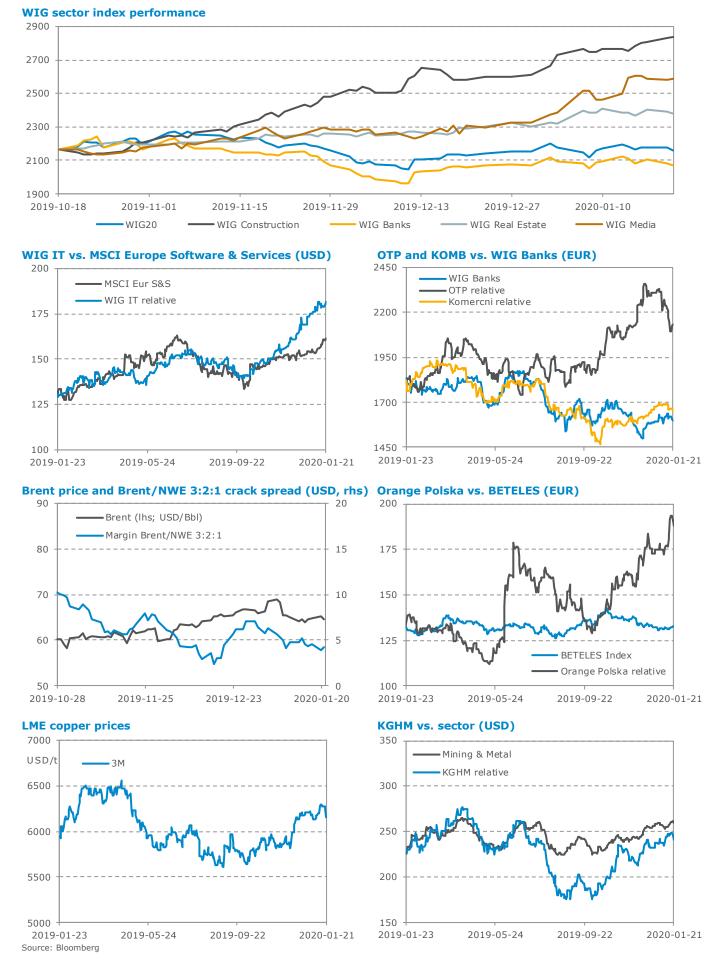
Clothing and footwear company valuations

	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	95.70	5.5	4.3	3.6	0.8	0.7	0.6	-	20.1	13.3	15%	17%	17%	0.5%	2.1%	2.1%
LPP	8600.00	10.8	9.2	7.9	1.7	1.4	1.2	25.5	18.8	15.0	15%	15%	15%	0.7%	0.5%	0.8%
VRG	3.86	4.7	4.3	3.8	0.9	0.8	0.7	14.9	12.3	11.1	19%	19%	19%	0.0%	0.0%	0.0%
Median		5.5	4.3	3.8	0.9	0.8	0.7	20.2	18.8	13.3	15%	17%	17%	0.5%	0.5%	0.8%
Foreign companies																
ABC Mart	7130.00	9.6	9.3	8.9	1.8	1.7	1.6	19.3	18.9	18.1	18%	18%	18%	2.2%	2.4%	2.4%
Adidas	311.50	17.7	16.2	14.6	2.6	2.4	2.3	31.8	28.1	24.4	15%	15%	16%	1.2%	1.4%	1.6%
Assoc Brit Foods	2664.00	10.2	9.6	9.0	1.3	1.2	1.2	19.6	18.1	16.9	13%	13%	13%	0.0%	0.0%	0.0%
Caleries	21.63	4.8	4.4	4.1	0.3	0.3	0.3	9.5	9.0	8.1	7%	7%	8%	1.3%	1.3%	1.3%
Crocs	41.71	18.9	16.3	15.2	2.4	2.3	2.1	30.1	26.2	22.1	13%	14%	14%	-	-	-
Foot Locker	39.61	4.0	3.9	3.9	0.4	0.4	0.4	8.7	8.0	7.6	11%	11%	11%	3.4%	3.8%	4.3%
Geox	1.17	5.5	4.4	3.0	0.4	0.4	0.3	-	22.0	14.6	7%	8%	11%	1.7%	2.8%	5.2%
H&M	185.66	10.1	9.4	8.9	1.2	1.2	1.1	23.5	21.6	20.2	12%	12%	12%	5.3%	5.2%	5.1%
Hugo Boss	46.66	5.9	5.6	5.3	1.1	1.1	1.0	13.2	12.0	11.1	19%	19%	20%	5.9%	6.5%	7.0%
Inditex	31.28	16.3	12.1	11.5	3.4	3.2	3.0	28.0	25.6	23.9	21%	27%	26%	2.5%	3.3%	3.7%
KappAhl	20.02	6.0	5.6	5.7	0.4	0.4	0.4	10.6	10.4	10.8	7%	7%	7%	5.2%	5.0%	5.0%
Lululemon	242.52	35.0	29.2	25.2	8.8	7.5	6.5	64.7	51.1	43.1	25%	26%	26%	0.0%	0.0%	0.0%
Nike	104.58	23.0	20.8	18.2	3.3	3.1	2.9	40.6	35.2	30.3	15%	15%	16%	0.8%	0.9%	1.0%
Under Armour	20.20	9.4	7.7	6.1	0.7	0.7	0.7	59.8	42.3	31.3	8%	9%	11%	0.0%	0.0%	0.0%
Median		9.8	9.4	8.9	1.2	1.2	1.1	23.5	21.8	19.2	13%	13%	13%	1.7%	2.4%	2.4%

Luxury, e-commerce, and food retail 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
Luxury goods																
Estee Lauder	217.73	15.8	14.0	12.8	3.3	3.1	2.9	41.5	36.3	32.7	21%	22%	22%	0.8%	0.8%	0.9%
Hermes Internetional	709.20	27.2	25.0	22.9	10.5	9.7	8.9	49.3	44.5	40.4	39%	39%	39%	0.8%	0.9%	1.0%
Kering	586.60	13.9	12.8	12.1	4.8	4.5	4.2	23.5	20.7	19.1	35%	35%	35%	1.9%	2.2%	2.4%
LVMH	424.95	15.5	14.2	13.3	4.2	3.9	3.6	29.3	26.5	24.3	27%	27%	27%	1.6%	1.8%	2.0%
Moncler	40.43	16.9	15.0	13.6	6.0	5.4	4.8	27.8	25.8	23.2	36%	36%	36%	1.1%	1.3%	1.5%
Median		15.8	14.2	13.3	4.8	4.5	4.2	29.3	26.5	24.3	35%	35%	35%	1.1%	1.3%	1.5%
E-commerce																
Asos	2970.00	22.5	15.7	12.1	0.9	0.8	0.7	-	49.3	33.4	4%	5%	6%	0.0%	0.0%	0.0%
boohoo.com	313.50	43.0	30.5	24.4	4.2	3.0	2.4	-	60.3	46.8	10%	10%	10%	0.0%	0.0%	0.0%
Zalando	46.80	31.1	25.3	19.8	1.7	1.4	1.2	-	-	69.0	6%	6%	6%	0.0%	0.0%	0.0%
Median		31.1	25.3	19.8	1.7	1.4	1.2	-	54.8	46.8	6%	6%	6%	0.0%	0.0%	0.0%
Retail																
Dino	159.60	22.7	17.3	13.3	2.1	1.6	1.3	38.5	28.6	21.5	9%	9%	10%	0.0%	0.0%	0.0%
Eurocash	20.76	7.6	7.2	6.8	0.1	0.1	0.1	-	41.9	29.1	2%	2%	2%	5.0%	2.9%	3.6%
Jeronimo Martins	15.41	9.6	8.7	8.2	0.5	0.5	0.5	21.9	19.6	18.7	6%	6%	6%	1.8%	1.9%	2.0%
Carrefour	14.76	4.8	4.3	4.1	0.2	0.2	0.2	12.9	11.1	10.4	5%	5%	5%	3.4%	3.9%	4.1%
AXFood	201.30	10.3	10.0	9.8	0.9	0.9	0.8	25.8	25.2	24.8	9%	9%	9%	3.5%	3.5%	3.3%
Tesco	244.60	7.8	5.4	5.3	0.4	0.4	0.4	17.2	14.4	13.4	5%	8%	8%	0.0%	0.0%	0.0%
Ahold	22.23	6.6	6.3	6.3	0.5	0.5	0.5	13.8	12.8	12.2	8%	8%	8%	3.4%	3.7%	3.9%
X 5 Retail	2098.00	5.9	5.4	5.0	0.4	0.4	0.3	14.4	12.8	11.6	7%	7%	7%	5.1%	6.1%	7.1%
Magnit	3840.00	5.7	5.0	4.5	0.4	0.4	0.3	14.9	11.6	8.6	7%	7%	7%	5.7%	6.0%	7.0%
Sonae	0.87	9.6	9.0	6.9	0.8	0.7	0.7	11.9	10.2	10.5	8%	8%	10%	5.1%	5.5%	5.6%
Median		7.7	6.8	6.6	0.5	0.5	0.4	14.9	13.6	12.8	7%	7%	7%	3.5%	3.6%	3.8%

Source: mBank (stocks marked with bold), Bloomberg





Global Market Overview

Index	Date	Open	Maximum	Minimum	Close	Change
DJIA	2020-01-21	29,269.05	29,341.21	29,146.47	29,196.04	-0.52%
S&P 500	2020-01-21	3,321.03	3,329.79	3,316.61	3,320.79	-0.27%
NASDAQ	2020-01-21	9,361.07	9,397.58	9,350.20	9,370.81	-0.19%
DAX	2020-01-21	13,456.90	13,560.68	13,443.25	13,555.87	+0.05%
CAC 40	2020-01-21	6,034.24	6,045.99	5,994.17	6,045.99	-0.54%
FTSE 100	2020-01-21	7,651.44	7,651.44	7,550.47	7,610.70	-0.53%
WIG20	2020-01-21	2,174.93	2,174.93	2,152.62	2,158.04	-0.92%
BUX	2020-01-21	44,471.26	44,609.93	44,038.70	44,132.00	-0.76%
РХ	2020-01-21	1,131.79	1,132.08	1,125.52	1,130.12	-0.12%
RTS	2020-01-21	2,394.05	2,394.05	2,362.60	2,387.44	-0.48%
SOFIX	2020-01-21	585.73	586.55	582.89	585.28	-0.08%
BET	2020-01-21	10,095.26	10,126.31	10,076.43	10,096.29	+0.01%
XU100	2020-01-21	121,886.80	123,804.00	121,504.10	123,556.10	+0.76%
BETELES	2020-01-21	132.80	133.17	132.17	132.93	+0.08%
NIKKEI	2020-01-21	24,072.81	24,081.75	23,843.48	23,864.56	-0.91%
SHCOMP	2020-01-21	3,085.79	3,085.79	3,051.23	3,052.14	-1.41%
Copper (LME)	2020-01-21	6,262.00	6,262.00	6,145.50	6,160.00	-1.58%
Crude Oil (Brent)	2020-01-21	64.61	64.61	63.51	63.92	-1.19%
USD/PLN	2020-01-21	3.8246	3.8320	3.8092	3.8171	-0.20%
EUR/PLN	2020-01-21	4.2441	4.2485	4.2273	4.2298	-0.34%
EUR/USD	2020-01-21	1.1095	1.1118	1.1081	1.1082	-0.12%
USBonds10	2020-01-21	1.8215	1.8232	1.7638	1.7743	-0.0472
GRBonds10	2020-01-21	-0.2300	-0.2100	-0.2560	-0.2480	-0.0300
PLBonds10	2020-01-21	2.3350	2.3430	2.2870	2.2890	-0.0530

PX Index

1150

1100

1050

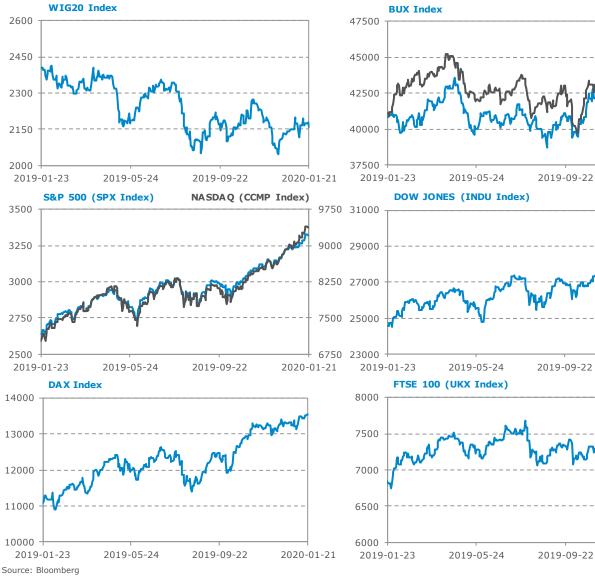
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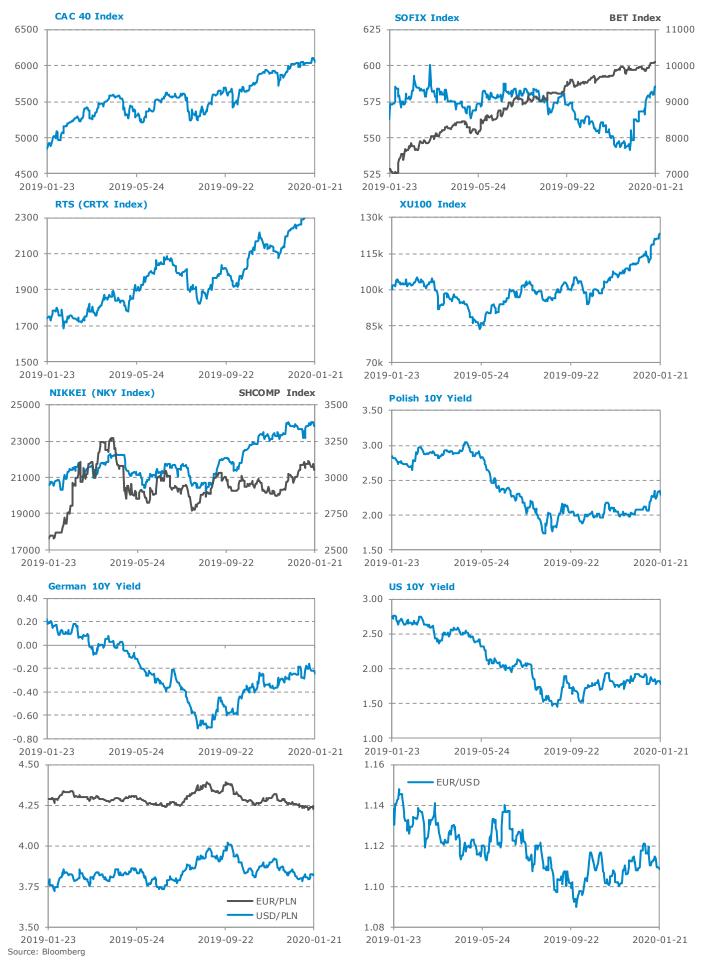
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2020-01-21

2020-01-21

2020-01-21







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 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

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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.

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