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Morning Comments

Equity Market, Poland

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DJIA	28,734.5	+0.04% FTSE 100	7,483.6	+0.04%	Copper (LME)	5,641.0	-1.09%
S&P 500	3,273.4	-0.09% WIG20	2,098.2	+0.01%	Crude Oil (Brent)	58.79	-0.91%
NA SDA Q	9,275.2	+0.06% BUX	43,431.3	-0.56%	USD/PLN	3.8927	+0.49%
DAX	13,345.0	+0.16% PX	1,097.6	-0.89%	EUR/PLN	4.2860	+0.37%
CA C 40	5,954.9	+0.49% PLBonds10	2.227	-0.031	EUR/USD	1.1010	-0.11%

Company & Sector News

Santander Bank Polska

Hold - 2019-12-05 Target price: PLN 265.50

Highlights from Q4 results conference

Market expectations were significantly beaten mainly due to lower opex and CoR. Bank showed improvement in administration costs, which were decreased by 9.7% Q/Q, it was effect of lower expenses on consulting and IT. In whole 2019 cost of merger was PLN 16m lower than planned, while cost synergies were PLN 11m higher. When it comes to cost of risk, bank observed better portfolio quality across all business lines. Additionally to that bank managed to sell PLN 223m NPL portfolio (with gain of PLN 27m). It means that if adjusted for NPL sale, market expectations regarding net provisions were correct. Provisions for CHF loans legal risks are made on the several assumptions: number of lawsuits in next 3 years, probability of losing, amount to return given lost. This assumptions should be updated at least annually. Worth to mention is that provisions at least in some portion take into account legal services costs. Tax shield is partially applied to FX provisions, we believe that this may source of difference between audited and unaudited results. In 2020 there will be several factors which will have impact on NIM: ongoing change in deposit structure (shift towards on demand deposits) and relatively more consumer credits in portfolio should help to improve NIM, however MREL related debt issuance will have negative impact on cost of finance. As we've mentioned above CIT related issues may cause a difference between preliminary and final results. We are positively surprised by the cost side of the P&L, especially if we take into account that lower consulting and third-party services expenses are recurring. One-offs adjusted result would be above PLN 700m mark, which is positive, however we believe that CHF loans related provisions will periodically resurface and put significant pressure on bottom line. (M. Konarski, M. Lemańczyk)

Banks

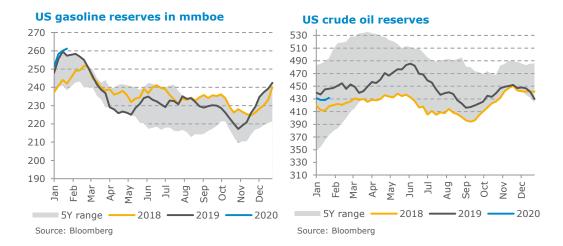
BFG president points out conditions for lowering regulatory burden

In interview for Dziennik Gazeta Prawna, president of BFG said that he sees two conditions which fulfilling would enable lowering regulatory burden for banks. First are sufficient provisions for CHF loans, while second one is establishing private bad bank (for which banks would chip in), which could restructure troubled entities without using funds from BFG. First condition is currently very unlikely to be fulfilled as there is great uncertainty when it comes to sufficient level of provisions for CHF loans. When it comes to second, banking lobby ZBP is ready for discussion. According to ZBP's president, there was a proposition of establishing such entity few years ago, however it was rejected. All in all lower regulatory burden isn't on the horizon. (M. Konarski, M. Lemańczyk)

Oil&Gas

US gasoline increased 12 week in a row

EIA report showed that US domestic crude inventories increased by 3.5 mmboe, whereas market consensus stood at +1.3 mmboe. Net import rose by 4% and refineries' utilization rate further decreased to 87.2% from 90.5%. Gasoline stocks increased 12 week in a row to all-time high levels since reporting began in 1990 (1.2 mmboe vs 1.6 mmboe expected), while diesel inventories decreased by 1.3 mmboe vs -0.9 mmboe expected. Gasoline consumption 4-weeks moving average dynamics yoy stood at -4.4% with last week deliveries increasing by 1.5%. **EIA** report confirms quite tough environment for refining business with higher supply of fuels, especially gasoline which is reflected in poor crack spreads. Meanwhile Russia declared that diesel exports from the Baltic port of Primorsk in February are set to soar to the highest since at least late 2016. European imports of gasoil/diesel from India are poised to increase this month as well. (K. Kliszcz)



Cyfrowy Polsat Reduce - 2019-11-14

Reduce – 2019-11-14 Target price: PLN 26.10

Copper

Coffee, Brazil floods

AmRest

Hold - 2019-12-05 Target price: PLN 47.00

Bond issue priced at 165

Listed media group Cyfrowy Polsat will issue up to PLN 1 bln in 7Y variable rate C-series bonds under the recently announced program, having priced the bonds at 165 bps over 6M WIBOR. Cyfrowy retains an option for early redemption. (P. Szpigiel)

Copper near 4-month low as China virus death toll climbs

London copper prices fell to near a four-month low on Thursday, set for the 11th straight session of losses, as the rising death toll from the coronavirus sparked fears of an economic slowdown in top metals consumer China. China's National Health Commission said the number of deaths from the coronavirus rose to 170 people as of late-Wednesday, while number of infected patients rose to 7,711. The epidemic could slow economic growth in the world's second-largest economy to 5% or even lower, a government economist said, as authorities extended Lunar New Year holidays, companies urged staff to stay home and airlines canceled flights to China. For more information please visit https://tinyurl.com/wehmwh8 (J. Szkopek)

Devastating Brazil rains likely spared most of Minas coffee fields

The devastating rains that triggered landslides and flooding in Brazil's Minas Gerais state over the past week and brought more than 50 deaths apparently did not cause much damage to coffee fields in the world's largest production region. The floods could also rist iron ore and sugar production which could accelerate commodity pricings. For more information please visit https://tinyurl.com/sh2hbgi (J. Szkopek)

Q4 2019 preliminary sales slightly above our expectations

AmRest estimates its 2019 Q3 sales revenue at EUR 529m (+19.4% y/y). Adjusted for acquisitions, the quarterly sales figure amounted to EUR 518.6m after growing 17.1% year over year. The global restaurant network expanded by 9.4% to 2,320 locations in 2019. By geographic segment, sales in WE increased 17.3% y/y in local currencies, driven by new openings. Russia posted a sales increase of 16.6% y/y in RUB (+26.3% y/y in EUR due to favorable FX); in CEE, sales showed organic growth at an annual rate of 18.8% y/y in local currencies and in Spain sales increased by 17.3% y/y. China delivered a solid growth of 20.3% y/y in Q3'19 driven by newopenings. At the same time, AmRest experienced falling revenues per restaurant in China (fast expansion rate). WE segment improved sales density by 0.2% y/y in 4Q mainly due to sales efficiency improvement in Spain. CEE managed to increase revenue per restaurant y/y. Preliminary sales results are 2% above our expectations on higher-than-expected sales in Russia and in Unattributed segments. Taking abovementioned in to account we would expect 2pp higher adjusted EBITDA (adjustment for pizzaportal transaction) dynamic y/y at roughly 25.5% y/y which implies EUR 62m. The company reported healthy sales results in core segments (CEE, WE), with sales per restaurant improvement y/y. Revenues per restaurant in Russia were supported by FX movements. Taking into consideration healthy sales results we expect double-digit EBTIDA improvement y/y in Q4'19, which in our opinion has been already discounted by the share price. (P. Bogusz)

Preliminary 2019 Q3 revenue by division

(EUR m)	40'19	40'18	y/y change	=
(LOK III)	46 19	46 TO	PLN	LCU
CEE	231.9	195.4	18.7%	18.8%
WE	210.5	179.5	17.3%	17.3%
Spain	76.0	68.1	11.6%	11.6%
Russia	55.7	44.1	26.3%	16.6%
China	22.0	18.8	16.8%	15.4%
Unattributed	8.9	5.0	75.6%	74.6%
TOTAL	529.0	442.9	19.4%	18.4%
TOTAL*	518.6	442.9	17.1%	

Source: AmRest, mBank; *After adjustment for acquisitions

Restaurant count by geographic division and revenues per restaurant

	restauı	ant count	y/y change	revenue per restaurant y/y change (EUR m)						
	Q4'19	Q4'18		Q4'19	Q4'18					
CEE	99	876	13.9%	0.241	0.237	1.9%				
WE	97.	938	3.9%	0.217	0.217	0.2%				
Spain	34	4 326	5.5%	0.224	0.220	1.9%				
Russia	27	3 244	11.9%	0.212	0.190	11.7%				
China	7-	4 63	17.5%	0.306	0.325	-5.9%				
TOTAL	2,32	2,121	9.4%	0.228	0.228	0.1%				

Source: AmRest, mBank;

CCC

Buy - 2019-12-05 Target price: PLN 157.00

Highlights of GO.22 Strategy Presentation

- Brick & Mortar Business: CCC decided to curb the rate of future brick store expansion, with
 most new openings planned in CEE, mainly Romania. The target floor space is between 500 and
 800 square meters. CCC is focusing on improving the quality of its own footwear, and
 intensifying the marketing efforts for own lines. Future sales growth will be supported by
 omnichannel retailing and technologies designed to improve inventory management and
 pricing.
- **KVAG:** After significantly reducing administrative costs in 2019 (job cuts, closed warehouse), CCC expects to save upwards of CHF 10m on the Swiss business in 2020. Plans for this year include cutting the Swiss store network by one-third (mainly Bingo locations), and improving sales per square meter and margins, with the first effects expected in Q2. The Swiss business is on track to turning a profit after 2020.
- e-commerce: eobuwie.pl is targeting sales of ca. PLN 3bn and an EBITDA margin of 8-10% in 2022. 10-15% of the target sales will come from the Modivo platform, generating 2019 Q4 revenue of PLN 38m, and growing sales at a monthly rate of 50-60%. Transport costs increased in 2019 because of limited capacity in existing warehouses, but they will normalize with the completion of a new facility in 2020. CCC wants to extend the call option on a 25% stake in eobuwie.pl to 2024. The Web store might be taken public after topping EUR 50m in annual EBITDA.
- **Debt:** Net debt/EBITDA at 31 March 2020 should not exceed 3.2x-3.3x. There are no plans for an equity offering at this time.
- **Profits:** CCC aims to grow EBIT margins from 2% in 2019 to 8.5% in 2022 in the following ways: 1) increase sales margins (+2pp) through stronger first-price sales, better inventory management, and price adjustments); 2) increase revenues per square meter (+2pp) by adjusting the sales mix and developing omnichannel, and 3) optimize costs (+2pp).
- CCC's 2022 objectives look ambitious but feasible. The biggest challenge is to further improve the sales mix and start growing sales at brick stores. eobuwie.pl and its Modivo platform are the main pillars of near-term growth. We expect CCC to keep increasing profits trough 2020 and beyond. Given the much lower EBIT margin estimates assumed by the consensus than the margin estimates presented in the strategy, we see room for market expectations to rise. (P. Bogusz)



CCC financial targets through 2022 vs. expectations

	mBa	nk Fore	cast	Conse	nsus Fo	recast	GO.22 Tar	get
(PLN m)	2020	2021	2022	2020	2021	2022	2022	2022 Average
Revenue	7,147	8,080	8,537	7,181	8,204	8,607	8,500 - 9,000	8,750
EBIT	433	567	634	326	419	521		
margin	6.1%	7.0%	7.4%	4.5%	5.1%	6.0%	8.5% - 9.5%	9.0%
EBITDA (ex. IFRS 16)	612	751	815					787.5
margin	8.6%	9.3%	9.5%					
Net income	196	295	406	173	244	302		656.3
margin	2.7%	3.7%	4.8%	2.4%	3.0%	3.5%	7% - 8%	7.5%

Source: CCC, Bloomberg, mBank

Develia

Final agreement to sell Wola Center inked

Develia inked a EUR 101.9 million final deal to sell the Wola Center office building in Warsaw to company Gisla controlled by Luxembourg investment fund HEVF. Supportive for Develia's investment story, but largely expected by the market. A preliminary deal was signed in September 2019 and a closing transaction was to finalized by the end-January. To remind, a sale price of the building totaled EUR 101.9m close to its BV of EUR 102.3m. From the received proceeds, a EUR 45.2m loan will be repaid. According to our estimates, the company should generate free cash flow on this transaction at about PLN 175m (after tax and transaction costs), 15% of its Market capitalization. (A. Szklarczyk)

Quarterly Earnings Results

PKN Orlen

Hold- 2019-12-05 Target price: PLN 94.17

Adj EBITDA LIFO below expectations

- adj EBITDA LIFO came in 15% below market expectations and 18% below our estimates (12M results are 6% below our FY estimate). Reported EBITDA was boosted by positive LIFO effect at PLN 0.22bn (only PLN 5m expected) and affected by assets impairment (PLN -112m, mainly in upstream). MMSSF16 impact on EBITDA can be estimated at PLN 0.1bn. Result on other operating activities (excl. mentioned impairments) amounted to PLN -0.15bn but mainly due to hedging which is a part of normal business activity.
- **Refining:** adj EBITDA LIFO at PLN 0.79bn vs PLN 0.92bn expected with no surprises on throughput (8.35 mln tonnes vs 8.4m expected). It seems that mentioned losses on hedging activity matters here whereas in previous year this line's contribution was positive.
- Petchem: adj EBITDA LIFO PLN 0.29bn vs PLN vs expected 0.4bn. Lower results here despite Włocławek CCGT's positive impact (gas prices) are driven by poor volumes (polymers -16% mom, aromatics -14% mom, PVC -46% due to shutdown).
- Retail: clean EBITDA at PLN 0.59bn vs PLN 0.64bn expected. Negative surprise is probably driven by lower contribution of FMCG sales (only +35m yoy vs 52m in Q3)
- **Upstream:** adj EBITDA lower than expected (adj. PLN 69m vs PLN 80m) due to lower volumes.
- Others: after adjustment PLN -234 vs -215m expected due to visible cost pressure.
- Net financials: slightly lower result due to short term hedging activities. Effective tax rate at 11%.
- **CFO** stood at PLN 1.2bn affected by WC changes (PLN -0.4bn). Capex amounted to PLN 1.65bn (FY 4.45bn in line with our assumptions) and net debt increased qoq by PLN 0.16bn to PLN 5.8bn including leases contribution which under MSSF16 stays at PLN 3.9bn. Company disclosed capex guidance for 2020 at 7.7 bn (probably incl. leases at PLN 1bn) vs our estimate at 5.8bn (excl. leases).
- Summary: adj EBITDA is a negative surprise and potential negative market reaction may be leveraged by the current poor refining and petchem macro environment.
 Capex increase in 2020 is also not very supporting however it was already highlighted by the CEO few times. (K. Kliszcz)

2019 Q4 actuals vs. expectations

(PLN m)	Q1 18	Q2 18	Q3 18	Q4 18	Q1 19	Q2 19	Q3 19	Q4 19	yoy	Q4 19E	diff.	2019E	YTD
Revenues	23 241	26 701	30 344	29 420	25 246	29 228	29 229	27 500	-7%	28 037	-2%	109 098	102%
EBITDA	2 040	3 047	2 968	1 911	1 829	2 932	2 700	1 607	-16%	1 832	-12%	9 511	95%
refining	878	1 743	1 826	913	477	1 436	1 227	967	6%	929	4%	4 108	100%
o/w LIFO effect	147	889	553	-729	-194	228	-362	180	125%	5	-	-353	42%
retail	471	677	712	907	678	855	924	566	-38%	641	-12%	3 184	95%
petchem	777	769	513	310	790	766	781	297	-4%	402	-26%	2 820	93%
o/w LIFO effect	-3	47	26	-70	19	-11	-32	38	-	0	-	0	-
upstream	79	72	86	-4	93	82	23	11	-	75	-85%	282	74%
others	-165	-214	-169	-215	-209	-207	-255	-234	9%	-215	9%	-883	102%
adj. EBITDA LIFO	1 814	1 746	2 405	2 342	1 763	2 715	3 313	1 504	-36%	1 827	-18%	9 862	94%
Depreciation	626	673	677	697	833	846	893	934	34%	893	5%	3 446	102%
EBIT	1 414	2 374	2 291	1 214	996	2 086	1 807	673	-45%	939	-28%	6 065	92%
adj. EBIT LIFO	1 188	1 073	1 728	1 645	930	1 869	2 420	570	-65%	934	-39%	6 416	90%
Net financials	-169	-142	257	-51	-2	37	-240	193	478%	237	-18%	-132	9%
Gross profit	1 245	2 232	2 548	1 163	994	2 123	1 567	865	-26%	1 176	-26%	5 932	94%
Net profit	1 042	1 744	2 063	804	849	1 601	1 266	772	-4%	952	-19%	4 805	93%

2019 O4 actuals vs. market consensus

LOID Q T decadio voi illai	KCC CONSCIISUS						
(PLN m)	Q4'19	Q4'18	różnica	Q4'19F	diff.	consensus	diff.
Revenues	27 500	29 420	-7%	28 037	-2%	28 109	-2%
adj. EBITDA LIFO	1 504	2 342	-36%	1 827	-18%	1 771	-15%
EBITDA	1 607	1 911	-16%	1 832	-12%	1 859	-14%
EBIT	673	1 214	-45%	939	-28%	967	-30%
Net profit	772	804	-4%	952	-19%	935	-17%

Source: PKN Orlen, E - estimates by mBank; Consensus estimates provided by PAP $\,$



More News

Banking

Polish banks will likely boost the value of granted housing loans to PLN 70 bln in 2020 from PLN 65 bln in 2019 and increase sales of cash loans to PLN 75 bln in 2020 from PLN 72 bln in 2019, credit information firm BIK forecasts.

Polish banks will likely boost the value of granted housing loans by ca. 10% to above the record PLN 70 bln in 2020 y/y and shorten the period of time consumer loans are granted for following the October CJEU ruling on consumer loans, credit information firm BIK CEO Mariusz Cholewa told PAP.

Poland's low interest rates discourage households from keeping money on term deposits, but lead to more money kept on current accounts, the Finance Ministry said in an answer to an MP interpellation.

Comarch

Comarch saw its deputy CEO Marcin Dabrowski resign from his post, the company said in a market filing.

CPK

Japan's Tokyo Narita airport is likely to help Poland construct its central transport hub CPK as a strategic adviser for the airport, Infrastructure Minister Marcin Horala opined on Wednesday. The talks with Japan are at the advanced stage, he added.

EBA

Polish firms will participate in the projects submitted to the EC as part of the European Battery Alliance, Development Minister Jadwiga Emilewicz announced.

Home Appliances

Poland's market of large home appliances should continue to grow in 2020 after growing 8.5% in value and 6.1% in volume in 2019, sector's lobby APPLiA head Wojciech Konecki told a news conference.

J.W. Construction

Listed housing developer J.W. Construction set up a bond program with face value of up to PLN 100 mln, the company said in a market filing.

Mabion

Mabion submitted its answers to questions asked by the European Medicines Agency within the framework of the ongoing registration procedure for the company's medicine MabionCD20, Mabion said in a filing. Following the company's move, the EMA will continue to review Mabion's registration motions, but submitting the answers does not guarantee the medicine will be granted approval, Mabion explained.

MDG

Medicalgorithmics saw investors purchase the full pool of 721,303 shares offered at PLN 18,25 apiece, the company said in a market filing.

Murapol

Murapol bought land plots to construct 1,100 apartments, the company announced in a press release.

OncoArendi

OncoArendi's PLN 31 mln development prioject got recommendation for PLN 22 mln in financing from R&D authority NCBiR, the firm said in a market filing.

Pesa

Pesa sports "several billion zloty" in backlog for 2020-2022, CEO Krzysztof Zdziarski told PAP.

PGG

PGG will develop a new PLN 10 mln system boosting coal excavation productivity using longwall coal-cutters, PLN 6.8 mln of which will be financed from the EU funds, PGG spokesperson Tomasz Glogowski said on Wednesday.

PKP Cargo

PKP Cargo will adjust its capex for EBITDA levels, management board member Witold Bator told

Radpol

Listed heatshrinkable products producer Radpol will wrap up its operations at the production plant in Ostrow Wielkopolski following a review of strategic options, the company said in a market filing. The decision will have no impact on achieving the goals formulated in the company strategy for years 2018-2021, Radpol assured.

Renewables

Poland appointed deputy Climate Minister Ireneusz Zyska as the government's plenipotentiary in the field of renewable energy sources, Climate Ministry announced on Wednesday.

Retail

Poland will reassess its ban on Sunday retail trade no sooner than in 2021, when effects of full implementation of the ban will be known, the Development Ministry said in an answer to an MP interpellation.

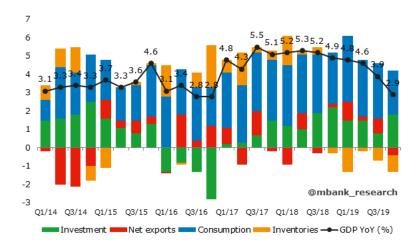
TSG

Ten Square Games' key shareholders will sell 963,574 company shares, or 13.31%, at PLN 230, the company said in a market filing on results of an ABB process.

Macroeconomics

Polish GDP decelerated to 3% in the fourth quarter already

According to the annual estimate, GDP rose by 4.0% y/y in 2019, below market consensus (4.2% r/r) and our forecast (4.0% y/y). GDP growth in the fourth quarter and its composition are rather shocking and it is safe to say that nobody has predicted this exact outcome.



First, using Q1-Q3 data and today's figures we can estimate likely intervals for key national accounts figures in Q4'19: GDP rose by 2.8-3.1% y/y, household consumption by 3.5-3.8% y/y, gross fixed investment by 7.2-7.3% y/y; net exports subtracted 0.5-0.3 p.p. from the headline.

Second, household consumption has been quite weak at the end of the year, which casts serious doubt on Q1 spending. Further deceleration in household consumption runs against signals from retail sales and is completely inconsistent with sky-high consumer sentiment. It is also evident (granted, we don't know the counterfactual) that 2019 fiscal stimulus failed to overcome the drag from cyclical factors. Perhaps consumers were already adjusting their spending to the expected loss in purchasing power associated with surging inflation, but we are grasping at straws so far. If the negative supply shock is responsible, spending in Q1 will also be affected. In addition, the NBP's assumption of permanently lower precautionary savings rate might no longer hold.

Third, investment was several percentage points (!) higher than forecast and it was impossible to nowcast it from available data without very aggressive and (ex ante) unrealistic assumptions regarding spending on machinery and equipment. Perhaps the fourth-quarter surge is related to defense spending which tends to be cumulated in the final part of the year. We should also be mindful of historical precedents – initial estimates of Q4'17 investment were also surprisingly high (and also blamed on defense spending), only to be revised sharply downwards several months later. In any case, 2020 will be marked by a decline in public investment (UE cycle, lower local government spending) and private investment is unlikely to compensate given the worsening demand prospects and falling capacity utilization. If Q4'19 investment is not revised downwards, high statistical base will also limit the extent to which investment can apparently rebound in 2020.

Net exports posted only a small positive contribution in the whole 2019, which implies a modest negative contribution in Q4. It is somewhat surprising given what we know about October and November trade flows, but perhaps squares neatly with the surge in investment, if big-ticked items were purchased abroad in December. 2020 net exports will see a very regular pattern, with highly positive contributions.

Our forecast of 2020 growth amounted to 2.8% y/y before the publication and we stand firm by it. The risks are symmetric in our view and private and public (incl. the NBP) forecasters will continue drift towards 3%. The on-going slowdown in the Polish economy is the decisive argument in the debate on the optimal reaction to current inflationary episode. It will reinforce the governor's conviction that the next move in Polish rates will be a cut. The confluence of local and global factors are making any bets on monetary tightening in Poland null and void.

mBank Research

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



Corporate Action Calendar

Date	Time	Company	Event
30-Jan	9:00	PKN Orlen	Q3'19 earnings conference call (+48 22 583 90 21; ID: 28354519#)
3-Feb		Millennium	Q4'19 earnings announcement (preliminary)
4-Feb		Izoblok	Investors meeting (Przyokopowa 33, Warsaw)
5-Feb		Grupa Kęty	Forecast publication for 2020 year
6-Feb		ING BSK	Q4'19 earnings announcement (preliminary)
6-Feb		mBank	Q4'19 earnings announcement (preliminary)
6-Feb		Moneta Money	Q4'19 earnings announcement
6-Feb		Komercni Banka	Q4'19 earnings announcement
6-Feb		RBI	Q4'19 earnings announcement (preliminary)

Economic Calendar

Thurse	day, 30 Jar	nuary 2020			
Time	Region	Data	Period	Forecast	Previous
00:50	Japan	Foreigners Buying Japan Bonds	25 January		227.40bn
00:50	Japan	Foreigners Buying Japan Stocks	25 January		-52.10bn
00:50	Japan	Japan Buying Foreign Bonds	25 January		-511.90bn
00:50	Japan	Japan Buying Foreign Stocks	25 January		-220.10bn
08:00	Germany	Unemployment Rate	December		3.10%
11:00	EU	Business Climate Indicator	January		-0.25
11:00	EU	Consumer Confidence Index	January	-8.10	-8.10
11:00	EU	Unemployment Rate	December	7.50%	7.50%
13:00	UK	Interest Rate		0.75%	0.75%
14:00	Germany	CPI Harmonized (P)	January	1.70% y/y	0.60% m/m; 1.50% y/y
14:00	Germany	CPI (P)	January	-0.60% m/m;1.70% y/y	0.50% m/m; 1.50% y/y
14:30	USA	Continuing Claims	18 January		1,731,000
14:30	USA	GDP Deflator	Q4	1.80% q/q	1.80% q/q
14:30	USA	GDP	Q4	2.00% q/q; 2.00% y/y	2.10% q/q; 2.10% y/y
14:30	USA	Initial Jobless Claims	25 January	210,000	211,000
14:30	USA	PCE	Q4		3.20% q/q; 2.60% y/y
14:30	USA	Core PCE	Q4		1.70% y/y
16:30	USA	Natural Gas Inventory	24 January		2947bn
Eniday	24 3	2020			
Friday	, 31 Janua	ry 2020			
Time	Region	Data	Period	Forecast	Previous
Time 00:30	Region Japan	Data Tokyo Area Core CPI	January	Forecast	0.90% y/y
Time 00:30 00:30	Region	Data Tokyo Area Core CPI Tokyo Area CPI	January January		0.90% y/y 0.90% y/y
Time 00:30	Region Japan	Data Tokyo Area Core CPI	January	Forecast 2.35%	0.90% y/y
Time 00:30 00:30 00:30 00:50	Region Japan Japan Japan Japan Japan	Data Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P)	January January December December	2.35% 0.80% m/m;-4.30% y/y	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y
Time 00:30 00:30 00:30 00:50 00:50	Region Japan Japan Japan	Data Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade	January January December December December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y	0.90% y/y 0.90% y/y 2.20%
Time 00:30 00:30 00:30 00:50 00:50 07:30	Region Japan Japan Japan Japan Japan	Data Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP	January January December December December Q4	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y
Time 00:30 00:30 00:30 00:50 00:50	Region Japan Japan Japan Japan Japan Japan	Data Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade	January January December December December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y
Time 00:30 00:30 00:30 00:50 00:50 07:30 08:00 08:45	Region Japan Japan Japan Japan Japan Japan France	Data Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP	January January December December December Q4 December December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y
Time 00:30 00:30 00:30 00:50 00:50 07:30 08:00 08:45 08:45	Region Japan Japan Japan Japan Japan Japan France Germany France France	Data Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI	January January December December Q4 December December December December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y
Time 00:30 00:30 00:30 00:50 00:50 07:30 08:00 08:45 08:45 10:30	Region Japan Japan Japan Japan Japan France Germany France France UK	Data Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI M4 Money Supply	January January December December Q4 December December December December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y -0.25% m/m;	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y 0.10% m/m; 0.20% y/y 1.10% m/m; -0.80% y/y 0.80% m/m; 4.50% y/y
Time 00:30 00:30 00:30 00:50 00:50 07:30 08:00 08:45 08:45 10:30 10:30	Region Japan Japan Japan Japan Japan Japan France Germany France France UK UK	Data Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI M4 Money Supply Mortgage Approvals	January January December December Q4 December December December December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y 0.10% m/m; 0.20% y/y 1.10% m/m; -0.80% y/y
Time 00:30 00:30 00:30 00:50 00:50 07:30 08:00 08:45 10:30 10:30 11:00	Region Japan Japan Japan Japan Japan France Germany France UK UK EU	Data Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI M4 Money Supply	January January December December Q4 December December December December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y -0.25% m/m;	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y 0.10% m/m; 0.20% y/y 1.10% m/m; -0.80% y/y 0.80% m/m; 4.50% y/y 64,990 0.20% q/q; 1.20% y/y
Time 00:30 00:30 00:30 00:50 00:50 07:30 08:00 08:45 10:30 10:30 11:00 14:30	Region Japan Japan Japan Japan Japan France Germany France UK UK EU USA	Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI M4 Money Supply Mortgage Approvals GDP Employment Cost Index	January January December December Q4 December December December December December Q4 Q4 Q4	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y -0.25% m/m; 65,500 0.16% q/q; 1.05% y/y 0.70%	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y 0.10% m/m; 0.20% y/y 1.10% m/m; -0.80% y/y 0.80% m/m; 4.50% y/y
Time 00:30 00:30 00:30 00:50 00:50 07:30 08:00 08:45 10:30 11:00 14:30 14:30	Region Japan Japan Japan Japan Japan Japan France Germany France UK UK EU USA USA	Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI M4 Money Supply Mortgage Approvals GDP Employment Cost Index Core PCE Deflator	January January December December Q4 December December December December Q4 Q4 Q4 December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y -0.25% m/m; 65,500 0.16% q/q; 1.05% y/y 0.70% 0.13% m/m;	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y 0.10% m/m; 0.20% y/y 1.10% m/m; -0.80% y/y 0.80% m/m; 4.50% y/y 64,990 0.20% q/q; 1.20% y/y 0.70% 0.10% m/m; 1.60% y/y
Time 00:30 00:30 00:30 00:50 00:50 07:30 08:00 08:45 10:30 10:30 11:00 14:30 14:30	Region Japan Japan Japan Japan Japan Japan France Germany France UK UK EU USA USA USA	Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI M4 Money Supply Mortgage Approvals GDP Employment Cost Index Core PCE Deflator Personal Income	January January December December Q4 December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y -0.25% m/m; 65,500 0.16% q/q; 1.05% y/y 0.70% 0.13% m/m; 0.18% m/m	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y 0.10% m/m; 0.20% y/y 1.10% m/m; -0.80% y/y 0.80% m/m; 4.50% y/y 64,990 0.20% q/q; 1.20% y/y 0.70% 0.10% m/m; 1.60% y/y 0.50% m/m
Time 00:30 00:30 00:50 00:50 07:30 08:00 08:45 10:30 11:00 14:30 14:30 14:30	Region Japan Japan Japan Japan Japan Japan France Germany France UK UK EU USA USA USA USA	Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI M4 Money Supply Mortgage Approvals GDP Employment Cost Index Core PCE Deflator	January January December December Q4 December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y -0.25% m/m; 65,500 0.16% q/q; 1.05% y/y 0.70% 0.13% m/m; 0.18% m/m 0.25% m/m	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y 0.10% m/m; 0.20% y/y 1.10% m/m; -0.80% y/y 0.80% m/m; 4.50% y/y 64,990 0.20% q/q; 1.20% y/y 0.70% 0.10% m/m; 1.60% y/y 0.50% m/m 0.40% m/m
Time 00:30 00:30 00:50 00:50 07:30 08:00 08:45 10:30 11:00 14:30 14:30 14:30 15:45	Region Japan Japan Japan Japan Japan Japan France Germany France UK UK EU USA USA USA USA	Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI M4 Money Supply Mortgage Approvals GDP Employment Cost Index Core PCE Deflator Personal Income Personal Spending Chicago PMI	January January December December Q4 December December December December December December December December Jecember December December Jecember December January	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y -0.25% m/m; 65,500 0.16% q/q; 1.05% y/y 0.70% 0.13% m/m; 0.18% m/m 0.25% m/m 48.00	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y 0.10% m/m; 0.20% y/y 1.10% m/m; -0.80% y/y 0.80% m/m; 4.50% y/y 64,990 0.20% q/q; 1.20% y/y 0.70% 0.10% m/m; 1.60% y/y 0.50% m/m 0.40% m/m 48.90
Time 00:30 00:30 00:50 00:50 07:30 08:00 08:45 10:30 11:00 14:30 14:30 14:30	Region Japan Japan Japan Japan Japan Japan France Germany France UK UK EU USA USA USA	Tokyo Area Core CPI Tokyo Area CPI Unemployment Rate Industrial Production (P) Retail Trade GDP Retail Sales Consumer Spending PPI M4 Money Supply Mortgage Approvals GDP Employment Cost Index Core PCE Deflator Personal Income Personal Spending	January January December December Q4 December	2.35% 0.80% m/m;-4.30% y/y -2.00% y/y 0.25% q/q; 1.20% y/y -0.25% m/m; 65,500 0.16% q/q; 1.05% y/y 0.70% 0.13% m/m; 0.18% m/m 0.25% m/m	0.90% y/y 0.90% y/y 2.20% -1.00% m/m; -8.20% y/y -2.10% y/y 0.30% q/q; 1.70% y/y 2.10% m/m; 2.80% y/y 0.10% m/m; 0.20% y/y 1.10% m/m; -0.80% y/y 0.80% m/m; 4.50% y/y 64,990 0.20% q/q; 1.20% y/y 0.70% 0.10% m/m; 1.60% y/y 0.50% m/m 0.40% m/m

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Monda	y, 3 Febru	ary 2020			
Time	Region	Data	Period	Forecast	Previous
09:00	Poland	PMI Manufacturing	January		48.00
09:50	France	PMI Manufacturing (F)	January		50.40
09:55	Germany	PMI Manufacturing (F)	January		43.70
10:00	EU	PMI Manufacturing (P)	January		46.30
10:30	UK	PMI Manufacturing	January		47.50
10:30	EU	Sentix Index	January		7.60
16:00	USA	Construction Spending	December		0.60%
16:00	USA	ISM Manufacturing	January		47.20
Tuesda	ay, 4 Febru	ıary 2020			
Time	Region	Data	Period	Forecast	Previous
02:45	China	PMI Manufacturing	January	51.00	51.50
11:00	EU	PPI	December		0.20% m/m; -1.40% y/y
16:00	USA	Factory Goods Orders	December		-0.70% m/m
Wedne	esday, 5 Fe	bruary 2020			
Time	Region	Data	Period	Forecast	Previous
01:30	Japan	PMI Services (F)	January		49.40
02:45	China	PMI Services	January	52.00	52.50
09:50	France	PMI Services (F)	January		52.40
09:55	Germany	PMI Services (F)	January		52.90
10:00	EU	PMI Services (F)	January		52.90
10:30	UK	PMI Services (F)	January		52.90
11:00	EU	Retail Sales	December		1.00% m/m; 2.20% y/y
14:15	USA	ADP Employment Change	January		202,000
14:30	USA	Exports	December		208.60bn
14:30	USA	Imports	December		251.70bn
14:30	USA	Trade Balance	December		-43.10bn
15:45	USA	PMI Composite (F)	January		52.70
15:45	USA	PMI Services (F)	January		52.80
16:00	USA	ISM Non-Manufacturing	January		55.00
	Poland	Interest Rate			1.50%



Current Recommendations by mBank

Company	Recommendation	Issued On	Price At	Target	Current	Upside/	P/E		EV/EBI	TDA
	Recommendation	155464 511	Reco.	Price	Price	Downside	2019	2020	2019	2020
Financial Sector						+6.9%	10.0	10.5		
Alior Bank	hold	2019-11-06	29.34	31.00	26.00	+19.2%	8.2	7.5		
Handlowy	accumulate	2019-12-05	51.70	57.44	56.40	+1.8%	16.4	11.9		
ING BSK	hold	2019-12-05	190.80	187.77	205.00	-8.4%	16.8	14.9		
Millennium	hold	2019-12-05	5.49	5.47	5.85	-6.5%	10.2	12.8		
Pekao	buy	2019-12-05	96.34	115.20	99.42	+15.9%	11.6	10.5		
PKO BP	accumulate	2019-12-05	34.99	39.50	34.90	+13.2%	9.7	10.0		
Santander Bank Polska	hold	2019-12-05	279.00	265.50	292.60	-9.3%	13.7	12.4		
Komercni Banka	buy	2019-12-05	792.00	928.20 CZK	792.00	+17.2%	9.9	10.5		
Moneta Money Bank Erste Group	buy	2019-08-28	75.95 32.20	94.33 CZK	84.00 33.70	+12.3%	11.3 9.4	10.5 9.0		
RBI	accumulate accumulate	2019-12-05 2019-12-05	21.24	36.61 EUR 23.05 EUR	21.12	+8.6% +9.1%	6.0	5.7		
OTP Bank	hold	2019-12-05	14,870	14,681 HUF	14,210	+3.3%	9.8	8.9		
PZU	accumulate	2019-12-05	36.47	41.91	40.60	+3.3%	11.1	10.6		
Kruk	buy	2019-12-05	150.90	210.31	166.00	+26.7%	9.4	9.3		
Skarbiec Holding	buy	2019-12-05	17.20	29.34	21.80	+34.6%	6.8	6.5		
GPW	buy	2020-01-16	40.85	47.82	42.45	+12.7%	14.0	16.0		
Chemicals	buy	2020-01-10	40.03	47.02	42.43	+20.9%	10.1	15.4	5.2	6.0
Ciech	buy	2019-12-05	36.40	44.41	38.60	+15.1%	14.9	9.1	6.6	5.6
Grupa Azoty	hold	2019-12-05	30.00	32.75	26.16	+25.2%	5.3	21.6	3.9	6.3
Oil & Gas	Tiolu	2017 12 03	50.00	32.73	20.10	+15.8%	10.6	9.0	4.4	4.6
Lotos	reduce	2019-12-05	85.20	77.80	79.40	-2.0%	12.9	9.2	6.1	4.8
MOL	accumulate	2019-11-27	2,926	3,302 HUF	2,650	+24.6%	8.8	8.0	4.2	4.5
PGNiG	hold	2020-01-28	3.86	4.06	3.71	+9.6%	12.3	14.4	4.6	4.5
PKN Orlen	hold	2019-12-05	88.50	94.17	79.28	+18.8%	7.1	8.8	4.3	4.6
Power Utilities						+36.1%	4.9	5.5	3.7	3.8
CEZ	buy	2019-12-05	502.00	597.80 CZK	509.50	+17.3%	15.2	13.2	7.3	6.8
Enea	buy	2019-11-06	8.59	11.53	7.42	+55.4%	3.1	3.0	3.1	3.1
Energa	buy	2019-11-06	6.37	11.67	7.28	+60.3%	5.7	5.5	3.7	4.2
PGE	buy	2019-10-24	8.42	12.20	7.28	+67.6%	4.9	6.3	3.1	3.5
Tauron	buy	2019-11-06	1.73	2.45	1.55	+58.1%	3.0	2.5	4.1	3.8
Telecoms, Media, IT						-0.6%	30.7	18.5	6.6	6.7
Netia	hold	2019-12-05	4.44	4.70	4.48	+4.9%	31.3	32.0	4.6	4.6
Orange Polska	accumulate	2019-11-29	6.46	7.40	7.25	+2.1%	34.1	37.4	5.5	5.7
Play	buy	2019-11-14	31.30	36.00	36.78	-2.1%	10.6	9.7	6.6	6.5
Agora	buy	2019-10-30	9.50	17.00	12.50	+36.0%	59.6	31.8	7.4	7.0
Cyfrowy Polsat	reduce	2019-11-14	28.86	26.10	27.82	-6.2%	15.9	13.5	7.1	6.9
Wirtualna Polska	hold	2019-12-05	68.20	70.00	79.40	-11.8%	30.7	21.3	13.8	10.9
Asseco Poland	hold	2019-12-05	57.35	59.20	64.60	-8.4%	16.3	15.8	5.3	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	434.50	+4.5%	43.6	52.0	27.7	31.1
CD Projekt	accumulate	2019-12-05	260.30	281.30	277.30	+1.4%	-	11.8	-	10.2
Industrials, Mining						+0.3%	7.0	11.1	4.6	5.2
Cognor	hold	2019-12-06	1.20	1.25	1.25	+0.0%	6.7	38.8	4.4	6.1
Famur	buy	2019-12-05	2.98	5.18	3.28	+58.2%	5.0	7.7	4.0	4.1
Grupa Kęty	hold	2019-12-05	338.50	335.44	352.50	-4.8%	12.0	13.8	8.2	8.9
JSW	hold	2020-01-20	22.68	23.32	19.99	+16.7%	5.0	-	0.9	2.9
Kernel	hold	2019-12-05	41.20	41.60	46.50	-10.5%	5.2	8.8	4.8	6.7
KGHM	hold	2019-12-05	88.66	85.54	94.10	-9.1%	9.3	9.8	4.7	5.1
PKP Cargo	reduce	2019-12-05	20.00	18.13	19.10	-5.1%	7.2	-	2.8	3.4
Stelmet	hold	2019-12-05	8.20	8.78	8.00	+9.7%	12.5	12.5	5.5	5.2
Property Developers						-0.6%	10.3	9.0	9.3	8.1
Atal	buy	2019-12-05	37.20	44.90	41.50	+8.2%	11.1	9.1	10.8	8.5
Dom Development	hold	2019-12-05	93.00	88.92	96.00	-7.4%	9.5	8.9	7.8	7.8
Retail		2010 12 25	44.00		/=	+4.9%	38.3	19.8	9.6	8.8
AmRest	hold	2019-12-05	46.35	47.00	47.60	-1.3%	38.5	37.1	12.7	11.8
CCC	buy	2019-12-05	108.10	157.00	89.10	+76.2%	83.9	18.7	5.2	4.0
Dino	accumulate	2019-11-25	134.00	148.60	158.70	-6.4%	38.3	28.4	22.6	17.2
Eurocash	reduce	2019-11-25	22.22	19.80	19.01	+4.2%	64.5	38.4	7.1	6.7
Jeronimo Martins	hold	2019-10-07	14.92	14.30 EUR	15.53	-7.9%	22.1	19.8	9.6	8.8
LPP	buy accumulate	2019-12-05 2019-12-02	8,575.00 3.94	10,100.00 4.50	8,535.00 3.76	+18.3% +19.7%	25.3 14.5	18.7 12.0	10.7 4.6	9.1 4.2
VRG										

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Current Calls by mBank

Company	Relative	Rated On	Price At	Current	Change	P/I		EV/EBITDA	
Company	Positioning	Rated On	Rating	Price	Change	2019	2020	2019	2020
IT						15.2	12.6	6.7	5.6
Ailleron	neutral	2019-10-31	7.16	8.38	+17.0%	15.1	11.4	5.9	4.7
Asseco BS	neutral	2019-12-05	27.60	32.60	+18.1%	16.7	16.1	10.7	10.2
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	3.48	+13.7%	12.3	11.5	5.1	4.9
Industrials						12.5	11.6	7.0	6.9
AC	neutral	2019-12-05	43.20	48.00	+11.1%	12.1	12.1	8.4	8.0
Alumetal	neutral	2019-12-05	39.30	42.80	+8.9%	13.4	13.9	7.7	7.9
Amica	neutral	2019-12-05	133.20	145.00	+8.9%	9.8	9.1	6.3	6.3
Apator	neutral	2019-12-05	21.10	20.70	-1.9%	13.0	11.9	7.1	7.0
Astarta	overweight	2019-12-05	15.90	15.90	+0.0%	-	2.9	7.1	3.0
Boryszew	neutral	2019-12-05	4.09	4.54	+11.1%	15.0	11.9	7.0	7.1
Forte	neutral	2019-12-05	28.15	32.30	+14.7%	19.7	13.9	9.3	8.3
Kruszwica	overweight	2019-12-05	45.80	52.20	+14.0%	11.5	10.9	5.9	5.8
Mangata	neutral	2019-12-05	72.00	75.50	+4.9%	9.1	10.7	6.4	6.9
Pozbud	neutral	2019-12-05	1.80	1.64	-9.2%	3.8	3.7	4.4	5.4
TIM	overweight	2019-12-05	10.90	11.70	+7.3%	13.1	11.6	6.8	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	26.00	8.2	7.5	7.1	6%	6%	6%	0.5	0.5	0.4	0.0%	0.0%	0.0%
Handlowy	56.40	16.4	11.9	11.4	6%	9%	9%	1.0	1.0	1.0	6.6%	6.8%	6.3%
ING BSK	205.00	16.8	14.9	13.6	12%	12%	12%	1.9	1.8	1.6	1.7%	1.8%	2.0%
Millennium	5.85	10.2	12.8	15.6	8%	6%	5%	0.8	0.8	0.7	0.0%	0.0%	0.0%
Pekao	99.42	11.6	10.5	9.8	10%	10%	11%	1.1	1.1	1.0	6.6%	6.5%	7.1%
РКО ВР	34.90	9.7	10.0	9.7	11%	10%	10%	1.0	1.0	1.0	3.8%	9.0%	10.2%
Santander BP	292.60	13.7	12.4	12.1	9%	9%	9%	1.2	1.1	1.0	6.7%	1.8%	2.0%
Median		11.6	11.9	11.4	9%	9%	9%	1.0	1.0	1.0	3.8%	1.8%	2.0%
Investors in Polish ba	nks												
ВСР	0.191	6.8	6.2	5.2	6%	7%	8%	0.5	0.4	0.4	2.1%	4.7%	6.8%
Citigroup	76.480	10.1	9.0	8.6	10%	10%	9%	0.9	0.9	0.8	2.5%	2.8%	3.2%
Commerzbank	5.250	8.0	6.8	6.5	3%	3%	3%	0.2	0.2	0.2	4.0%	4.6%	5.3%
ING	10.082	7.8	8.0	7.8	10%	9%	9%	0.7	0.7	0.7	6.8%	6.9%	7.0%
UCI	12.640	7.0	7.2	6.9	8%	7%	6%	0.5	0.5	0.5	4.7%	5.5%	6.1%
Median		7.8	7.2	6.9	8%	7%	8%	0.5	0.5	0.5	4.0%	4.7%	6.1%
Foreign banks													
Erste Group	33.70	9.4	9.0	8.9	11%	11%	10%	1.0	0.9	0.9	3.9%	4.5%	4.7%
Komercni Banka	792.00	9.9	10.5	10.0	15%	13%	13%	1.4	1.4	1.3	6.4%	6.4%	6.4%
Moneta Money	84.00	11.3	10.5	10.4	15%	16%	16%	1.7	1.6	1.6	7.3%	6.7%	7.2%
OTP Bank	14,210	9.8	8.9	8.7	20%	18%	17%	1.8	1.5	1.4	1.6%	1.7%	3.9%
RBI	21.12	6.0	5.7	5.7	10%	9%	9%	0.6	0.5	0.5	5.5%	5.0%	5.3%
Akbank	8.28	7.8	4.9	4.1	11%	16%	16%	0.8	0.7	0.6	2.5%	3.7%	5.5%
Alpha Bank	1.85	16.7	12.7	8.8	2%	3%	4%	0.3	0.4	0.4	0.0%	0.0%	0.0%
Banco Santander	3.71	7.7	7.2	7.0	8%	8%	8%	0.6	0.6	0.6	6.0%	6.3%	6.6%
Deutsche Bank	7.96	28.2	17.0	10.9	-1%	1%	3%	0.3	0.3	0.3	0.0%	0.6%	2.1%
Eurobank Ergasias	0.86	12.1	7.6	6.6	4%	8%	9%	0.6	0.6	0.5	0.0%	0.0%	0.0%
National Bank of Greece	2.98	12.1	12.5	9.2	5%	4%	6%	0.5	0.5	0.5	-	0.0%	0.0%
Piraeus Bank	3.22	15.8	10.9	7.4	2%	3%	4%	0.3	0.3	0.3	-	0.0%	0.0%
Sberbank	259.94	6.6	5.8	5.3	21%	21%	21%	1.3	1.2	1.0	7.3%	8.6%	9.6%
Turkiye Garanti Bank	11.85	7.2	5.3	4.3	13%	15%	16%	0.9	0.8	0.7	1.3%	1.7%	1.7%
Turkiye Halk Bank	6.90	5.5	3.0	2.1	5%	7%	10%	0.3	0.3	0.2	0.7%	1.3%	1.9%
Turkiye Vakiflar Bankasi	6.66	6.0	3.6	2.9	9%	13%	13%	0.5	0.4	0.4	-	-	-
VTB Bank	0.05	3.4	3.4	3.0	12%	12%	12%	0.4	0.4	0.3	6.3%	6.3%	8.4%
Yapi ve Kredi Bankasi	3.01	6.1	4.5	3.6	10%	13%	13%	0.6	0.5	0.5	0.0%	0.0%	0.0%
Median		8.6	7.4	6.8	10%	11%	11%	0.6	0.5	0.5	2.5%	1.7%	3.9%

Insurance company valuations

			P/E			ROE			P/BV			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Insurers													
PZU	40.60	11.1	10.6	10.4	21%	22%	22%	2.3	2.3	2.3	7.3%	7.2%	7.6%
Aegon	3.74	5.9	5.4	5.3	7%	8%	7%	0.4	0.4	0.3	8.2%	8.6%	9.0%
Allianz	220.05	11.6	10.9	10.3	12%	12%	12%	1.3	1.3	1.2	4.3%	4.6%	4.9%
Assicurazioni Generali	18.25	11.6	10.6	10.1	11%	10%	10%	1.1	1.0	1.0	5.3%	5.6%	5.9%
Aviva	4.07	6.8	6.7	6.4	13%	13%	14%	0.9	0.9	0.9	7.7%	8.0%	8.3%
AXA	24.23	9.1	8.4	8.2	10%	11%	11%	0.9	0.9	0.8	6.1%	6.4%	6.9%
Baloise	177.30	12.3	12.7	12.6	10%	9%	9%	1.2	1.2	1.1	3.6%	3.8%	4.0%
Helvetia	141.60	13.9	14.0	13.5	11%	10%	10%	1.2	1.1	1.1	3.5%	3.6%	3.8%
Mapfre	2.38	9.6	8.8	8.5	9%	10%	10%	0.9	0.8	0.8	6.5%	6.8%	6.9%
RSA Insurance	5.57	13.8	11.8	11.1	11%	12%	13%	1.5	1.4	1.4	4.4%	5.0%	5.7%
Uniqa	8.65	12.3	11.5	10.9	7%	7%	7%	0.9	0.9	1.0	6.3%	6.6%	6.8%
Vienna Insurance G.	24.70	10.1	9.5	8.9	6%	7%	7%	0.6	0.6	0.6	4.2%	4.5%	4.8%
Zurich Financial	409.70	14.9	13.5	12.8	13%	13%	13%	1.8	1.7	1.7	5.0%	5.2%	5.6%
Median		11.6	10.6	10.3	11%	10%	10%	1.1	1.0	1.0	5.3%	5.6%	5.9%

Gas & Oil valuations

		EV	/EBITD	4		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Oil companies																
Lotos	79.40	6.1	4.8	4.7	0.6	0.6	0.5	12.9	9.2	10.2	10%	12%	12%	3.8%	3.8%	3.8%
MOL	2650.00	4.2	4.5	4.2	0.5	0.7	0.6	8.8	8.0	7.4	13%	15%	15%	5.4%	5.6%	5.9%
PKN Orlen	79.28	4.3	4.6	5.1	0.4	0.4	0.4	7.1	8.8	11.0	9%	8%	7%	4.4%	4.4%	4.4%
Hellenic Petroleum	8.34	6.2	4.8	5.2	0.5	0.4	0.4	10.9	6.4	6.7	7%	9%	8%	6.0%	6.8%	6.6%
HollyFrontier	45.98	5.5	5.5	5.8	0.6	0.6	0.6	9.5	8.9	9.8	10%	10%	10%	2.9%	3.0%	3.0%
Marathon Petroleum	53.59	7.6	5.8	6.1	0.6	0.5	0.5	13.1	7.1	7.8	7%	9%	9%	4.0%	4.4%	4.9%
Motor Oil	20.02	4.6	4.0	4.5	0.3	0.3	0.3	7.6	6.1	7.1	6%	7%	7%	6.8%	7.0%	7.2%
Neste Oil	35.58	13.6	12.4	11.9	1.8	1.8	1.7	21.8	19.2	18.2	13%	15%	15%	2.4%	2.7%	2.9%
OMV	46.27	3.8	3.6	3.5	1.0	0.9	1.0	8.8	8.1	7.6	25%	26%	27%	4.2%	4.7%	5.1%
Phillips 66	95.80	7.5	6.5	6.8	0.5	0.5	0.5	12.1	9.2	9.6	7%	7%	7%	3.6%	4.0%	4.3%
Saras SpA	1.28	3.5	2.2	3.1	0.1	0.1	0.1	12.2	4.3	7.2	4%	6%	4%	5.2%	10.8%	7.2%
Tupras	114.10	6.7	4.4	4.7	0.4	0.4	0.4	11.1	5.1	5.0	6%	8%	8%	8.9%	16.5%	17.2%
Valero Energy	86.46	8.3	5.7	6.2	0.4	0.4	0.4	17.9	9.0	9.9	5%	7%	7%	4.2%	4.5%	4.8%
Median		6.1	4.8	5.1	0.5	0.5	0.5	11.1	8.1	7.8	7%	9%	8%	4.2%	4.5%	4.9%
Gas companies																
PGNiG	3.71	4.6	4.5	3.6	0.6	0.6	0.6	12.3	14.4	9.5	12%	13%	16%	3.0%	3.2%	2.8%
A2A SpA	1.85	8.0	7.4	7.1	1.5	1.4	1.4	17.9	15.3	14.5	18%	19%	19%	4.2%	4.3%	4.4%
BP	477.90	4.7	4.4	4.4	0.6	0.6	0.6	12.2	10.9	10.3	14%	14%	14%	0.0%	0.0%	0.0%
Centrica	87.72	4.5	4.2	4.7	0.3	0.3	0.3	12.7	9.2	9.0	7%	7%	7%	0.0%	0.0%	0.0%
Enagas	24.43	10.8	10.5	11.5	8.7	8.7	9.5	13.7	12.8	14.0	80%	84%	82%	6.6%	6.7%	6.7%
Endesa	24.78	9.0	8.9	8.8	1.6	1.6	1.6	17.2	16.9	16.6	18%	18%	18%	5.8%	5.9%	5.0%
Engie	15.88	7.0	6.7	6.3	1.1	1.1	1.0	15.4	13.7	12.4	16%	16%	16%	4.9%	5.3%	5.7%
Eni	13.29	3.6	3.4	3.2	0.8	0.9	0.9	12.4	10.3	9.4	24%	26%	28%	6.4%	6.6%	6.7%
Equinor	173.20	3.3	2.9	2.7	1.1	1.1	1.0	11.9	10.4	9.5	35%	36%	37%	0.1%	0.1%	0.1%
Gas Natural SDG	23.81	9.4	9.0	8.8	1.6	1.5	1.6	17.1	15.7	15.0	17%	17%	18%	5.7%	6.0%	6.3%
Gazprom	232.00	3.7	3.6	3.5	1.0	1.0	1.0	3.7	4.0	3.8	28%	28%	28%	7.1%	7.9%	10.3%
Hera SpA	4.32	8.6	8.3	8.0	1.5	1.4	1.3	21.2	20.6	20.5	17%	17%	17%	2.4%	2.5%	2.6%
NovaTek	1199.00	11.3	11.4	11.7	4.2	4.2	3.8	8.5	12.0	10.7	38%	37%	32%	2.4%	3.0%	3.2%
ROMGAZ	35.95	5.4	5.5	5.2	2.7	2.6	2.5	9.4	9.4	8.9	49%	47%	48%	9.2%	9.3%	10.6%
Shell	25.26	3.4	3.2	3.0	0.5	0.5	0.5	12.0	10.0	9.4	16%	17%	17%	8.2%	8.3%	8.5%
Snam SpA	4.98	13.3	13.0	12.6	10.7	10.5	10.2	15.6	15.4	14.7	81%	81%	81%	4.9%	5.1%	5.3%
Total	46.18	5.3	4.9	4.7	0.9	0.9	0.9	11.7	10.3	9.9	17%	19%	19%	6.4%	6.7%	7.0%
Median		5.4	5.5	5.2	1.1	1.1	1.0	12.4	12.0	10.3	18%	19%	19%	4.9%	5.3%	5.3%

Power generation company valuations

rower generatio												-				
			//EBITD			EV/S			P/E			DA mar			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Power generation																
CEZ	509.50	7.3	6.8	6.7	2.1	1.9	1.8	15.2	13.2	13.3	29%	28%	27%	4.7%	5.9%	6.8%
Enea	7.42	3.1	3.1	2.8	0.6	0.5	0.6	3.1	3.0	2.4	20%	18%	21%	0.0%	0.0%	3.3%
Energa	7.28	3.7	4.2	4.5	0.7	0.7	0.8	5.7	5.5	5.0	19%	17%	17%	0.0%	0.0%	0.0%
PGE	7.28	3.1	3.5	2.8	0.7	0.6	0.6	4.9	6.3	4.1	21%	17%	21%	0.0%	5.1%	4.0%
Tauron	1.55	4.1	3.8	3.2	0.7	0.6	0.6	3.0	2.5	2.0	18%	17%	19%	0.0%	0.0%	0.0%
EDF	11.30	5.4	5.0	4.9	1.2	1.2	1.2	16.7	13.5	12.7	23%	24%	24%	2.9%	3.4%	3.7%
EDP	4.36	9.6	9.2	8.8	2.1	2.1	2.1	19.7	18.0	16.7	22%	23%	23%	4.4%	4.5%	4.6%
Endesa	24.78	9.0	8.9	8.8	1.6	1.6	1.6	17.2	16.9	16.6	18%	18%	18%	5.8%	5.9%	5.0%
Enel	8.01	8.1	7.7	7.4	1.8	1.7	1.7	17.0	15.6	14.7	22%	23%	23%	4.1%	4.5%	4.8%
EON	10.36	9.9	7.3	7.2	1.6	0.8	0.7	15.2	16.3	15.1	16%	11%	10%	4.4%	4.6%	4.8%
Fortum	22.76	15.2	14.1	13.5	4.7	4.6	4.5	15.9	15.2	14.1	31%	33%	33%	4.8%	4.9%	4.8%
Iberdola	9.87	10.5	9.9	9.4	2.8	2.7	2.6	18.7	17.6	16.8	27%	27%	28%	3.8%	4.1%	4.3%
National Grid	1021.80	12.5	11.8	11.1	4.0	4.0	3.9	17.6	17.5	16.5	32%	34%	35%	0.0%	0.0%	0.0%
Red Electrica	18.23	9.5	9.6	9.7	7.4	7.5	7.5	13.7	14.6	15.1	78%	78%	77%	5.8%	5.6%	5.5%
RWE	31.83	11.4	6.4	5.5	1.4	1.0	0.9	28.9	18.5	13.8	12%	15%	16%	2.5%	3.0%	3.4%
SSE	1500.00	12.6	12.2	11.2	0.9	3.4	3.3	22.3	17.1	14.8	7%	28%	29%	0.0%	0.0%	0.0%
Verbund	48.70	8.9	7.4	7.0	3.2	2.8	2.7	29.9	23.4	22.0	36%	38%	39%	1.4%	2.0%	2.4%
Median		9.0	7.4	7.2	1.6	1.7	1.7	16.7	15.6	14.7	22%	23%	23%	2.9%	4.1%	4.0%

Machine and equipment manufacturers

	- q			-												
		E۱	//EBITD	A		EV/S			P/E		EBIT	TDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Industrials																
Famur	3.28	4.0	4.1	4.4	1.0	1.1	1.2	5.0	7.7	8.9	25%	28%	26%	16.2%	12.0%	9.9%
Caterpillar	135.78	8.1	8.5	8.4	1.7	1.7	1.7	11.6	11.3	10.9	21%	20%	20%	2.8%	3.1%	3.4%
Epiroc	116.40	9.3	8.7	8.4	2.3	2.2	2.1	21.3	20.0	18.9	25%	25%	25%	2.2%	2.4%	2.5%
Komatsu	2528.50	5.9	6.4	6.3	1.1	1.2	1.2	9.5	10.9	10.7	19%	18%	19%	4.2%	4.4%	4.5%
Sandvig AG	186.25	10.3	9.9	9.5	2.3	2.3	2.2	17.5	16.7	15.7	23%	23%	23%	2.5%	2.7%	2.8%
Median		8.1	8.5	8.4	1.7	1.7	1.7	11.6	11.3	10.9	23%	21%	22%	2.8%	3.1%	3.4%



Fertilizer producers and chemical companies

		EV	/EBITD	4		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Fertilizer producers																
Grupa Azoty	26.16	3.9	6.3	7.9	0.5	0.6	0.8	5.3	21.6	-	14%	10%	10%	0.0%	0.0%	0.0%
Acron	4782.00	7.1	6.5	6.5	2.3	2.2	2.0	9.1	8.6	8.8	33%	33%	31%	7.0%	7.3%	8.0%
CF Industries	40.27	8.8	8.0	7.6	3.2	3.1	3.0	17.0	14.0	12.5	37%	39%	40%	3.0%	3.0%	3.0%
Israel Chemicals	1447.00	6.0	5.8	5.6	1.4	1.3	1.3	10.0	9.2	8.8	23%	23%	22%	0.0%	0.0%	0.0%
K+S	8.87	7.1	6.2	5.6	1.2	1.2	1.1	9.6	7.1	5.7	17%	19%	20%	3.9%	5.5%	6.7%
Phosagro	2452.00	6.0	5.7	5.4	1.9	1.8	1.7	8.9	8.9	8.7	31%	31%	31%	7.4%	6.2%	6.3%
The Mosaic Company	19.31	6.6	5.6	5.0	1.2	1.2	1.1	17.8	10.8	8.3	19%	21%	23%	1.0%	1.1%	1.5%
Yara International	331.70	43.8	37.9	35.9	7.0	6.5	6.4	-	-	-	16%	17%	18%	0.6%	0.8%	0.6%
ZA Police	10.50	5.1	4.2	4.2	1.1	1.0	1.0	1.3	0.9	0.9	21%	24%	24%	79.1%	85.7%	95.2%
ZCh Puławy	96.00	1.4	1.9	1.9	0.3	0.3	0.3	4.4	7.2	7.4	21%	16%	16%	5.2%	5.2%	5.2%
Median		6.3	6.0	5.6	1.3	1.3	1.2	9.1	8.9	8.5	21%	22%	22%	3.5%	4.1%	4.1%
Chemical companies																
Ciech	38.60	6.6	5.6	5.5	1.0	1.1	1.1	14.9	9.1	9.1	16%	20%	19%	0.0%	0.0%	5.5%
Akzo Nobel	87.27	14.5	12.8	11.9	2.0	2.0	1.9	27.3	21.1	18.9	14%	16%	16%	2.1%	2.4%	2.7%
BASF	63.06	9.4	8.3	7.7	1.3	1.2	1.2	16.5	14.0	12.5	13%	15%	15%	5.0%	5.1%	5.4%
Croda	5150.00	17.4	16.4	15.6	5.1	4.9	4.7	27.0	25.2	23.6	29%	30%	30%	0.0%	0.0%	0.0%
Sisecam	5.03	3.9	3.3	2.9	0.8	0.7	0.6	5.9	5.7	5.2	20%	20%	20%	4.7%	5.0%	5.5%
Soda Sanayii	6.51	4.8	4.1	3.5	1.2	1.0	0.8	5.0	5.2	4.6	24%	25%	24%	5.2%	5.2%	6.0%
Solvay	95.62	5.4	5.2	4.9	1.2	1.1	1.1	10.9	11.2	10.0	22%	22%	22%	4.0%	4.2%	4.3%
Tata Chemicals	757.55	10.3	9.1	8.1	1.9	1.8	1.6	18.4	16.6	14.6	18%	20%	20%	1.6%	1.9%	1.6%
Tessenderlo Chemie	30.00	6.0	5.6	5.3	0.8	0.8	0.7	15.4	12.2	10.7	13%	14%	14%	-	-	-
Wacker Chemie	66.08	5.5	5.0	4.6	0.8	0.8	0.8	23.7	16.7	13.3	15%	16%	17%	3.2%	3.8%	4.3%
Median		6.3	5.6	5.4	1.2	1.1	1.1	16.0	13.1	11.6	17%	20%	20%	3.2%	3.8%	4.3%

Mining company valuations

		EV	/EBITD	۸		EV/S			P/E		EBIT	TDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Metals																
KGHM	94.10	4.7	5.1	5.4	1.1	1.1	1.1	9.3	9.8	11.5	24%	22%	20%	0.0%	1.6%	3.1%
Anglo American	2047.50	4.2	4.5	4.8	1.5	1.5	1.5	8.8	9.6	10.5	36%	34%	31%	0.0%	0.0%	0.0%
Antofagasta	861.20	5.7	5.9	5.3	2.8	2.8	2.7	18.6	20.0	16.3	49%	47%	50%	0.0%	0.0%	0.0%
BHP Group LTD	39.34	3.8	3.8	4.1	2.1	2.0	2.1	14.0	12.7	14.4	53%	53%	51%	3.8%	2.9%	2.4%
Boliden	237.20	5.4	5.1	5.3	1.3	1.3	1.3	11.3	10.4	10.6	24%	25%	24%	4.7%	5.0%	5.0%
First Quantum	11.48	8.6	6.0	5.5	3.4	2.5	2.4	21.0	14.9	10.4	40%	42%	44%	0.1%	0.1%	0.1%
Freeport-McMoRan	11.29	12.1	8.6	5.0	2.2	2.1	1.7	-	20.2	8.2	18%	25%	35%	1.8%	2.6%	3.2%
Fresnillo	619.20	8.1	6.4	5.3	3.0	2.8	2.6	30.5	21.7	15.4	37%	44%	49%	0.0%	0.0%	0.0%
Gold Fields	8891.00	5.2	4.4	4.1	2.3	2.1	2.0	23.9	15.0	13.8	45%	49%	49%	0.0%	0.0%	0.0%
Hudbay Min	4.22	3.6	3.2	2.6	1.1	1.1	1.1	-	34.8	9.7	32%	35%	40%	0.3%	0.3%	0.3%
KAZ Minerals	460.90	4.8	4.9	4.7	2.6	2.6	2.5	6.2	6.2	5.5	55%	52%	53%	0.0%	0.0%	0.0%
Lundin Min	7.24	7.0	4.3	3.7	2.5	1.9	1.7	22.7	10.2	8.4	35%	43%	46%	1.0%	1.1%	1.4%
MMC Norilsk Nickel	33.78	8.5	8.1	8.1	4.8	4.7	4.6	15.3	15.0	14.7	56%	59%	57%	7.1%	8.2%	8.6%
OZ Minerals	10.06	7.2	5.8	4.7	3.1	2.6	2.3	20.0	16.4	9.5	43%	44%	48%	2.0%	2.3%	2.8%
Polymetal Intl	1245.00	9.0	7.7	7.8	4.2	3.9	3.8	14.3	11.1	11.1	47%	50%	49%	0.0%	0.0%	0.0%
Polyus	7752.00	7.8	7.1	7.0	5.1	4.6	4.6	10.5	9.6	9.6	65%	66%	66%	4.2%	4.8%	4.8%
Sandfire Resources	5.67	2.2	1.9	1.7	1.1	1.0	1.0	8.0	6.7	5.6	51%	54%	56%	4.4%	4.8%	5.5%
Southern CC	38.61	10.0	9.8	9.1	4.9	4.8	4.5	18.6	17.9	17.2	49%	49%	49%	4.0%	3.8%	3.7%
Median		6.4	5.5	5.1	2.5	2.3	2.2	14.8	13.8	10.6	44%	46%	49%	0.7%	1.3%	1.9%
		EV	/EBITD	4		EV/S			P/E		EBIT	TDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
01																
Coal																
JSW	19.99	0.9	2.9	2.6	0.2	0.2	0.3	5.0	-		19%	9%	11%	8.6%	0.0%	0.0%
7.7.7	9.34	0.9 1.9	2.9 2.2	2.3	0.2 0.6	0.2 0.6	0.6	3.0	6.4	8.1	30%	27%	28%	22.8%	16.6%	16.6%
JSW																
JSW Alliance Res Partners	9.34	1.9	2.2	2.3	0.6	0.6	0.6	3.0	6.4	8.1	30%	27%	28%	22.8%	16.6%	16.6%
JSW Alliance Res Partners Arch Coal	9.34 54.54	1.9 2.1	2.2	2.3 2.3	0.6 0.4	0.6 0.4	0.6	3.0 3.7	6.4 4.5	8.1 4.4	30% 18%	27% 17%	28% 17%	22.8% 3.3%	16.6% 3.3%	16.6% 3.3%
JSW Alliance Res Partners Arch Coal Banpu	9.34 54.54 10.20	1.9 2.1 10.2	2.2 2.4 10.7	2.3 2.3 10.0	0.6 0.4 1.9	0.6 0.4 2.0	0.6 0.4 2.2	3.0 3.7 10.5	6.4 4.5 9.7	8.1 4.4 8.9	30% 18% 19%	27% 17% 19%	28% 17% 22%	22.8% 3.3% 4.7%	16.6% 3.3% 5.0%	16.6% 3.3% 5.4%
JSW Alliance Res Partners Arch Coal Banpu BHP Group	9.34 54.54 10.20 53.07	1.9 2.1 10.2 3.8	2.2 2.4 10.7 3.8	2.3 2.3 10.0 4.1	0.6 0.4 1.9 2.0	0.6 0.4 2.0 2.0	0.6 0.4 2.2 2.1	3.0 3.7 10.5 14.0	6.4 4.5 9.7 12.7	8.1 4.4 8.9 14.4	30% 18% 19% 53%	27% 17% 19% 53%	28% 17% 22% 51%	22.8% 3.3% 4.7% 8.3%	16.6% 3.3% 5.0% 6.4%	16.6% 3.3% 5.4% 5.2%
JSW Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy	9.34 54.54 10.20 53.07 2.73	1.9 2.1 10.2 3.8 4.7	2.2 2.4 10.7 3.8 4.7	2.3 2.3 10.0 4.1 5.1	0.6 0.4 1.9 2.0 0.9	0.6 0.4 2.0 2.0 0.9	0.6 0.4 2.2 2.1 1.0	3.0 3.7 10.5 14.0 5.6	6.4 4.5 9.7 12.7 6.0	8.1 4.4 8.9 14.4 5.9	30% 18% 19% 53% 20%	27% 17% 19% 53% 20%	28% 17% 22% 51% 19%	22.8% 3.3% 4.7% 8.3% 4.2%	16.6% 3.3% 5.0% 6.4% 3.8%	16.6% 3.3% 5.4% 5.2% 3.6%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy LW Bogdanka	9.34 54.54 10.20 53.07 2.73 31.40	1.9 2.1 10.2 3.8 4.7 1.0	2.2 2.4 10.7 3.8 4.7	2.3 2.3 10.0 4.1 5.1 1.2	0.6 0.4 1.9 2.0 0.9 0.4	0.6 0.4 2.0 2.0 0.9 0.4	0.6 0.4 2.2 2.1 1.0 0.4	3.0 3.7 10.5 14.0 5.6 3.7	6.4 4.5 9.7 12.7 6.0 4.6	8.1 4.4 8.9 14.4 5.9 5.2	30% 18% 19% 53% 20% 35%	27% 17% 19% 53% 20% 33%	28% 17% 22% 51% 19% 31%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners	9.34 54.54 10.20 53.07 2.73 31.40 19.82	1.9 2.1 10.2 3.8 4.7 1.0	2.2 2.4 10.7 3.8 4.7 1.1 1.3	2.3 2.3 10.0 4.1 5.1 1.2	0.6 0.4 1.9 2.0 0.9 0.4 0.9	0.6 0.4 2.0 2.0 0.9 0.4 1.0	0.6 0.4 2.2 2.1 1.0 0.4 1.0	3.0 3.7 10.5 14.0 5.6 3.7 4.0	6.4 4.5 9.7 12.7 6.0 4.6 3.7	8.1 4.4 8.9 14.4 5.9 5.2 3.6	30% 18% 19% 53% 20% 35% 77%	27% 17% 19% 53% 20% 33% 78%	28% 17% 22% 51% 19% 31% 78%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp	9.34 54.54 10.20 53.07 2.73 31.40 19.82 6.92	1.9 2.1 10.2 3.8 4.7 1.0 1.2	2.2 2.4 10.7 3.8 4.7 1.1 1.3	2.3 2.3 10.0 4.1 5.1 1.2 1.3	0.6 0.4 1.9 2.0 0.9 0.4 0.9	0.6 0.4 2.0 2.0 0.9 0.4 1.0	0.6 0.4 2.2 2.1 1.0 0.4 1.0	3.0 3.7 10.5 14.0 5.6 3.7 4.0 7.4	6.4 4.5 9.7 12.7 6.0 4.6 3.7	8.1 4.4 8.9 14.4 5.9 5.2 3.6	30% 18% 19% 53% 20% 35% 77% 18%	27% 17% 19% 53% 20% 33% 78% 16%	28% 17% 22% 51% 19% 31% 78% 16%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1% 31.5%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1% 7.9%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1% 8.2%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk	9.34 54.54 10.20 53.07 2.73 31.40 19.82 6.92 2330.00	1.9 2.1 10.2 3.8 4.7 1.0 1.2 1.3	2.2 2.4 10.7 3.8 4.7 1.1 1.3 1.6 3.7	2.3 2.3 10.0 4.1 5.1 1.2 1.3 1.5 3.4	0.6 0.4 1.9 2.0 0.9 0.4 0.9 0.2	0.6 0.4 2.0 2.0 0.9 0.4 1.0 0.2	0.6 0.4 2.2 2.1 1.0 0.4 1.0 0.2	3.0 3.7 10.5 14.0 5.6 3.7 4.0 7.4 6.0	6.4 4.5 9.7 12.7 6.0 4.6 3.7	8.1 4.4 8.9 14.4 5.9 5.2 3.6	30% 18% 19% 53% 20% 35% 77% 18% 28%	27% 17% 19% 53% 20% 33% 78% 16% 26%	28% 17% 22% 51% 19% 31% 78% 16% 26%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1% 31.5% 11.9%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1% 7.9% 11.3%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1% 8.2% 10.7%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto	9.34 54.54 10.20 53.07 2.73 31.40 19.82 6.92 2330.00 4240.50	1.9 2.1 10.2 3.8 4.7 1.0 1.2 1.3 3.5	2.2 2.4 10.7 3.8 4.7 1.1 1.3 1.6 3.7 4.1	2.3 2.3 10.0 4.1 5.1 1.2 1.3 1.5 3.4	0.6 0.4 1.9 2.0 0.9 0.4 0.9 0.2 1.0	0.6 0.4 2.0 2.0 0.9 0.4 1.0 0.2 1.0	0.6 0.4 2.2 2.1 1.0 0.4 1.0 0.2 0.9 2.0	3.0 3.7 10.5 14.0 5.6 3.7 4.0 7.4 6.0 8.6	6.4 4.5 9.7 12.7 6.0 4.6 3.7 - 6.5 9.9	8.1 4.4 8.9 14.4 5.9 5.2 3.6 - 6.3 12.0	30% 18% 19% 53% 20% 35% 77% 18% 28% 49%	27% 17% 19% 53% 20% 33% 78% 16% 26% 46%	28% 17% 22% 51% 19% 31% 78% 16% 26% 43%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1% 31.5% 11.9% 0.0%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1% 7.9% 11.3% 0.0%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1% 8.2% 10.7% 0.0%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power	9.34 54.54 10.20 53.07 2.73 31.40 19.82 6.92 2330.00 4240.50 20.00	1.9 2.1 10.2 3.8 4.7 1.0 1.2 1.3 3.5 3.7 5.1	2.2 2.4 10.7 3.8 4.7 1.1 1.3 1.6 3.7 4.1 4.6	2.3 2.3 10.0 4.1 5.1 1.2 1.3 1.5 3.4 4.7 4.3	0.6 0.4 1.9 2.0 0.9 0.4 0.9 0.2 1.0 1.8 2.4	0.6 0.4 2.0 2.0 0.9 0.4 1.0 0.2 1.0	0.6 0.4 2.2 2.1 1.0 0.4 1.0 0.2 0.9 2.0	3.0 3.7 10.5 14.0 5.6 3.7 4.0 7.4 6.0 8.6 7.5	6.4 4.5 9.7 12.7 6.0 4.6 3.7 - 6.5 9.9 6.9	8.1 4.4 8.9 14.4 5.9 5.2 3.6 - 6.3 12.0 6.7	30% 18% 19% 53% 20% 35% 77% 18% 28% 49% 46%	27% 17% 19% 53% 20% 33% 78% 16% 26% 46% 46%	28% 17% 22% 51% 19% 31% 78% 16% 26% 43% 47%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1% 31.5% 11.9% 0.0% 8.1%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1% 7.9% 11.3% 0.0% 8.5%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1% 8.2% 10.7% 0.0% 8.7%
Alliance Res Partners Arch Coal 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	9.34 54.54 10.20 53.07 2.73 31.40 19.82 6.92 2330.00 4240.50 20.00 5.58	1.9 2.1 10.2 3.8 4.7 1.0 1.2 1.3 3.5 3.7 5.1	2.2 2.4 10.7 3.8 4.7 1.1 1.3 1.6 3.7 4.1 4.6 5.2	2.3 2.3 10.0 4.1 5.1 1.2 1.3 1.5 3.4 4.7 4.3 5.1	0.6 0.4 1.9 2.0 0.9 0.4 0.9 0.2 1.0 1.8 2.4	0.6 0.4 2.0 2.0 0.9 0.4 1.0 0.2 1.0 1.9 2.1	0.6 0.4 2.2 2.1 1.0 0.4 1.0 0.2 0.9 2.0 2.0	3.0 3.7 10.5 14.0 5.6 3.7 4.0 7.4 6.0 8.6 7.5 8.9	6.4 4.5 9.7 12.7 6.0 4.6 3.7 - 6.5 9.9 6.9	8.1 4.4 8.9 14.4 5.9 5.2 3.6 - 6.3 12.0 6.7 8.7	30% 18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19%	27% 17% 19% 53% 20% 33% 78% 16% 26% 46% 46%	28% 17% 22% 51% 19% 31% 78% 16% 26% 43% 47% 19%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1% 31.5% 11.9% 0.0% 8.1% 3.5%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1% 7.9% 11.3% 0.0% 8.5% 3.5%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1% 8.2% 10.7% 0.0% 8.7% 3.4%
Alliance Res Partners Arch Coal 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	9.34 54.54 10.20 53.07 2.73 31.40 19.82 6.92 2330.00 4240.50 20.00 5.58 1.62	1.9 2.1 10.2 3.8 4.7 1.0 1.2 1.3 3.5 3.7 5.1 5.1	2.2 2.4 10.7 3.8 4.7 1.1 1.3 1.6 3.7 4.1 4.6 5.2	2.3 2.3 10.0 4.1 5.1 1.2 1.3 1.5 3.4 4.7 4.3 5.1 0.8	0.6 0.4 1.9 2.0 0.9 0.4 0.9 0.2 1.0 1.8 2.4 1.0	0.6 0.4 2.0 0.9 0.4 1.0 0.2 1.0 1.9 2.1 1.0	0.6 0.4 2.2 2.1 1.0 0.4 1.0 0.2 0.9 2.0 2.0 1.0	3.0 3.7 10.5 14.0 5.6 3.7 4.0 7.4 6.0 8.6 7.5 8.9	6.4 4.5 9.7 12.7 6.0 4.6 3.7 - 6.5 9.9 6.9 8.9 6.5	8.1 4.4 8.9 14.4 5.9 5.2 3.6 - 6.3 12.0 6.7 8.7 7.1	30% 18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19% 54%	27% 17% 19% 53% 20% 33% 78% 16% 26% 46% 46% 19% 54%	28% 17% 22% 51% 19% 31% 78% 16% 26% 43% 47% 19%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1% 31.5% 11.9% 0.0% 8.1% 3.5% 7.4%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1% 7.9% 11.3% 0.0% 8.5% 3.5% 7.3%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1% 8.2% 10.7% 0.0% 8.7% 3.4% 5.8%
Alliance Res Partners Arch Coal 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	9.34 54.54 10.20 53.07 2.73 31.40 19.82 6.92 2330.00 4240.50 20.00 5.58 1.62 0.98	1.9 2.1 10.2 3.8 4.7 1.0 1.2 1.3 3.5 3.7 5.1 0.7	2.2 2.4 10.7 3.8 4.7 1.1 1.3 1.6 3.7 4.1 4.6 5.2 0.7	2.3 2.3 10.0 4.1 5.1 1.2 1.3 1.5 3.4 4.7 4.3 5.1 0.8 2.2	0.6 0.4 1.9 2.0 0.9 0.4 0.9 0.2 1.0 1.8 2.4 1.0 0.4	0.6 0.4 2.0 0.9 0.4 1.0 0.2 1.0 1.9 2.1 1.0 0.4	0.6 0.4 2.2 2.1 1.0 0.4 1.0 0.2 0.9 2.0 2.0 1.0 0.4 0.5	3.0 3.7 10.5 14.0 5.6 3.7 4.0 7.4 6.0 8.6 7.5 8.9 7.0 2.6	6.4 4.5 9.7 12.7 6.0 4.6 3.7 - 6.5 9.9 6.9 8.9 6.5 3.8	8.1 4.4 8.9 14.4 5.9 5.2 3.6 - 6.3 12.0 6.7 8.7 7.1 5.9	30% 18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19% 54% 38%	27% 17% 19% 53% 20% 33% 78% 16% 26% 46% 46% 19% 54%	28% 17% 22% 51% 19% 31% 78% 16% 26% 43% 47% 19% 49% 21%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1% 31.5% 11.9% 0.0% 8.1% 3.5% 7.4% 9.0%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1% 7.9% 11.3% 0.0% 8.5% 3.5% 7.3% 6.9%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1% 8.2% 0.0% 8.7% 3.4% 5.8% 6.6%
Alliance Res Partners Arch Coal 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	9.34 54.54 10.20 53.07 2.73 31.40 19.82 6.92 2330.00 4240.50 20.00 5.58 1.62 0.98 13.48	1.9 2.1 10.2 3.8 4.7 1.0 1.2 1.3 3.5 3.7 5.1 0.7 1.1 2.7	2.2 2.4 10.7 3.8 4.7 1.1 1.3 1.6 3.7 4.1 4.6 5.2 0.7 1.5 2.9	2.3 2.3 10.0 4.1 5.1 1.2 1.3 1.5 3.4 4.7 4.3 5.1 0.8 2.2 2.9	0.6 0.4 1.9 2.0 0.9 0.4 0.9 0.2 1.0 1.8 2.4 1.0 0.4	0.6 0.4 2.0 0.9 0.4 1.0 0.2 1.0 1.9 2.1 1.0 0.4 0.4	0.6 0.4 2.2 2.1 1.0 0.4 1.0 0.2 0.9 2.0 2.0 1.0 0.4 0.5	3.0 3.7 10.5 14.0 5.6 3.7 4.0 7.4 6.0 8.6 7.5 8.9 7.0 2.6 5.4	6.4 4.5 9.7 12.7 6.0 4.6 3.7 - 6.5 9.9 6.9 8.9 6.5 3.8 5.7	8.1 4.4 8.9 14.4 5.9 5.2 3.6 - 6.3 12.0 6.7 8.7 7.1 5.9	30% 18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19% 54% 38% 39%	27% 17% 19% 53% 20% 33% 78% 16% 26% 46% 46% 19% 54% 28% 39%	28% 17% 22% 51% 19% 31% 78% 16% 26% 43% 49% 49% 21% 38%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1% 31.5% 11.9% 0.0% 8.1% 3.5% 7.4% 9.0%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1% 7.9% 0.0% 8.5% 3.5% 7.3% 6.9% 2.5%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1% 8.2% 10.7% 0.0% 8.7% 3.4% 5.8% 6.6% 5.2%
Alliance Res Partners Arch Coal 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	9.34 54.54 10.20 53.07 2.73 31.40 19.82 6.92 2330.00 4240.50 20.00 5.58 1.62 0.98 13.48 0.31	1.9 2.1 10.2 3.8 4.7 1.0 1.2 1.3 3.5 3.7 5.1 5.1 0.7 1.1 2.7 1.3	2.2 2.4 10.7 3.8 4.7 1.1 1.3 1.6 3.7 4.1 4.6 5.2 0.7 1.5 2.9	2.3 2.3 10.0 4.1 5.1 1.2 1.3 1.5 3.4 4.7 4.7 4.3 5.1 0.8 2.2 2.9 1.6	0.6 0.4 1.9 2.0 0.9 0.4 0.9 0.2 1.0 1.8 2.4 1.0 0.4 1.1	0.6 0.4 2.0 2.0 0.9 0.4 1.0 0.2 1.0 1.9 2.1 1.0 0.4 0.4	0.6 0.4 2.2 2.1 1.0 0.4 1.0 0.2 0.9 2.0 2.0 0.4 0.5 1.1	3.0 3.7 10.5 14.0 5.6 3.7 4.0 7.4 6.0 8.6 7.5 8.9 7.0 2.6 5.4 2.3	6.4 4.5 9.7 12.7 6.0 4.6 3.7 - 6.5 9.9 6.9 6.5 3.8 5.7 4.4	8.1 4.4 8.9 14.4 5.9 5.2 3.6 - 6.3 12.0 6.7 7.1 5.9 5.9	30% 18% 19% 53% 20% 35% 77% 18% 28% 49% 46% 19% 54% 38% 39% 30%	27% 17% 19% 53% 20% 33% 78% 16% 26% 46% 46% 54% 28% 39% 22%	28% 17% 22% 51% 19% 31% 78% 16% 26% 43% 47% 49% 21% 38% 23%	22.8% 3.3% 4.7% 8.3% 4.2% 3.5% 9.1% 31.5% 11.9% 0.0% 8.1% 9.0% 2.0%	16.6% 3.3% 5.0% 6.4% 3.8% 6.0% 9.1% 7.9% 11.3% 0.0% 8.5% 3.5% 7.3% 6.9% 2.5% 6.6%	16.6% 3.3% 5.4% 5.2% 3.6% 6.4% 9.1% 8.2% 10.7% 0.0% 8.7% 3.4% 5.8% 6.6% 5.2% 9.8%

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	4.48	4.6	4.6	4.7	1.5	1.6	1.6	31.3	32.0	28.9	34%	34%	34%	0.0%	0.0%	8.9%
Orange Polska	7.25	5.5	5.7	5.1	1.6	1.6	1.5	34.1	37.4	20.6	29%	28%	29%	0.0%	0.0%	3.4%
Play	36.78	6.6	6.5	6.0	2.3	2.3	2.2	10.6	9.7	9.6	34%	36%	36%	3.9%	3.9%	3.9%
Median		5.5	5.7	5.1	1.6	1.6	1.6	31.3	32.0	20.6	34%	34%	34%	0%	0.0%	3.9%
Mid Caps																
Proximus	26.17	5.9	6.0	6.0	2.0	2.0	2.0	15.4	15.3	15.6	33%	33%	33%	5.8%	5.9%	6.0%
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	13.50	5.6	5.4	5.3	1.9	1.9	1.9	18.8	15.3	13.4	35%	35%	36%	4.2%	4.5%	4.9%
Matav	456.00	4.3	4.3	4.3	1.3	1.3	1.3	10.2	9.5	9.1	31%	31%	31%	5.7%	6.1%	6.7%
Telecom Austria	7.13	5.2	5.1	5.0	1.8	1.8	1.7	11.4	10.7	10.2	34%	34%	35%	3.0%	3.3%	3.9%
Median		5.6	5.4	5.3	1.9	1.9	1.9	14.3	14.7	13.4	33%	33%	33%	5.7%	5.9%	6.0%
Big Caps																
BT	175.34	3.8	3.7	3.6	1.2	1.2	1.2	6.7	7.2	7.0	32%	34%	34%	0.0%	0.0%	0.0%
DT	14.85	5.4	5.1	4.9	1.7	1.7	1.6	14.8	13.5	12.0	32%	33%	33%	4.9%	5.2%	5.5%
KPN	2.55	7.1	6.9	6.6	3.0	3.1	3.1	21.9	18.9	16.0	43%	44%	47%	5.2%	5.5%	5.8%
Orange France	12.96	5.0	4.9	4.8	1.5	1.5	1.5	12.5	11.7	10.9	31%	31%	31%	5.5%	5.8%	6.1%
Swisscom	537.40	8.4	8.4	8.3	3.2	3.2	3.2	18.7	19.0	19.0	38%	38%	38%	4.1%	4.1%	4.1%
Telefonica S.A.	6.20	5.1	5.1	5.0	1.8	1.8	1.8	9.2	8.6	7.9	34%	34%	35%	6.5%	6.5%	6.6%
Telia Company	41.83	8.7	8.5	8.3	3.0	3.0	3.0	17.8	16.2	15.0	35%	35%	36%	5.8%	6.0%	6.1%
TI	0.52	4.6	4.6	4.6	1.9	1.9	1.9	8.3	8.1	7.8	42%	42%	42%	0.0%	0.0%	0.0%
Median		5.3	5.1	4.9	1.9	1.9	1.9	13.6	12.6	11.4	35%	35%	35%	5.1%	5.3%	5.6%

Media 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
Polish companies																
Agora	12.50	7.4	7.0	6.6	1.0	1.0	1.0	59.6	31.8	21.0	14%	14%	15%	4.0%	4.0%	4.0%
Wirtualna Polska	79.40	13.8	10.9	9.8	3.7	3.2	2.9	30.7	21.3	18.7	27%	29%	29%	1.3%	1.5%	2.4%
Median		10.6	9.0	8.2	2.3	2.1	1.9	45.2	26.5	19.9	20%	22%	22%	2.6%	2.8%	3.2%
Daily Mail																
Arnolgo Mondadori	1.90	6.7	6.2	6.1	0.7	0.7	0.7	13.5	12.3	12.4	10%	11%	11%	2.5%	3.1%	2.6%
Axel Springer	63.00	7.9	8.2	7.3	1.8	1.7	1.7	24.3	25.2	21.6	23%	21%	23%	3.4%	3.5%	3.7%
Daily Mail	803.00	9.1	10.0	9.4	1.2	1.3	1.3	21.3	19.8	18.6	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	-	19.8	14.7	8%	9%	10%	1.1%	2.0%	3.9%
New York Times	32.18	23.2	21.0	17.7	2.9	2.7	2.6	42.7	38.8	30.9	12%	13%	15%	0.6%	0.6%	0.7%
Promotora de Inform	1.34	8.6	7.3	6.8	1.8	1.7	1.6	22.7	15.2	9.4	21%	23%	24%	0.0%	0.0%	-
Median		8.3	7.7	7.0	1.5	1.5	1.4	22.7	19.8	16.7	13%	13%	14%	0.9%	1.3%	2.6%
TV																
Atresmedia Corp	3.17	5.1	5.2	5.4	0.9	0.9	0.9	5.8	6.0	6.2	18%	17%	17%	13.7%	13.5%	12.7%
Gestevision Telecinco	5.13	6.2	6.8	7.1	1.6	1.6	1.7	8.6	8.9	9.1	26%	24%	23%	7.9%	8.9%	8.4%
ITV PLC	138.50	9.2	9.0	8.6	2.0	2.0	1.9	10.8	10.5	10.0	22%	22%	22%	0.0%	0.0%	0.0%
M6-Metropole Tel	15.47	5.3	5.1	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	2.46	4.1	4.0	3.7	1.4	1.4	1.4	11.9	10.3	9.8	33%	35%	37%	4.7%	6.4%	6.7%
Prosieben	12.44	5.7	5.5	5.3	1.3	1.2	1.2	6.4	6.1	5.8	23%	22%	22%	8.2%	8.4%	8.0%
TF1-TV Francaise	7.04	3.0	3.0	2.9	0.6	0.6	0.6	8.4	7.7	6.9	20%	20%	21%	6.4%	6.9%	7.6%
Median		5.5	5.3	5.1	1.3	1.3	1.3	9.7	9.6	9.4	24%	23%	23%	6.4%	6.7%	7.2%
Pay TV																
Cogeco	104.96	5.9	5.8	5.7	2.8	2.8	2.7	15.1	13.7	13.7	48%	48%	48%	2.0%	2.2%	2.4%
Comcast	43.32	8.7	8.1	7.9	2.7	2.6	2.5	14.3	12.8	11.8	31%	32%	32%	1.9%	2.1%	2.3%
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	20.61	4.3	4.2	4.2	1.7	1.8	1.8	-	-	-	41%	42%	43%	0.0%	0.0%	0.0%
Shaw Communications	19.80	7.8	7.4	7.1	3.2	3.1	2.9	18.9	19.2	17.9	41%	41%	42%	8.0%	8.0%	8.0%
Median		7.8	7.4	7.1	2.7	2.6	2.5	15.1	16.5	15.8	41%	41%	42%	1.9%	2.1%	2.3%

IT company valuations

II Company var	uations															
		ΕV	//EBITD	A		EV/S			P/E		EBI	ΓDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
Asseco Poland	64.60	5.3	5.1	4.8	0.8	0.8	0.7	16.3	15.8	15.4	15%	15%	15%	4.7%	4.8%	3.5%
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	15.6	15.1	14.6	16%	16%	15%	2.7%	2.7%	2.1%
Foreign companies																
Atos Origin	77.76	7.8	7.5	6.9	1.1	1.1	1.1	9.4	8.6	8.1	14%	15%	15%	2.1%	2.3%	2.5%
CapGemini	115.35	9.2	8.7	8.3	1.4	1.3	1.3	17.6	16.1	14.9	15%	15%	15%	1.6%	1.8%	1.9%
IBM	137.69	9.5	8.9	8.5	2.2	2.1	2.0	10.7	10.2	9.5	23%	24%	24%	4.7%	4.9%	5.1%
Indra Sistemas	10.86	6.8	6.4	6.1	0.7	0.7	0.7	14.5	12.5	11.3	11%	11%	11%	0.8%	1.4%	1.9%
Microsoft	168.04	22.8	19.9	17.8	9.8	8.7	7.9	36.6	32.0	28.3	43%	44%	44%	1.1%	1.2%	1.3%
Oracle	53.20	10.3	10.0	9.7	4.8	4.7	4.6	15.4	13.7	12.6	47%	47%	47%	1.6%	1.8%	1.8%
SAP	120.04	18.7	16.1	14.3	5.7	5.3	4.9	24.6	22.1	19.7	31%	33%	34%	1.3%	1.4%	1.6%
TietoEnator	29.38	10.3	9.2	8.9	1.5	1.3	1.3	15.9	15.4	14.7	14%	14%	14%	4.7%	5.0%	5.3%
Median		9.9	9.1	8.7	1.8	1.7	1.7	15.7	14.5	13.7	19%	19%	20%	1.6%	1.8%	1.9%



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	434.50	27.7	31.1	6.9	12.6	12.4	4.3	43.6	52.0	10.5	45%	40%	63%	0.0%	0.0%	0.0%
CD Projekt	277.30	-	10.2	11.2	60.6	7.8	9.1	-	11.8	13.2	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	60.40	19.4	16.5	15.2	6.8	6.2	5.7	27.5	23.7	21.0	35%	37%	37%	0.6%	0.6%	0.7%
Capcom	3040.00	15.5	14.1	12.6	3.7	4.1	3.7	24.8	20.9	19.6	24%	29%	29%	1.2%	1.3%	1.4%
Take Two	125.91	17.2	17.8	16.7	4.2	4.4	4.4	26.6	26.7	25.6	24%	25%	26%	-	-	-
Ubisoft	69.16	8.0	8.5	7.7	4.0	3.7	3.5	23.4	24.8	21.8	50%	44%	45%	0.0%	0.0%	0.0%
Electronic Arts	112.21	19.5	17.0	15.0	6.2	5.7	5.4	28.6	24.4	22.1	32%	34%	36%	-	0.0%	0.0%
Paradox Interactive	154.90	21.1	16.1	13.5	11.7	9.4	8.3	50.0	38.6	26.2	55%	59%	61%	1.2%	1.5%	1.2%
Mediana		19.4	16.5	13.5	6.8	6.2	5.4	28.0	24.8	21.8	35%	40%	45%	0.6%	0.3%	0.4%

Source: mBank (stocks marked with bold), Bloomberg

Steam Global Top Sellers

Steam Global Top 5	CIICIS								
2020-01-30	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	150	+47	-139	90	110	0%	+2x	72.29
Frostpunk: SP	11 bit studios	61	-14	-17	34	88	0%	0%	88.00
Frostpunk: GOTY	11 bit studios	127	+24	-106	74	178	0%	+50%	144.29
Blair Witch	Bloober Team	200+	-	-	-	-	-	-	-
Cyberpunk 2077	CD Projekt	37	-11	+40	48	199	0%	0%	199.00
The Witcher 3: WH	CD Projekt	109	+22	-71	93	100	0%	0%	80.00
The Witcher 3: WH (GOTY)	CD Projekt	68	-10	-31	34	150	0%	0%	105.00
Green Hell	Creepy Jar	200+	-	-	-	-	-	-	-
Chernobylite	The Farm 51	200+	-	-	-	-	-	-	-
Dying Light	Techland	62	+31	+99	95	100	0%	0%	78.00

Steam Wishlist

2020-01-30	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	54	-	+2	54	2020
Bum Simulator	PlayWay	42	-	-	42	2019
I am Your President	PlayWay	66	-	+3	67	TBA
Junkyard Simulator	PlayWay	51	-	-	51	2019
Ship Builder Simulator	PlayWay	84	-2	-2	82	TBA
Tank Mechanic Simulator	PlayWay	61	-	+2	61	2019
Dying Light 2	Techland	3	-	-	3	Spring 2020

Source: Steam (Valve Corporation), Biuro maklerskie mBanku

Construction company valuations

	EV/EBITDA					EV/S			P/E		EBIT	DA mar	gin		DY		
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	
Construction																	
Acciona	101.40	8.4	8.3	8.0	1.5	1.4	1.4	19.3	19.1	18.0	17%	17%	17%	3.7%	3.9%	4.1%	
Astaldi	0.56	0.4	0.4	0.5	0.0	0.0	0.0	0.7	0.7	0.7	9%	9%	6%	-	-	180%	
Budimex	186.00	11.9	11.6	13.4	0.5	0.5	0.5	28.5	27.7	25.6	4%	5%	4%	5.2%	3.4%	3.1%	
Ferrovial	29.22	-	43.2	39.6	4.5	4.5	4.4	-	47.6	41.8	3%	10%	11%	2.5%	2.6%	2.7%	
Hochtief	108.90	4.1	4.0	3.6	0.3	0.3	0.2	11.6	11.0	10.5	6%	6%	7%	5.5%	5.9%	6.1%	
Mota Engil	1.70	4.1	3.7	-	0.6	0.6	0.5	13.1	8.5	6.1	15%	15%	-	2.7%	6.5%	-	
NCC	158.95	6.7	5.5	5.3	0.3	0.3	0.3	16.8	11.6	10.8	4%	5%	5%	4.0%	4.8%	4.9%	
Skanska	223.50	9.2	9.8	9.3	0.5	0.5	0.5	16.5	16.7	15.7	6%	5%	6%	3.0%	3.2%	3.5%	
Strabag	30.65	2.9	2.9	2.8	0.2	0.2	0.2	9.6	9.8	9.3	6%	6%	6%	4.2%	4.4%	4.7%	
Median		5.4	5.5	6.7	0.5	0.5	0.5	14.8	11.6	10.8	6%	6%	6%	3.8%	4.1%	4.4%	

Real-estate developers

	EV/EBITDA					P/BV		P/E			EBITDA margin				DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
RE Developers																
Atal	41.50	10.8	8.5	6.9	2.0	1.9	1.7	11.1	9.1	7.1	24%	23%	23%	11.3%	8.3%	10.0%
Dom Development	96.00	7.8	7.8	7.6	2.2	2.2	2.2	9.5	8.9	8.4	19%	20%	20%	9.4%	10.5%	11.3%
Develia	2.69	6.6	11.7	12.2	-	-	-	-	-	-	30%	28%	16%	14.1%	16.4%	12.1%
Echo Investment	5.15	9.5	12.1	12.6	1.4	1.3	1.2	8.1	8.1	11.2	55%	43%	36%	8.5%	8.3%	6.2%
GTC	9.43	16.0	14.8	14.2	1.0	1.0	0.9	11.2	10.3	9.9	83%	82%	79%	0.2%	0.2%	0.3%
CA Immobilien Anlagen	39.50	30.4	26.6	24.4	1.3	1.3	1.2	31.5	27.7	25.0	70%	65%	62%	2.4%	2.7%	2.8%
Deutsche Euroshop AG	24.68	15.2	15.2	15.3	0.7	0.7	0.7	13.8	13.4	12.9	88%	88%	88%	6.3%	6.4%	6.5%
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	31.66	20.6	19.9	19.5	0.9	0.9	1.0	11.8	11.4	11.1	83%	86%	86%	6.9%	7.1%	7.3%
Segro	908.60	39.6	35.6	32.6	1.3	1.2	1.1	36.9	34.0	31.7	77%	80%	82%	0.0%	0.0%	0.0%
Median		15.6	15.0	14.7	1.3	1.2	1.1	11.8	11.4	11.2	62%	61%	59%	6.6%	6.8%	6.4%



Clothing and footwear company valuations

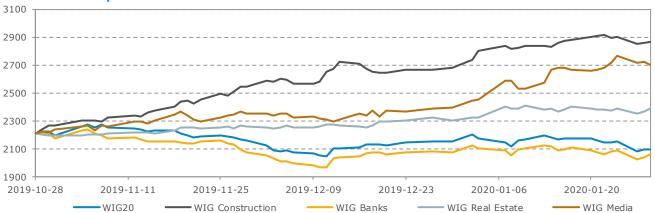
		EV/EBITDA				EV/S			P/E		EBIT	ΓDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
CCC	89.10	5.2	4.0	3.4	0.8	0.7	0.6	-	18.7	12.4	15%	17%	17%	0.5%	2.2%	2.2%
LPP	8535.00	10.7	9.1	7.8	1.6	1.4	1.2	25.3	18.7	14.9	15%	15%	15%	0.7%	0.5%	0.8%
VRG	3.76	4.6	4.2	3.7	0.9	0.8	0.7	14.5	12.0	10.8	19%	19%	19%	0.0%	0.0%	0.0%
Median		5.2	4.2	3.7	0.9	0.8	0.7	19.9	18.7	12.4	15%	17%	17%	0.5%	0.5%	0.8%
Foreign companies																
ABC Mart	7020.00	9.4	9.2	8.7	1.7	1.6	1.6	19.0	18.6	17.8	18%	18%	18%	2.3%	2.4%	2.4%
Adidas	296.30	16.8	15.4	13.8	2.5	2.3	2.2	30.2	26.7	23.2	15%	15%	16%	1.3%	1.5%	1.7%
Assoc Brit Foods	2643.00	10.1	9.5	9.0	1.3	1.2	1.2	19.4	18.0	16.7	13%	13%	13%	0.0%	0.0%	0.0%
Caleries	18.76	4.2	3.9	3.6	0.3	0.3	0.3	8.2	7.8	7.0	7%	7%	8%	1.5%	1.5%	1.5%
Crocs	40.60	18.4	15.9	14.8	2.4	2.2	2.1	29.3	25.5	21.5	13%	14%	14%	-	-	-
Foot Locker	39.29	3.9	3.9	3.8	0.4	0.4	0.4	8.6	7.9	7.6	11%	11%	11%	3.5%	3.9%	4.3%
Geox	1.10	5.2	4.2	2.8	0.4	0.3	0.3	-	20.8	13.8	7%	8%	11%	1.8%	3.0%	5.5%
H&M	189.66	10.3	9.6	9.1	1.2	1.2	1.1	24.0	22.1	20.6	12%	12%	12%	5.1%	5.0%	5.0%
Hugo Boss	43.94	5.6	5.3	5.0	1.1	1.0	1.0	12.5	11.3	10.4	19%	19%	20%	6.3%	6.9%	7.4%
Inditex	31.03	16.1	12.0	11.4	3.4	3.2	3.0	27.8	25.4	23.7	21%	27%	26%	2.6%	3.4%	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	243.66	35.1	29.3	25.3	8.9	7.5	6.5	65.0	51.4	43.3	25%	26%	26%	0.0%	0.0%	0.0%
Nike	99.84	21.9	19.8	17.3	3.2	2.9	2.7	38.7	33.6	29.0	15%	15%	16%	0.8%	0.9%	1.0%
Under Armour	21.00	9.7	8.0	6.4	0.8	0.7	0.7	62.1	44.0	32.5	8%	9%	11%	0.0%	0.0%	0.0%
Median		9.9	9.3	8.9	1.3	1.2	1.1	24.0	21.4	19.2	13%	13%	13%	1.8%	2.4%	2.4%

Luxury, e-commerce, and food retail company valuations

		EV	//EBITD	Ą		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Luxury goods																
Estee Lauder	198.73	14.4	12.8	11.7	3.0	2.8	2.6	37.9	33.2	29.8	21%	22%	22%	0.8%	0.9%	1.0%
Hermes Internetional	690.00	26.5	24.2	22.2	10.2	9.4	8.7	47.9	43.3	39.3	39%	39%	39%	0.8%	1.0%	1.0%
Kering	568.00	13.5	12.4	11.7	4.7	4.3	4.0	22.8	20.0	18.5	35%	35%	35%	2.0%	2.3%	2.5%
LVMH	407.60	14.9	13.7	12.8	4.0	3.7	3.5	28.1	25.4	23.3	27%	27%	27%	1.7%	1.9%	2.1%
Moncler	40.37	16.9	15.0	13.5	6.0	5.3	4.8	27.7	25.8	23.2	36%	36%	36%	1.1%	1.3%	1.5%
Median		14.9	13.7	12.8	4.7	4.3	4.0	28.1	25.8	23.3	35%	35%	35%	1.1%	1.3%	1.5%
E-commerce																
Asos	3048.00	23.1	16.1	12.4	1.0	0.8	0.7	-	50.6	34.3	4%	5%	6%	0.0%	0.0%	0.0%
boohoo.com	306.00	42.0	29.7	23.7	4.1	2.9	2.3	-	58.8	45.7	10%	10%	10%	0.0%	0.0%	0.0%
Zalando	43.95	29.1	23.6	18.5	1.6	1.4	1.2	-	-	64.8	6%	6%	6%	0.0%	0.0%	0.0%
Median		29.1	23.6	18.5	1.6	1.4	1.2	-	54.7	45.7	6%	6%	6%	0.0%	0.0%	0.0%
Retail																
Dino	158.70	22.6	17.2	13.2	2.1	1.6	1.3	38.3	28.4	21.4	9%	9%	10%	0.0%	0.0%	0.0%
Eurocash	19.01	7.1	6.7	6.3	0.1	0.1	0.1	64.5	38.4	26.6	2%	2%	2%	5.4%	3.1%	4.0%
Jeronimo Martins	15.53	9.6	8.8	8.3	0.6	0.5	0.5	22.1	19.8	18.9	6%	6%	6%	1.8%	1.8%	1.9%
Carrefour	15.57	5.0	4.5	4.2	0.2	0.2	0.2	13.6	11.7	10.9	5%	5%	5%	3.3%	3.7%	3.8%
AXFood	200.80	10.3	10.0	9.8	0.9	0.9	0.8	25.7	25.1	24.7	9%	9%	9%	3.5%	3.5%	3.3%
Tesco	246.10	7.8	5.5	5.3	0.4	0.4	0.4	17.3	14.5	13.4	5%	8%	8%	0.0%	0.0%	0.0%
Ahold	22.53	6.6	6.4	6.3	0.5	0.5	0.5	13.9	13.0	12.3	8%	8%	8%	3.3%	3.6%	3.8%
X 5 Retail	2264.50	6.3	5.7	5.3	0.5	0.4	0.4	15.5	13.8	12.6	7%	7%	7%	4.7%	5.7%	6.6%
Magnit	3819.50	5.7	5.0	4.5	0.4	0.4	0.3	14.8	11.5	8.6	7%	7%	7%	5.7%	6.0%	7.0%
Sonae	0.85	9.5	9.0	6.9	0.8	0.7	0.7	11.7	10.0	10.3	8%	8%	10%	5.2%	5.6%	5.8%
Median		7.4	6.5	6.3	0.5	0.5	0.4	16.4	14.1	13.0	7%	7%	7%	3.4%	3.6%	3.8%

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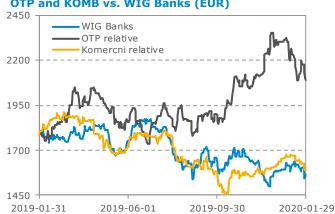
WIG sector index performance



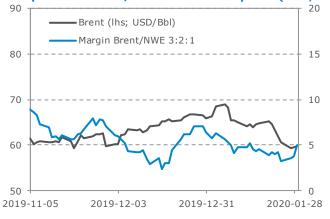
WIG IT vs. MSCI Europe Software & Services (USD)



OTP and KOMB vs. WIG Banks (EUR)



Brent price and Brent/NWE 3:2:1 crack spread (USD, rhs)



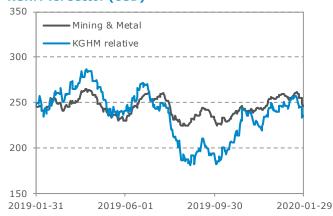
Orange Polska vs. BETELES (EUR)



LME copper prices



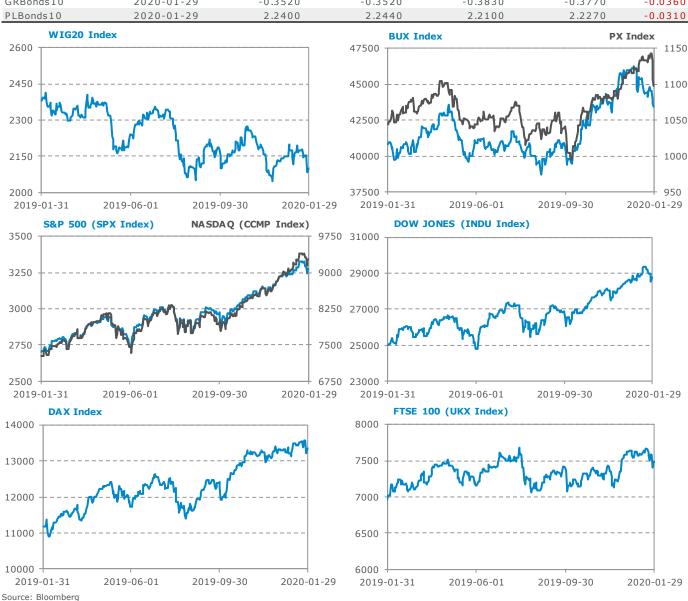
KGHM vs. sector (USD)



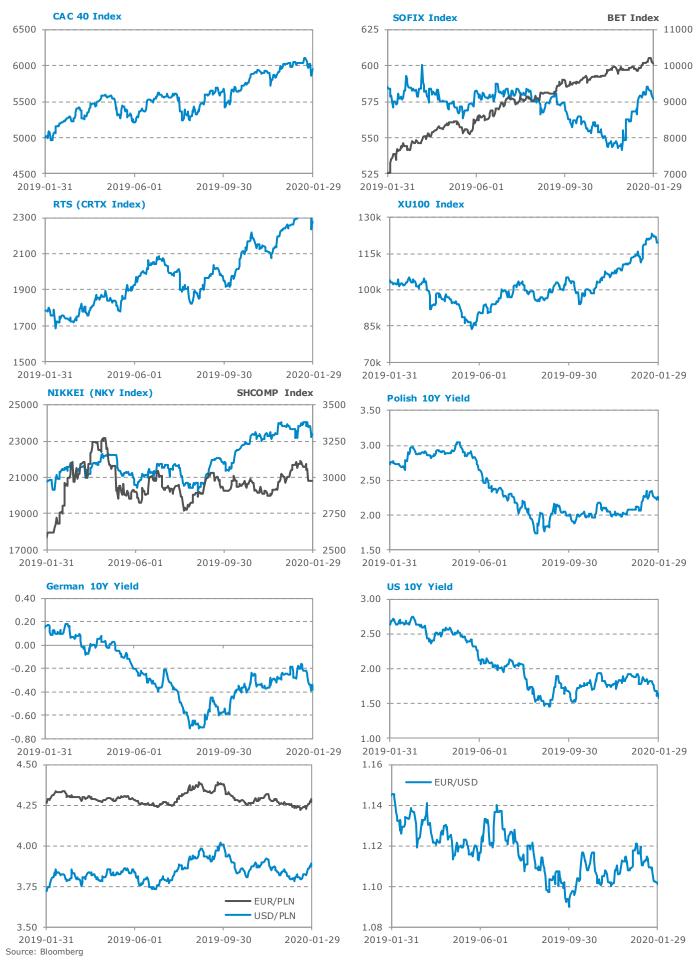
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Global Market Overview

Index	Date	Open	Maximum	Minimum	Close	Change
DJIA	2020-01-29	28,820.53	28,944.24	28,728.19	28,734.45	+0.04%
S&P 500	2020-01-29	3,289.46	3,293.47	3,271.89	3,273.40	-0.09%
NASDAQ	2020-01-29	9,318.26	9,329.11	9,249.04	9,275.16	+0.06%
DAX	2020-01-29	13,316.42	13,371.30	13,296.03	13,345.00	+0.16%
CAC 40	2020-01-29	5,921.97	5,969.73	5,916.23	5,954.89	+0.49%
FTSE 100	2020-01-29	7,480.69	7,514.73	7,462.21	7,483.57	+0.04%
WIG20	2020-01-29	2,099.30	2,114.31	2,090.41	2,098.18	+0.01%
BUX	2020-01-29	43,667.66	43,821.06	43,431.17	43,431.30	-0.56%
PX	2020-01-29	1,107.36	1,111.50	1,090.64	1,097.59	-0.89%
RTS	2020-01-29	2,281.80	2,297.61	2,260.25	2,272.80	-0.16%
SOFIX	2020-01-29	578.05	580.36	572.68	576.51	-0.27%
BET	2020-01-29	10,091.08	10,128.28	10,049.31	10,050.70	-0.40%
XU100	2020-01-29	120,585.90	120,740.70	119,505.80	119,689.50	-0.09%
BETELES	2020-01-29	132.65	133.03	132.00	132.15	-0.34%
NIKKEI	2020-01-29	23,309.32	23,392.61	23,214.28	23,379.40	+0.71%
SHCOMP	2020-01-23	3,037.95	3,045.04	2,955.35	2,976.53	-2.75%
Copper (LME)	2020-01-29	5,707.00	5,757.00	5,641.00	5,641.00	-1.09%
Crude Oil (Brent)	2020-01-29	59.25	59.79	58.36	58.79	-0.91%
USD/PLN	2020-01-29	3.8737	3.8988	3.8731	3.8927	+0.49%
EUR/PLN	2020-01-29	4.2702	4.2867	4.2699	4.2860	+0.37%
EUR/USD	2020-01-29	1.1022	1.1028	1.0992	1.1010	-0.11%
USBonds10	2020-01-29	1.6476	1.6649	1.5771	1.5839	-0.0723
GRBonds10	2020-01-29	-0.3520	-0.3520	-0.3830	-0.3770	-0.0360
PLBonds10	2020-01-29	2.2400	2.2440	2.2100	2.2270	-0.0310



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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

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.

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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.

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