Investor Activity on GPW Markets in November 2020 (attachment)

Equities Market¹

Main Market	November 2020	November 2019	Change %	January- November 2020	January- November 2019	Change %
		Total				
Furnover value - total (PLN)	31,290,626,882	15,385,373,154	103.4	275,879,465,477	181,310,220,304	52.2
Furnover value - Electronic Order Book (PLN)	30,633,999,968	15,209,755,251	101.4	262,778,304,191	177,704,544,993	47.9
Furnover value - block trades (PLN)	656,626,914	175,617,904	273.9	13,101,161,287	3,605,675,311	263.3
Number of transactions (Electronic Order Book)	3,174,391	1,424,082	122.9	30,079,576	16,558,106	81.3
WIG at the end of the period	52,639.45	57,502.14	-8.5	52,639.45	57,502.14	-8.5
	D	ay avarage				
Furnover value - Electronic Order Book (PLN)	1,531,699,998	800,513,434	91.3	1,132,665,104	772,628,456	46.6
Furnover value - block trades (PLN)	32,831,346	9,243,048	255.2	56,470,523	15,676,849	260.2
					74.000	00.1
Number of transactions (Electronic Order Book)	158,720	74,952	111.8	129,653	71,992	80.1
Number of transactions (Electronic Order Book) NewConnect	158,720 November 2020	74,952 November 2019	111.8 Change %	January- November 2020	January- November 2019	
, , , , , , , , , , , , , , , , , , ,				January-	January-	80.1 Change %
NewConnect		November 2019 Total	Change %	January-	January- November 2019	Change %
, , , , , , , , , , , , , , , , , , ,	November 2020	November 2019 Total 146,483,151	Change % 926.0	January- November 2020	January- November 2019 1,402,996,322	Change %
NewConnect Furnover value - total (PLN) Furnover value - Electronic Order Book (PLN)	November 2020 1,502,868,514	November 2019 Total 146,483,151	Change % 926.0 942.2	January- November 2020 13,760,258,344	January- November 2019 1,402,996,322	Change %
NewConnect Furnover value - total (PLN) Furnover value - Electronic Order Book (PLN) Furnover value - block trades (PLN)	November 2020 1,502,868,514 1,496,936,240	November 2019 Total 146,483,151 143,630,308	Change % 926.0 942.2	January- November 2020 13,760,258,344 13,578,397,739	January- November 2019 1,402,996,322 1,333,911,014 69,085,309	Change %
NewConnect urnover value - total (PLN) urnover value - Electronic Order Book (PLN) urnover value - block trades (PLN) Number of transactions (Electronic Order Book)	November 2020 1,502,868,514 1,496,936,240 5,932,274	November 2019 Total 146,483,151 143,630,308 2,852,843	Change % 926.0 942.2 107.9	January- November 2020 13,760,258,344 13,578,397,739 181,860,605	January- November 2019 1,402,996,322 1,333,911,014 69,085,309	Change % 880.8 917.9 163.2
NewConnect Furnover value - total (PLN) Turnover value - Electronic Order Book (PLN) Turnover value - block trades (PLN) Number of transactions (Electronic Order Book)	November 2020 1,502,868,514 1,496,936,240 5,932,274 460,097 516.60	November 2019 Total 146,483,151 143,630,308 2,852,843 90,023	Change % 926.0 942.2 107.9 411.1	January- November 2020 13,760,258,344 13,578,397,739 181,860,605 4,607,110	January- November 2019 1,402,996,322 1,333,911,014 69,085,309 754,504	Change % 880.8 917.9 163.2 510.6
NewConnect Furnover value - total (PLN) Furnover value - Electronic Order Book (PLN) Furnover value - block trades (PLN) Number of transactions (Electronic Order Book) NCIndex at the end of the period	November 2020 1,502,868,514 1,496,936,240 5,932,274 460,097 516.60	November 2019 Total 146,483,151 143,630,308 2,852,843 90,023 234,42	Change % 926.0 942.2 107.9 411.1 120.4	January- November 2020 13,760,258,344 13,578,397,739 181,860,605 4,607,110	January- November 2019 1,402,996,322 1,333,911,014 69,085,309 754,504 234.42	Change % 880.1 917.1 163.1 510.1 120.4
NewConnect Furnover value - total (PLN)	November 2020 1,502,868,514 1,496,936,240 5,932,274 460,097 5,510,000 0,000000	November 2019 Total 146,483,151 143,630,308 2,852,843 90,023 234,22 ay avarage	Change % 926.0 942.2 107.9 411.1 120.4 890.1	January- November 2020 13,760,258,344 13,578,397,739 181,860,605 4,607,110 516.60	January- November 2019 1,402,996,322 1,333,911,014 69,085,309 754,504 234.42	Change % 880.1 917.1 163.1 510.1 120.4

97.5 385.5

19,858

4.73

161.0 505.4

3,28

296,614 23,005

Number of transactions (Electronic Order Book)

Derivatives	November 2020	November 2019	Change %	January- November 2020	January- November 2019	Change %
	· · · · ·	Total				
Volume - EOB and block trades (#)	1,009,919	456,560	121.2	10,161,321	6,334,895	60.4
Index futures	568,822	227,859	149.6	5,662,839	3,546,508	59.7
Single-stock futures	257,950	149,172	72.9	2,219,930	1,311,749	69.2
Currency futures	145,955	63,101	131.3	1,933,531	1,250,669	54.6
Interest rate futures	0	0		0	10	-100.0
Options	37,192	16,428	126.4	345,021	225,959	52.7
	D	ay avarage				
	Volume - EO	B and block trades (#)			
Index futures	28,441	11,993	137.1	24,409	15,420	58.3
Single-stock futures	12,898	7,851	64.3	9,569	5,703	67.8
Currency futures	7,298	3,321	119.8	8,334	5,438	53.3
Interest rate futures	0	0		0	0	
Options	1,860	865	115.0	1,487	982	51.4
		NOI ²				
Index futures	45,889	60,518	-24.2	45,889	60,518	-24.2
Single-stock futures	46,925	41,427	13.3	46,925	41,427	13.3
Currency futures	159,265	95,552	66.7	159,265	95,552	66.7
Interest rate futures	0	4	-100.0	0	4	-100.0
Options	25,970	21,100	23.1	25,970	21,100	23.1

Debt Instruments Market

Catalyst ³	November 2020	November 2019	Change %	January- November 2020	January- November 2019	Change %
Value of listed issues (PLN bn) ⁴	97.2	91.3	6.4	97.2	91.3	6.4
Turnover value - total (PLN)	230,897,916	171,212,548	34.9	2,554,410,394	2,712,249,625	-5.8
Turnover value - Electronic Order Book (PLN)	224,725,574	164,190,184	36.9	2,450,815,974	2,548,289,247	-3.8
Turnover value - block trades (PLN)	6,172,342	7,022,364	-12.1	103,594,420	163,960,378	-36.8
Number of transactions (Electronic Order Book)	5,498	5,942	-7.5	75,604	74,559	1.4

Treasury BondSpot Poland ⁵	November 2020	November 2019	Change %	January- November 2020	January- November 2019	Change %
Turnover value - cash transactions (PLN)	2,575,699,500	5,003,262,675	-48.5	32,117,794,725	84,116,643,675	-61.8
Turnover value - conditional transactions (PLN)	18,053,769,097	9,501,806,030	90.0	120,065,461,115	184,489,011,123	-34.9

Structured products and ETFs	November 2020	November 2019	Change %	January- November 2020	January- November 2019	Change %	
Value - EOB and block trades (PLN)							
Structured products	186,876,083	133,875,278	39.6	2,522,598,987	1,193,524,938	111.4	
Investment certificates	4,364,013	5,453,636	-20.0	50,001,964	51,391,926	-2.7	
Warrants	0	0		0	0		
ETFs	71,426,875	19,959,818	257.9	696,630,974	154,264,837	351.6	

Electricity - TGE	November 2020	November 2019	Change %	January- November 2020	January- November 2019	Change %
Volume of trading - spot transactions (MWh)	3,022,749	2,833,801	6.7	31,569,462	30,696,457	2.8
Volume of trading - forward transactions (MWh)	16,594,135	19,508,683	-14.9	193,860,619	182,867,702	6.0
Property rights - TGE	November 2020	November 2019	Change %	January-	January-	Change %
Property rights - TGE	November 2020		Change %	November 2020	November 2019	Change %
Volume of trading - spot transactions (MWh) ⁶	November 2020 1,984,861				November 2019	
Volume of trading - spot transactions (MWh) ⁶				November 2020	November 2019	
Property rights - TGE Volume of trading - spot transactions (MWh) ⁶ Volume of trading - forward transactions (MWh) Volume of trading - spot transactions (toe) ⁷		1,609,540	- 23.3	November 2020	November 2019	-41.
Volume of trading - spot transactions (MWh) ⁶ Volume of trading - forward transactions (MWh)	1,984,861	1,609,540	- 23.3	November 2020 24,209,286 0	November 2019 41,174,043	-41

Gas - TGE	November 2020	November 2019	Change %	November 2020	November 2019	Change %
Volume of trading - spot transactions (MWh)	3,160,430	2,590,071	22.0	21,628,184	19,730,323	9.6
Volume of trading - forward transactions (MWh)	8,774,678	8,813,033	-0.4	114,805,177	111,569,602	2.9

Rejestr Gwarancji Pochodzenia (energia elektryczna)	November 2020	November 2019	Change %	January- November 2020	January- November 2019	Change %
Volume OZE (MWh)	1,565,713	1,524,566	2.7	16,081,394	17,127,167	-6.1
Volume cogeneration (MWh)	0	0	-	0	0	-

1 transactions in shares, allotment certificates and subscription rights

² number of open interest, data at the end of the period ³ corporate, municipal and mortgage bonds

⁴ corporate, municipal and mortgage bonds. As of 3rd of January 2018 BGK bonds are treated as Treasury bonds and hence the value of corporate bonds shown is lower and cannot be compared with previous tables. January 2017 has been recalculated according to MiFID2
⁵ transactions in Treasury bonds and bills
⁶ transactions in all TGE traded property rights excluding rights to certificates connected with energy efficiency ('white certificates')

As of December 29, 2017, trading in futures contracts for property rights for electricity generated in RES was suspended. The necessity to end trading in these contracts on TGE is related to the adaptation of TGE's activities to the MIFID2 regime. ⁷ transactions in property rights to certificates connected with energy efficiency ('white certificates')