2017

Report of the Management Board on the Activity of the Parent Entity and the Giełda Papierów Wartościowych w Warszawie Group in 2017

February 2018

Giełda Papierów Wartościowych w Warszawie S.A. - Warsaw Stock Exchange

registered address: ul. Książęca 4, 00-498 Warsaw, Poland, registered by the District Court for the City of Warsaw in Warsaw, entry no. KRS 82312, share capital of PLN 41,972,000 fully paid up. VAT no. 526-025-09-72, LEI code: 25940039ZHD3Z37GKR71

This document presents the Report of the Management Board of Giełda Papierów Wartościowych w Warszawie S.A. ("Warsaw Stock Exchange", "GPW", "Exchange", "parent entity") on the activity of the Parent Entity and Giełda Papierów Wartościowych w Warszawie Group ("GPW Group" or "Group") in 2017. The document includes a report on the activity of the parent entity.

The source of data presented in this Report is the GPW Group, unless indicated otherwise.

Statistics of the value and volume of trading are single-counted, unless indicated otherwise.

I. For the Shareholders

Letter of the President of the Management Board

Dear Shareholders and Investors,

It is with great pleasure that I present this Report of the GPW Management Board on the activity of the Giełda Papierów Wartościowych w Warszawie Group (GPW Group) and the separate and consolidated financial statements for 2017.

There is no doubt that 2017 was a good year for GPW and the capital market and generated gains for investors and issuers alike. Particularly memorable are large IPOs and the rebound of exchange indices to the levels from before the financial crisis, hitting historical highs, which were once again beaten in January 2018 (the oldest GPW index WIG reached 67,933.05 points at the session on 23 January 2018, beating the previous record of 67,568.51 points set on 6 July 2007). According to Bloomberg, WIG20 generated one of the best returns among global exchanges at 55 percent in 2017. The turnover on the GPW stock market increased by 28 percent in 2017 (EUR 55.8 billion according to FESE), which ranks GPW first in Europe, ahead of the stock exchanges in Bucharest and Vienna, and ahead of Deutsche Boerse and Euronext as well.

When I joined the Group as President of the GPW Management Board in the autumn of 2017, the company's financial standing was excellent. It was corroborated at the year's end when we reported a record-high net profit of PLN 156.1 million, representing an increase of 19 percent year on year. The consolidated revenue was PLN 352 million in 2017, an increase of 13.2 percent, including both increase of 13.7% of the revenue from the financial market as well increase of revenue from the commodity market by 13.4%. The operating profit was PLN 183.9 million in 2017 compared to PLN 139.5 million in 2016. EBITDA was PLN 212.2 million in 2017, an increase of 15.5 percent year on year. Our cost/income ratio has remained under 50 percent, which is in line with the Group's strategy. The financial results of the GPW Group in 2017 were impacted by one-off events including the cost of implementation of MiFID2 at PLN 11.0 million during the year.

We want to build sustainable shareholder value and regularly share our profits. This is why we paid more than PLN 90.2 million in dividend in 2017 from the consolidated profit of 2016 (adjusted for the share of profit of associates). Consequently, we paid one of the highest dividends among all European exchanges. The total shareholder return (TSR) was 23.1% in 2017 while GPW's share price gained 17.7% in 2017. The GPW Management Board is planning to maintain the dividend policy in the coming years.

Last year was very successful for our subsidiary Towarowa Giełda Energii as well. The volume of trading in natural gas was record-high (138.7 TWh, an increase of 21.1 percent year on year), as was the volume of trading in property rights (the annual volume of trading in property rights in energy efficiency was 399.9 thousand toe, an increase of 27.0% year on year). In 2017, TGE celebrated the fifth anniversary of the gas market, which is an important and integral part of Poland's natural gas market.

The Polish economy is growing fast. The conditions on GPW's spot market are favourable. Investor sentiment on the global stock market in early 2018 was strong. FTSE Russell's decision upgrading Poland as a Developed Market will take effect this autumn. The promotion is a reward for the development of the Polish economy and the local capital market. I hope that it will bring new categories of investors to GPW.

All of this makes me certain that we have a robust foundation for further growth, not only owing to conducive external factors but also our own resources. This year will be crucial for GPW and the local capital market in view of the planned development of a capital market strategy in collaboration with all market participants. GPW wants to actively contribute to the process and play a key role in the strategy. Importantly, the presence of many companies on our trading floor improves our capacity to analyse the Polish economy while disclosure requirements allow us to track the performance of companies and *industries. Public companies should be supported by the State as a strategic asset, not least in decisions introducing administrative and legislative changes. We are aware that some companies have not yet been floated on the exchange even though they are on the forefront of the Polish economy, have a presence on many markets and efficiently compete with global leaders. Any new incentive for Polish companies to go public on GPW or for investors to invest in listed companies is bound to help the development of an attractive capital market in Poland.*

The GPW Management Board has decided to update the strategy GPW.2020. We see many areas of development and improvement of our existing competences. However, we want to focus mainly on new business lines, including mainly technologies which will be an important driver of our growth. We will continue to work in support of the reputation of the exchange and its strong position in Central and Eastern Europe. We are not afraid to compete with global exchanges. The internationalisation of our business is a challenge for the Management Board this year.

I can see the huge potential and opportunities ahead of GPW Group, we can reach for new, attractive growth factors that will also translate into greater profits for our Shareholders. I wish that to myself and all of us

Yours sincerely,

Marek Dietl, President of GPW Management Board

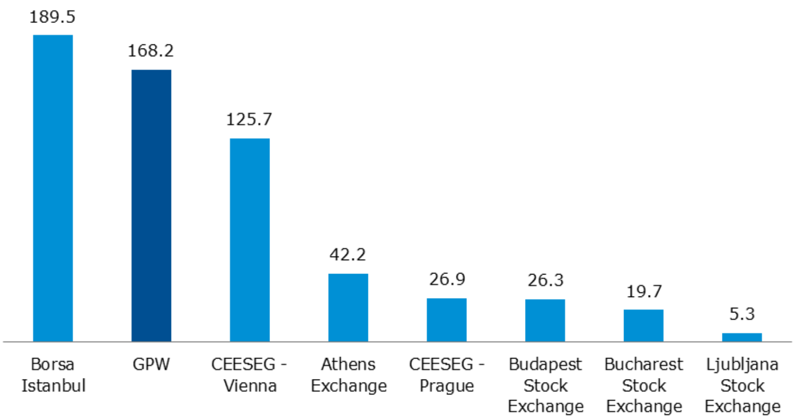
I. 1. Brief Description of the GPW Group

GPW is a vibrant renowned institution with strong international recognition. For 25 years, we help Polish and European companies to raise capital, provide education, and contribute to economic development.

The GPW Group includes the leading institutions of the Polish capital and commodity market. It is one of the biggest exchanges in Central and Eastern Europe. The parent entity of the Group is the Warsaw Stock Exchange ("GPW"), which organises trade in financial instruments and pursues a range of educational initiatives to promote economic knowledge of the general public. GPW is the key source of capital for companies and local governments in the region, contributing to dynamic growth of the Polish economy, creation of new jobs, international competitiveness of Polish businesses and the resulting affluence of Poles. Presence on the capital market provides Polish companies with additional benefits including enhanced visibility, credibility, efficiency and transparency in governance.

The Warsaw Stock Exchange has the biggest capitalisation of all exchanges in Central and Eastern Europe at EUR 168 billion. It is one of the biggest markets in Europe and lists 890 domestic and foreign companies. It attracts new issuers every year, which ranks GPW the third biggest market in Europe on a par with the Spanish exchange BME as measured by the number of IPOs.[1] Capital raised by companies on GPW in 2017 was EUR 1.8 billion, ranking GPW eighth in Europe.

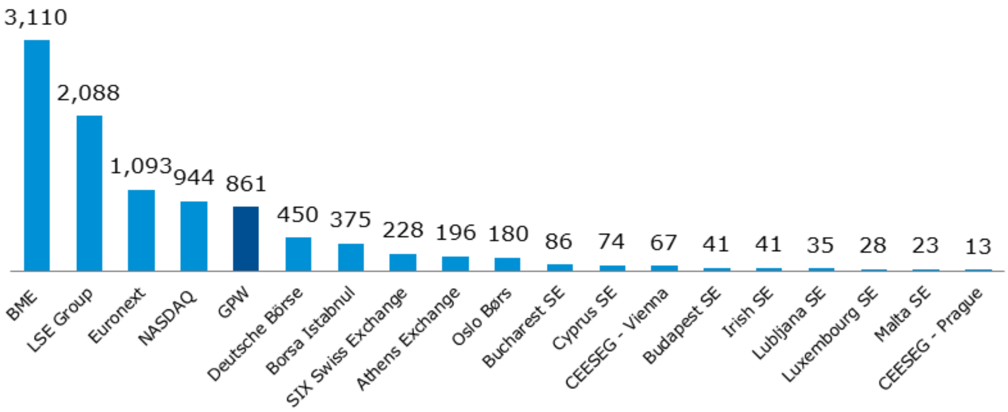
Figure 1 Capitalisation of CEE exchanges at 2017 YE [EUR billion]



Source: FESE, WFE

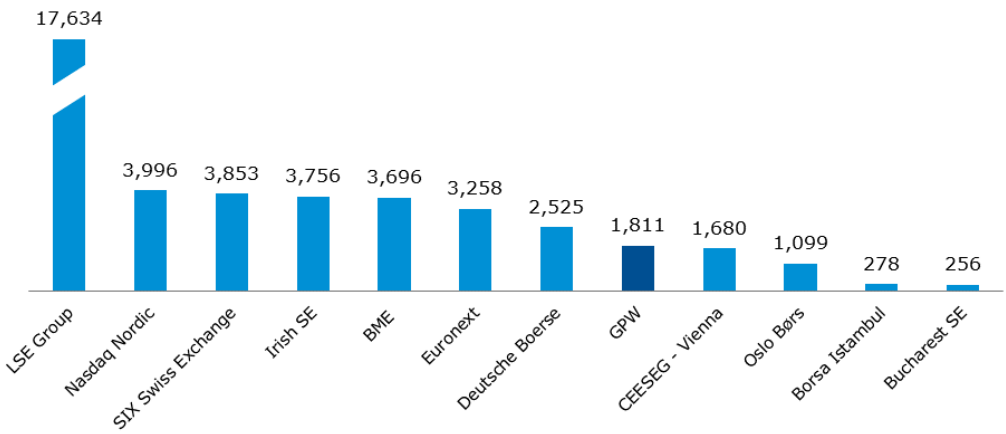
[1] PwC, IPO Watch Europe 2017 report.

Figure 2 Number of companies listed on European exchanges at 2017 YE



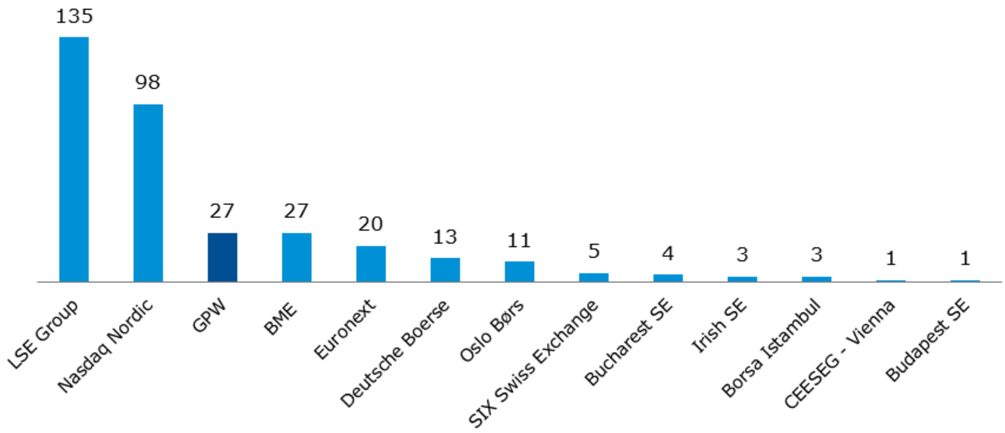
Source: FESE, WFE

Figure 3 Value of IPOs on European exchanges in 2017 [EUR million]



Source: PwC, IPO Watch Europe 2017

Figure 4 Number of IPOs on European exchanges in 2017



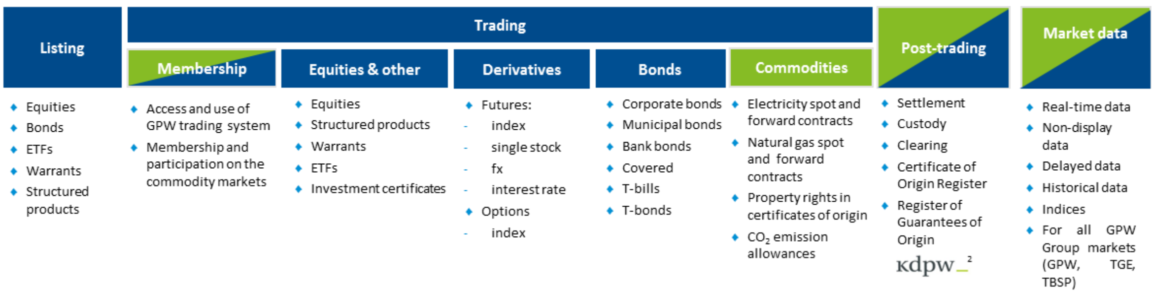
Source: PwC, IPO Watch Europe 2017

Towarowa Giełda Energii S.A. (TGE), GPW's 100% subsidiary, is a pioneer of innovation in trade in exchange-listed commodities. TGE operates markets for the biggest energy companies in Poland. In addition to trade in electricity, the commodity market also offers trade in natural gas and property rights in certificates of origin. TGE also operates a Register of Certificates of Origin and a Register of Guarantees of Origin. Through the subsidiary Izba Rozliczeniowa Giełd Towarowych (IRGiT), TGE clears transactions on the TGE commodity and financial markets.

TGE's product offer is similar to the product range of the most advanced commodity exchanges in EU Member States. The volume of trading in electricity and gas makes TGE the biggest exchange in the region and a major European market. Considering that TGE products are offered only for the Polish market while many European exchanges pool trade from many national markets on a shared platform, TGE's volume of trading confirms its strong position.

Post-trade services for the financial market operated by GPW and BondSpot, including depository, clearing and settlement services, are offered by GPW's associate, Krajowy Depozyt Papierów Wartościowych S.A. (KDPW), and its subsidiary KDPW_CCP S.A.

Chart 1 Business lines and product offer of the GPW Group



The Warsaw Stock Exchange Group was comprised of the parent entity and four consolidated subsidiaries as at 31 December 2017. GPW holds a stake in three associates.

[2] Associate (GPW's stake: 33.33%); offers post-trade services on the financial market.

Chart 2 GPW Group and associates

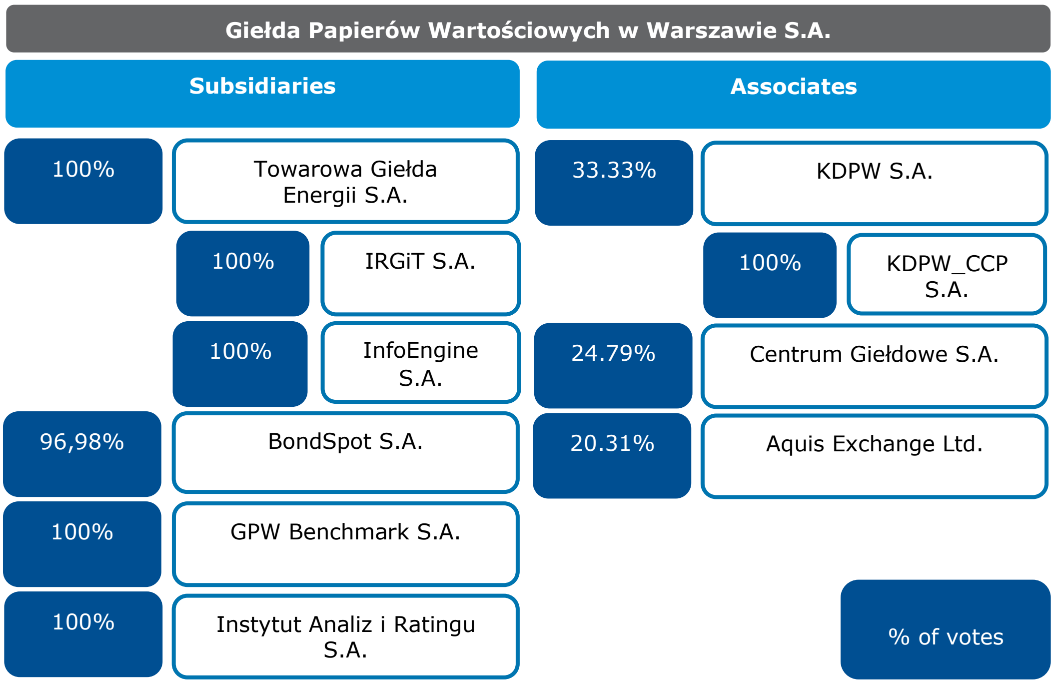
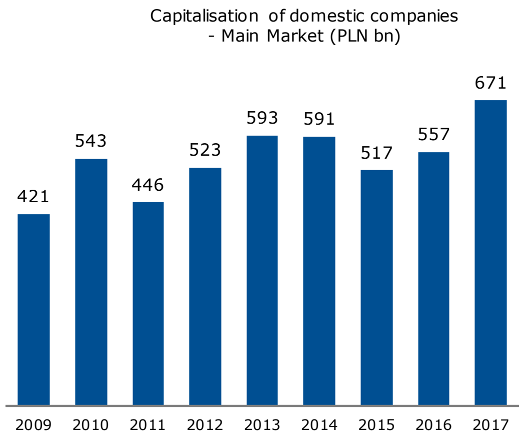


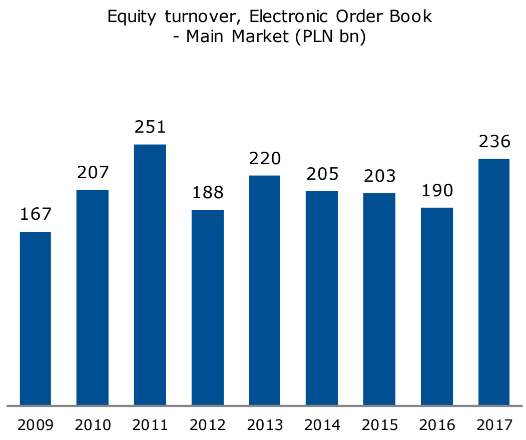
Table 1 Core business of GPW Group companies

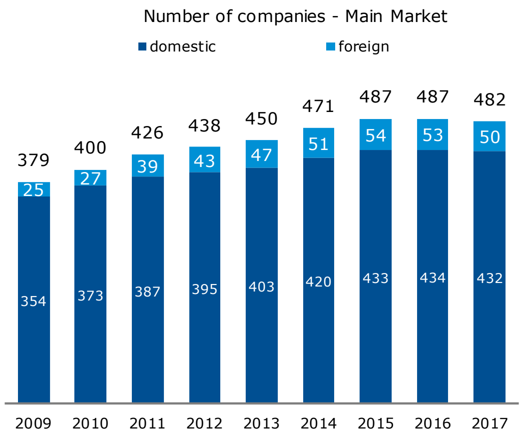
Subsidiary	Business profile
BondSpot S.A.	Operates trade in Treasury and non-Treasury debt securities. Treasury BondSpot Poland, operated by BondSpot, is the electronic wholesale market in Treasury securities authorised by the Ministry of Finance and a part of the Treasury Securities Dealers system in Poland.
Towarowa Giełda Energii S.A. (TGE)	The only licensed commodity exchange in Poland, operates trade in electricity, natural gas, emission allowances, property rights in certificates of origin of electricity, certificates of origin of biogas, energy efficiency certificates; operates the Register of Certificates of Origin of electricity generated from renewable energy sources, high-efficiency cogeneration and agricultural biogas as well as energy efficiency certificates; operates the Register of Guarantees of Origin; operates the Financial Instruments Market.
Izba Rozliczeniowa Giełd Towarowych S.A. (IRGiT, a subsidiary of TGE)	Provides clearing services for all markets operated by TGE. Authorised as a clearing house and settlement institution.
InfoEngine S.A. (a subsidiary of TGE)	Operates an electronic OTC commodity trading platform, provides services to electricity market participants.
GPW Benchmark S.A.	Organiser and administrator of WIBID and WIBOR fixings, the main money market index used for the valuation of most bank loans, derivatives and debt instruments issued in PLN.
Instytut Analiz i Ratingu S.A. (IAiR)	It is planning to launch as a rating and research provider.

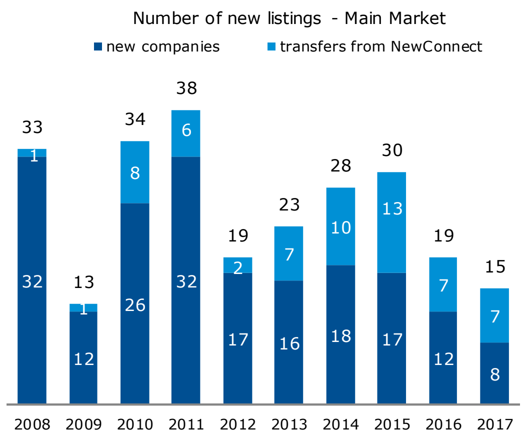
In addition, GPW holds 19.98% of InfoStrefa S.A. (formerly Instytut Rynku Kapitałowego WSE Research S.A.), 10% of the Ukrainian stock exchange INNEX PJSC, and 1.3% of the Romanian stock exchange S.C. SIBEX – Sibiu Stock Exchange S.A. Furthermore, GPW operates a representative office in London. The parent entity has no branches or establishments.

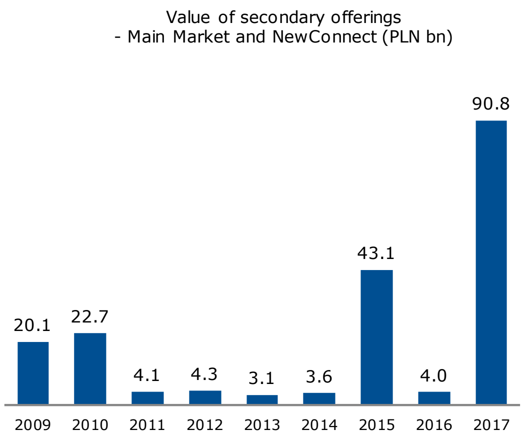
I. 2. Selected Market Data

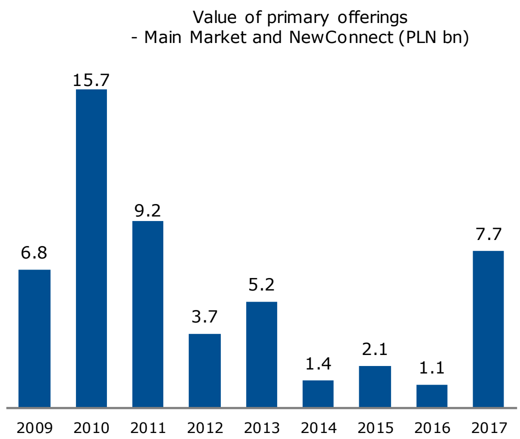


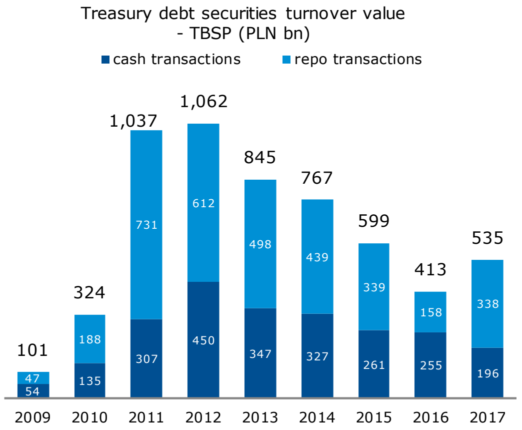


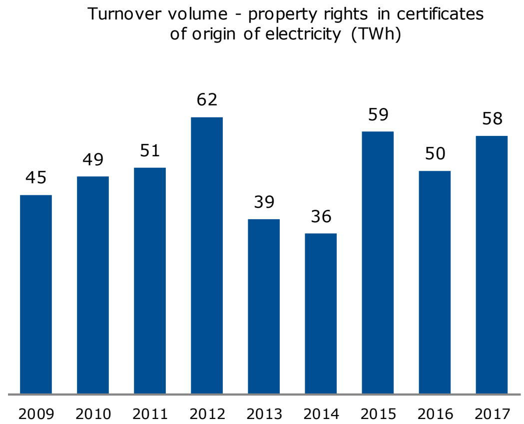


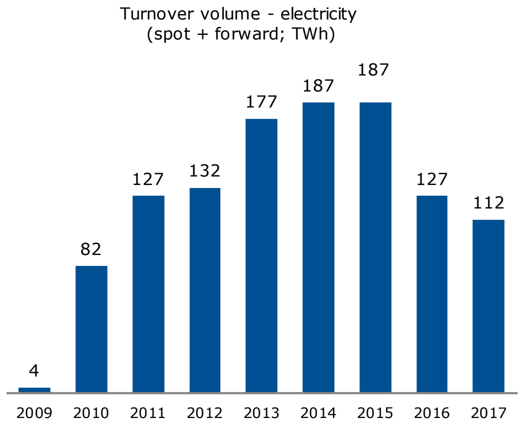


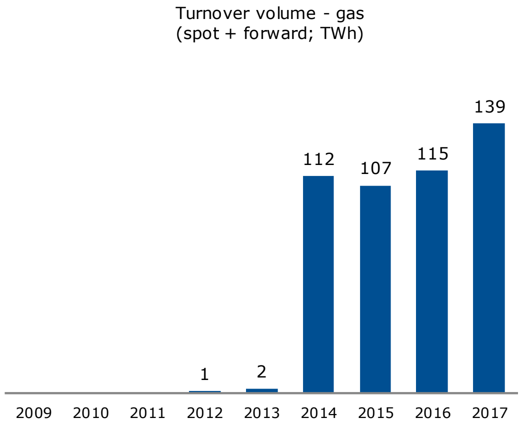


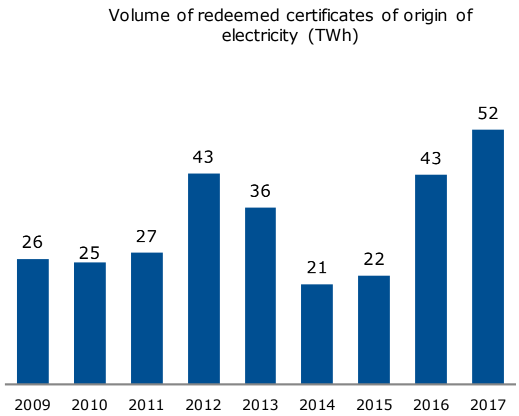


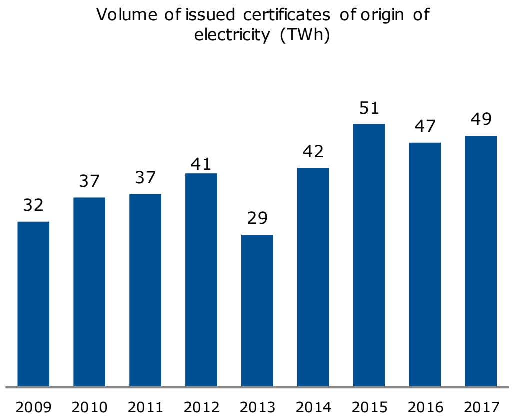

Treasury debt securities turnover value - TBSP (PLN bn)
cash transactions
repo transactions
101
47
54
324
188
135
1,037
731
307
1,062
612
450
845
498
347
767
439
327
599
339
261
413
158
255
535
338
196
2009
2010
2011
2012
2013
2014
2015
2016
2017

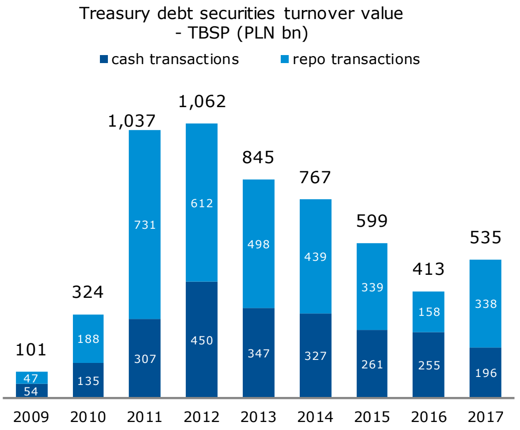

Turnover volume - property rights in certificates of origin of electricity (TWh)
45
49
51
62
39
36
59
50
58
2009
2010
2011
2012
2013
2014
2015
2016
2017

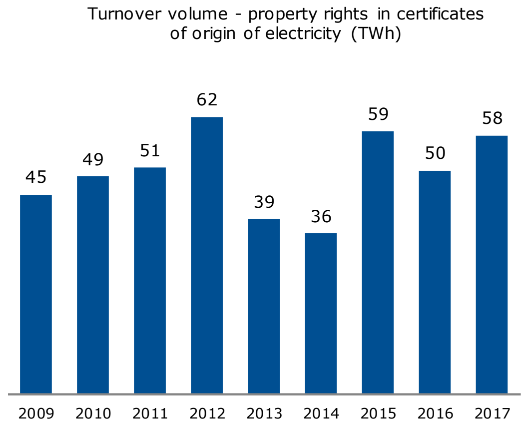

Turnover volume - electricity (spot + forward; TWh)
4
82
127
132
177
187
187
127
112
2009
2010
2011
2012
2013
2014
2015
2016
2017

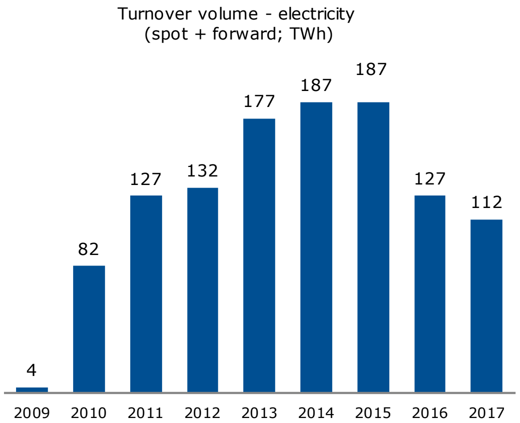

Turnover volume - gas (spot + forward; TWh)
1
2
112
107
115
139
2009
2010
2011
2012
2013
2014
2015
2016
2017

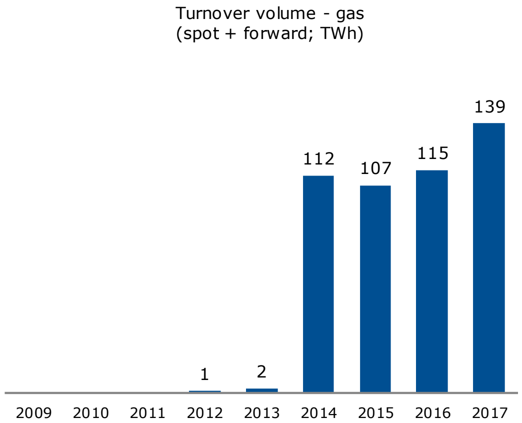

Volume of redeemed certificates of origin of electricity (TWh)
26
25
27
43
36
21
22
43
52
2009
2010
2011
2012
2013
2014
2015
2016
2017

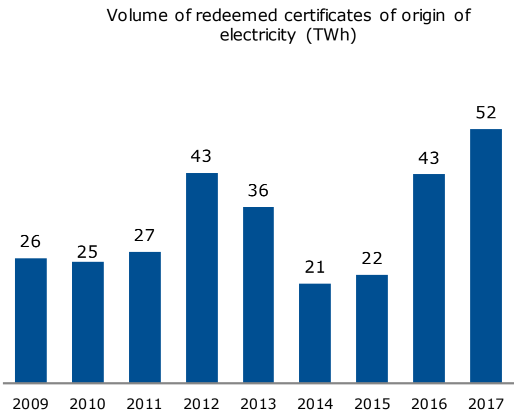

Volume of issued certificates of origin of electricity (TWh)
32
37
37
41
29
42
51
47
49
2009
2010
2011
2012
2013
2014
2015
2016
2017

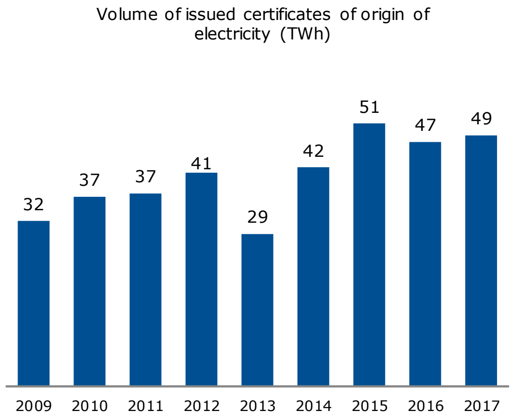












[3] The volume of trading in property rights net of the volume of issued and cancelled certificates do not include the volume of white certificates due to a different measurement unit (toe).
[4] Trade in gas opened in December 2012.

I. 3. Selected consolidated financial data

Table 2 Selected data on the statement of comprehensive income, consolidated, under IFRS, audited

	Year ended 31 December			
	2017	2016	2017	2016
	PLN'000		EUR'000[7]	
Sales revenue	**351,956**	**310,862**	**82,665**	**71,258**
Financial market	**208,849**	**183,698**	**49,053**	**42,108**
Trading	141,336	119,079	33,196	27,296
Listing	24,968	23,930	5,864	5,485
Information services	42,545	40,689	9,993	9,327
Commodity market	**142,088**	**125,254**	**33,373**	**28,712**
Trading	70,092	60,857	16,463	13,950
Register of certificates of origin	30,628	24,907	7,194	5,709
Clearing	41,019	39,163	9,634	8,977
Information services	349	327	82	75
Other revenue	**1,019**	**1,910**	**239**	**438**
Operating expenses	**165,763**	**150,155**	**38,933**	**34,419**
Other income	3,859	1,736	906	398
Other expenses	6,149	4,553	1,444	1,044
Operating profit	**183,903**	**157,890**	**43,194**	**36,192**
Financial income	5,550	12,950	1,303	2,968
Financial expenses	11,147	12,079	2,618	2,769
Share of profit of associates	10,059	3,518	2,363	806
Profit before income tax	**188,365**	**162,279**	**44,242**	**37,199**
Income tax expense	32,274	31,145	7,580	7,139
Profit for the period	**156,091**	**131,134**	**36,662**	**30,059**
Basic / Diluted earnings per share[8] (PLN, EUR)	3.72	3.12	0.87	0.72
EBITDA[9]	**212,228**	**183,683**	**49,847**	**42,105**

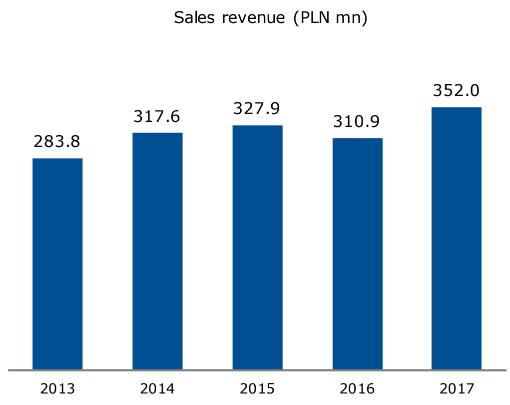
Table 3 Selected data on the statement of financial position, consolidated, under IFRS, audited

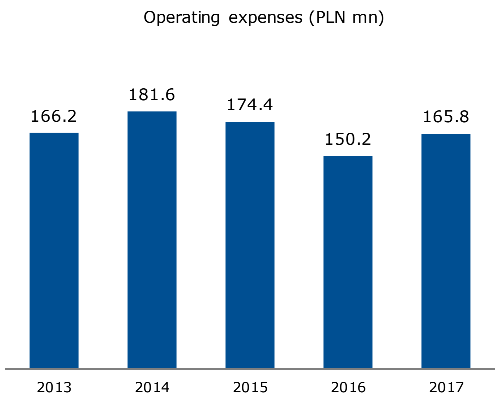
	As at			
	31 December 2017	31 December 2016	31 December 2017	31 December 2016
	PLN'000		EUR'000[10]	
Non-current assets	**596,354**	**597,287**	**142,980**	**135,011**
Property, plant and equipment	110,784	119,130	26,561	26,928
Intangible assets	267,991	273,815	64,253	61,893
Investment in associates	207,389	197,231	49,723	44,582
Deferred tax assets	3,803	1,809	912	409
Available-for-sale financial assets	271	288	65	65
Prepayments	6,116	5,014	1,466	1,133
Current assets	**550,699**	**560,561**	**132,034**	**126,709**
Corporate income tax receivable	71	428	17	97
Trade and other receivables	64,096	113,262	15,367	25,602
Cash and cash equivalents	486,476	446,814	116,636	100,998
Other current assets	56	57	13	13
TOTAL ASSETS	**1,147,053**	**1,157,848**	**275,013**	**261,720**
Equity attributable to the shareholders of the parent entity	810,908	744,727	194,420	168,338
Non-controlling interests	573	525	137	119
Non-current liabilities	259,951	143,422	62,325	32,419
Current liabilities	75,621	269,174	18,131	60,844
TOTAL EQUITY AND LIABILITIES	**1,147,053**	**1,157,848**	**275,013**	**261,720**

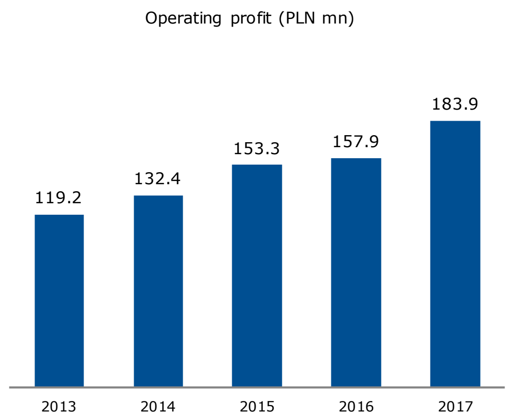
Table 4 GPW Group's selected financial ratios

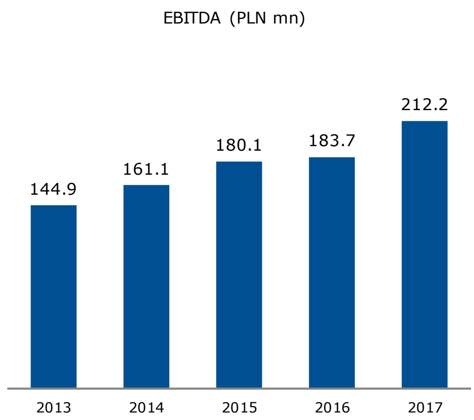
	Year ended / As at	
	31 December 2017	31 December 2016
EBITDA margin *(EBITDA/Sales revenue)*	60.3%	59.1%
Operating profit margin *(Operating profit/Sales revenue)*	52.3%	50.8%
Return on quity (ROE) *(Net profit for the last 12 months / Average equity at the beginning and at the end of the last 12 month period*	20.1%	18.0%
Debt to equity *(Interest-bearing liabilities[11]/Equity)*	30.3%	33.1%

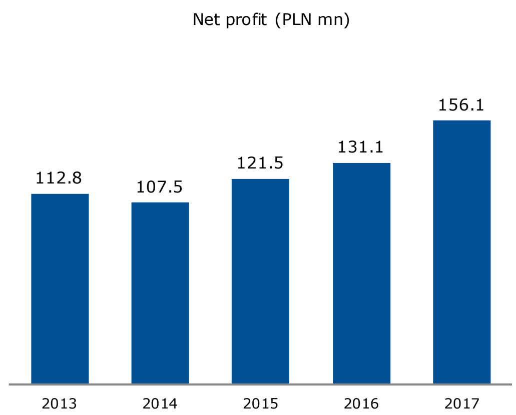
5 Based on average annual EUR/PLN exchange rate published by the National Bank of Poland (1 EUR = 4.2576 PLN in 2016 and 1 EUR = 4.3625 PLN in 2016).
6 Based on the total net profit.
7 EBITDA = operating profit + depreciation and amortisation.
8 Based on the average EUR/PLN exchange rate of the National Bank of Poland as at 31.12.2017 (1 EUR = 4,1709 PLN) and 31.12.2016 (1 EUR = 4.4240 PLN).
9 Liabilities in respect of interest and principal.

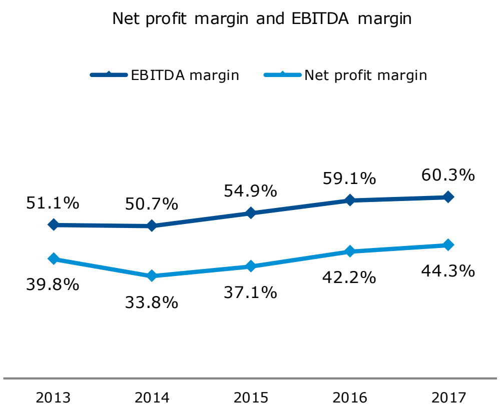

Sales revenue (PLN mn)
283.8
317.6
327.9
310.9
352.0
2013
2014
2015
2016
2017


Operating expenses (PLN mn)
166.2
181.6
174.4
150.2
165.8
2013
2014
2015
2016
2017


Operating profit (PLN mn)
119.2
132.4
153.3
157.9
183.9
2013
2014
2015
2016
2017


EBITDA (PLN mn)
144.9
161.1
180.1
183.7
212.2
2013
2014
2015
2016
2017


Net profit (PLN mn)
112.8
107.5
121.5
131.1
156.1
2013
2014
2015
2016
2017


Net profit margin and EBITDA margin
EBITDA margin
Net profit margin
51.1%
50.7%
54.9%
59.1%
60.3%
39.8%
33.8%
37.1%
42.2%
44.3%
2013
2014
2015
2016
2017

I. 4. Selected separate financial data

Table 5 Selected data on the statement of comprehensive income, separate, under IFRS, audited

	Year ended 31 December			
	2017	2016	2017	2016
	PLN'000		EUR'000[12]	
Sales revenue	**203,443**	**175,454**	**47,783**	**40,219**
Financial market	**196,229**	**172,899**	**46,089**	**39,633**
Trading	129,749	109,328	30,475	25,061
Listing	24,027	23,167	5,643	5,310
Information services	42,453	40,404	9,971	9,262
Commodity market	**348**	**327**	**82**	**75**
Information services	348	327	82	75
Other revenue	**6,866**	**2,228**	**1,613**	**511**
Operating expenses	**109,916**	**100,070**	**25,816**	**22,939**
Other income	940	680	221	156
Other expenses	4,829	4,330	1,134	993
Operating profit	**89,638**	**71,734**	**21,054**	**16,443**
Financial income	5,042	66,354	1,184	15,210
Financial expenses	8,871	8,073	2,084	1,851
Profit before income tax	**85,809**	**130,015**	**20,154**	**29,803**
Income tax expense	16,776	13,930	3,940	3,193
Profit for the period	**69,033**	**116,085**	**16,214**	**26,610**
EBITDA[13]	**109,110**	**91,074**	**25,627**	**20,877**

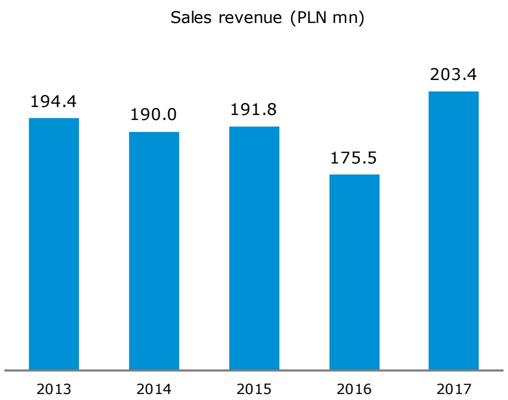
Table 6 Selected data on the statement of financial position, separate, under IFRS, audited

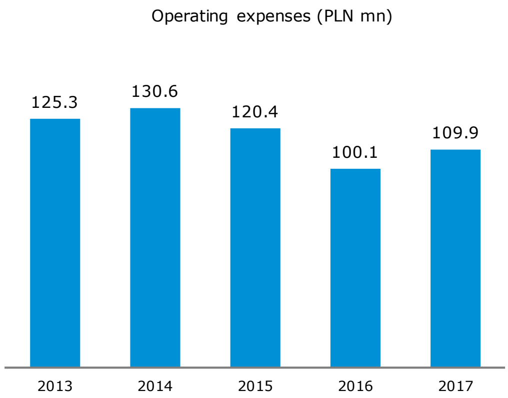
	As at			
	31 December 2017	31 December 2016	31 December 2017	31 December 2016
	PLN'000		EUR'000[12]	
Non-current assets	**462,760**	**472,942**	**110,950**	**106,904**
Property, plant and equipment	96,269	101,034	23,081	22,838
Intangible assets	68,963	75,918	16,534	17,160
Investment in associates and subsidiaries	291,944	291,944	69,995	65,991
Available-for-sale financial assets	271	288	65	65
Prepayments	5,313	3,758	1,274	849
Current assets	**275,535**	**291,788**	**66,061**	**65,956**
Trade and other receivables	26,272	23,941	6,299	5,412
Cash and cash equivalents	249,207	267,789	59,749	60,531
Other current assets	56	58	13	13
TOTAL ASSETS	**738,295**	**764,730**	**177,011**	**172,859**
Equity	450,887	472,102	108,103	106,714
Non-current liabilities	253,744	136,794	60,837	30,921
Current liabilities	33,664	155,834	8,071	35,225
TOTAL EQUITY AND LIABILITIES	**738,295**	**764,730**	**177,011**	**172,859**

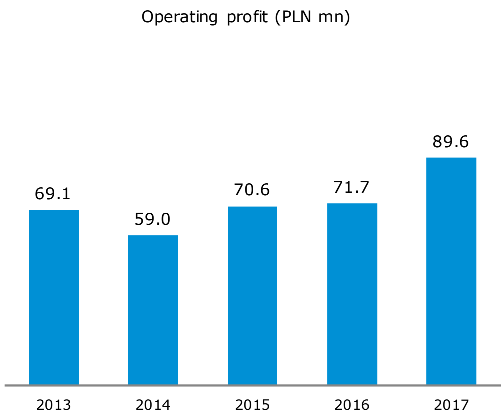
Table 7 GPW's selected financial ratios

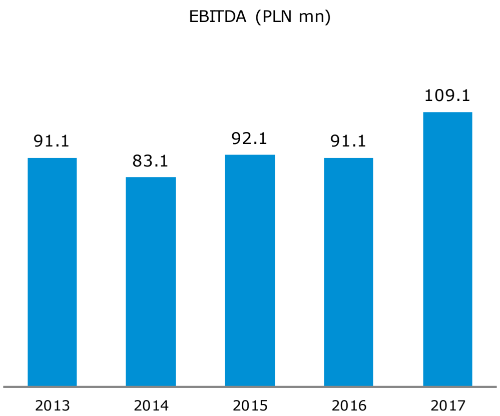
	Year ended / As at	
	31 December 2017	31 December 2016
EBITDA margin *(EBITDA/Sales revenue)*	53.6%	51.9%
Operating profit margin (*Operating profit/Sales revenue)*	44.1%	40.9%
Return on quity (ROE) *(Net profit for the last 12 months / Average equity at the beginning and at the end of the last 12 month period*	15.0%	25.0%
Debt to equity *(Interest-bearing liabilities[13]/Equity)*	54.5%	52.2%

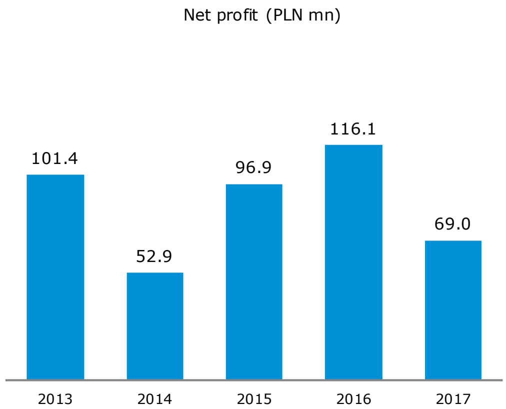
10 Based on average annual EUR/PLN exchange rate published by the National Bank of Poland (1 EUR = 4.2576 PLN in 2016 and 1 EUR = 4.3625 PLN in 2016).
11 EBITDA = operating profit + depreciation and amortisation.
12 Based on the average EUR/PLN exchange rate of the National Bank of Poland as at 31.12.2017 (1 EUR = 4.1709 PLN) and 31.12.2016 (1 EUR = 4.4240 PLN).
13 Liabilities in respect of interest and principal.

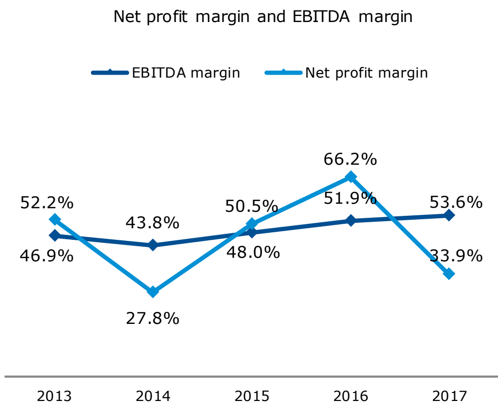

Sales revenue (PLN mn)
194.4
190.0
191.8
175.5
203.4
2013
2014
2015
2016
2017


Operating expenses (PLN mn)
125.3
130.6
120.4
100.1
109.9
2013
2014
2015
2016
2017


Operating profit (PLN mn)
69.1
59.0
70.6
71.7
89.6
2013
2014
2015
2016
2017


EBITDA (PLN mn)
91.1
83.1
92.1
91.1
109.1
2013
2014
2015
2016
2017


Net profit (PLN mn)
101.4
52.9
96.9
116.1
69.0
2013
2014
2015
2016
2017


Net profit margin and EBITDA margin
EBITDA margin
Net profit margin
52.2%
46.9%
43.8%
27.8%
50.5%
48.0%
66.2%
51.9%
53.6%
33.9%
2013
2014
2015
2016
2017

I. 5. GPW on the Capital Market

GPW has been listed on the Warsaw Stock Exchange since 9 November 2010. The Company's shares are listed in the continuous trading system on the GPW Main Market and the capitalisation of the company was PLN 1.97 billion as at the end of 2017, ranking #49 among all domestic stocks on GPW.

GPW shares once again participate in the dividend index WIGdiv of GPW-listed companies which regularly share profits with the shareholders, and in the RESPECT index of companies which follow high standards of corporate social responsibility

The Company is part of the mid-cap index mWIG40 since 19 March 2011 with a 1.54% share in the index portfolio at the end of 2017. GPW shares are also part of the broad market indices (WIG and WIG-Poland), as well as WIGdiv, the GPW regular dividend index. In addition, GPW shares participate in a number of small and mid-cap indices on the emerging markets, as well as indices which group securities exchanges, computed by global specialised, renowned index providers (including MSCI, FTSE Russel and SP Dow Jones). In December 2017, GPW was for the fifth time running included in the RESPECT Index portfolio, which it first joined in 2013. Thus, GPW is one of 28 Polish companies which follow the highest standards of environmental, social and corporate governance.

GPW STOCK PRICE

The GPW stock price ranged in 2017 from PLN 39.06 (2 January 2017) to PLN 49.98 (17 October 2017). The stock price was PLN 46.99 at the end of 2017, compared to PLN 48.82 as at 30 June 2017 and PLN 39.93 as at the end of 2016, gaining 17.7% during the year. Including the dividend of PLN 2.15 per share, the total shareholder return in 2017 was 23.1%. In the same period, the GPW mid-cap index mWIG40 gained 14.7%, and the broad market index WIG gained 23.2%.

Figure 5 GPW stock price in 2017 v. mWIG40 and WIG [normalised]

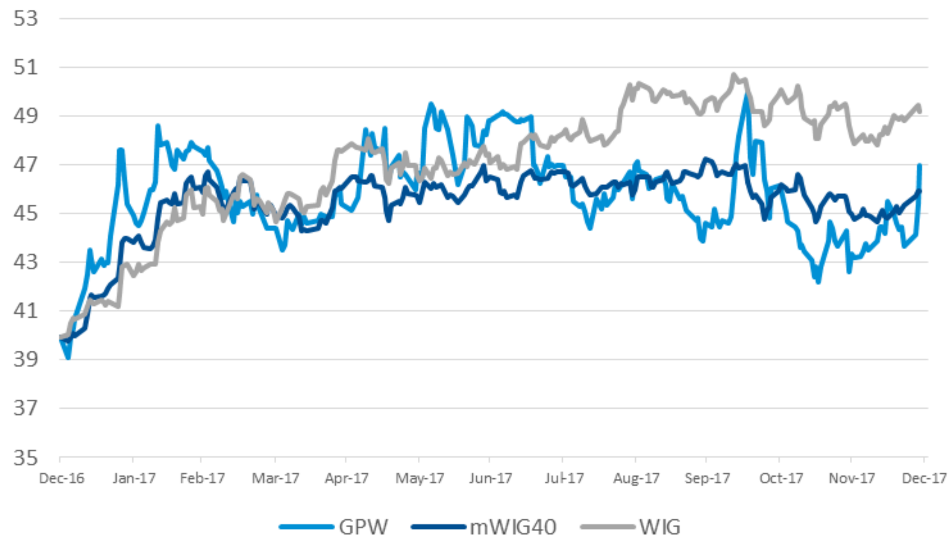


Figure 6 GPW stock price since new listing on GPW [PLN]

Table 8 Selected statistics of GPW SA stock

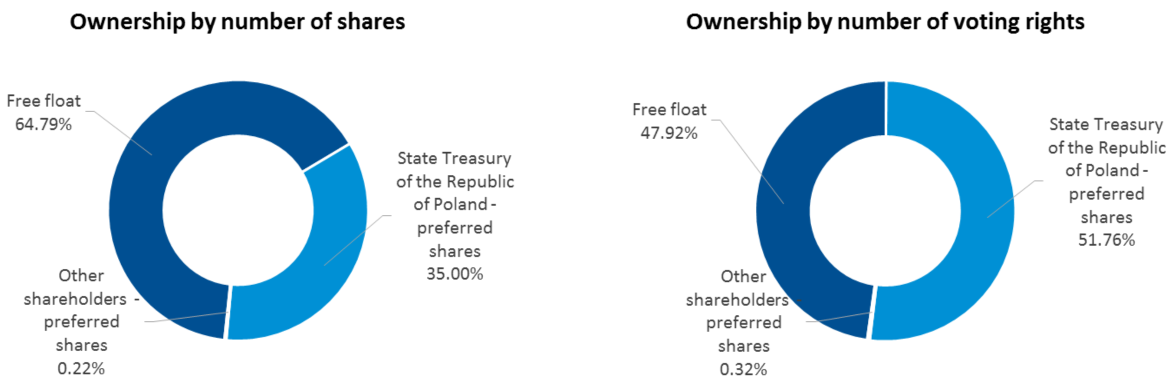
	2017	2016	2015	2014	2013	2012	2011	2010[14]
Earnings per share (PLN)[15]	3.72	3.12	2.95	2.67	2.70	2.52	3.19	2.26
Dividend per share (PLN)[16]	2.15	2.36	2.40	1.20	0.78	1.44	3.21	-
Dividend yield[17]	4.4%	6.7%	4.9%	3.3%	2.0%	3.8%	6.1%	-
P/E	16.9	12.8	12.2	17.1	15.4	15.4	11.1	21.7
Maximum share price (PLN)	49.98	41.57	53.00	48.04	45.10	43.89	54.20	54.00
Minimum share price (PLN)	39.06	31.05	34.53	35.25	34.75	32.10	34.20	48.70
Share price at the end of the period (PLN)	46.99	39.93	35.95	45.70	41.50	38.87	35.25	49.00
Average (volume) weighted share price PLN)	46.05	35.87	44.99	39.52	40.22	37.55	45.84	51.84
Return rate on shares	17.7%	11.1%	-21.3%	10.1%	6.8%	10.3%	-28.1%	14.0%[18]
Total shareholder return (TSR)[19]	23.1%	17.6%	-16.1%	13.0%	8.8%	14.4%	-21.5%	14.0%[21]
Number of shares (thousand)	41 972	41 972	41 972	41 972	41 972	41 972	41 972	41 972
Capitalisation (PLN million)	1 972	1 676	1 509	1 918	1 742	1 631	1 480	2 057
Free float[20] (PLN million)	1 278	1 089	978	1 241	1 127	1 054	948	1 313
Free float %	64.8%	64.8%	64.8%	64.7%	64.7%	64.6%	64.1%	63.8%
Volume of trading (million shares) [21]	10.9	11.8	11.7	14.5	14.8	19.2	25.9	20.4
Value of trading (PLN million)[24]	501.9	424.00	526.4	571.8	596.1	720.7	1 188.5	1 055.7
Number of transactions (thousand)[24]	90.2	89.7	63.0	68.8	67.3	73.3	170.6	167.0
Average volume of trading per session (thousand)[24]	46.3	47.1	46.6	58.1	60.0	77.1	103.3	550.4
Average value of trading per session (PLN thousand)[24]	2 007.7	1 689.1	2 097.4	2 296.2	2 413.4	2 894.2	4 735.0	28 531.5
Average number of transactions per session[24]	360.7	357.4	250.9	276.0	272.6	294.2	679.8	4 512.8
Velocity[22]	27.9%	26.9%	30.8%	31.2%	35.4%	46.2%	67.1%	344.8%

[14] GPW shares were newly listed on the exchange on 9 November 2010.
[15] Based on the consolidated profit attributable to the shareholders of the parent entity.
[16] Based on last year's profit.
[17] Dividend paid / share price at dividend record date.
[18] In relation to the IPO price for individual investors (PLN 43.00).
[19] (Annual change of share price + dividend per share) / share price at the end of the previous period.
[20] Free-float shares (excluding shares held by the State Treasury and strategic investors).
[21] Electronic Order Book (net of block trades).
[22] Value of trading (annualised for 2010) / average capitalisation at the beginning and at the end of the period.

GPW SHAREHOLDERS

The State Treasury of the Republic of Poland was the biggest shareholder of GPW and the only shareholder with a stake greater than 5% of the share capital as at 31 December 2017: it holds 14,688,470 shares representing 35.00% of all shares and 51.76% of the total vote.

Figure 7 GPW shareholders as at the end of 2017



Polish open-ended pension funds jointly held 9.87 million GPW shares at the end of 2017, representing 23.5% of the share capital of GPW. According to GPW estimates, another 10-16% of shares were held by other domestic institutional investors (mainly investment funds), 10-14% directly by domestic individual investors, and 15-17% by foreign investors.

DIVIDEND FOR GPW SHAREHOLDERS

According to the current strategy, it is the intention of the GPW Management Board to recommend that the General Meeting pay a dividend depending on the profitability and the financial capacity of GPW, above 60% of the consolidated net profit of the GPW Group for the financial year attributable to the shareholders of GPW adjusted for the share of profit of associates. The dividend is to be paid annually upon the approval of the Company's financial statements by the GPW General Meeting ("General Meeting"). To determine the final amount of dividend to be recommended to the General Meeting, the GPW Management Board will consider among others the following factors:

GPW is a financially sound company which has regularly paid high dividends to the investors for many years. The dividend yield was 4.4% in 2017. Since its IPO, the Company has paid PLN 13.54 of dividends per share in aggregate

- Capital and investment needs in the implementation of the strategy of the GPW Group;
- The dividend yield and the pay-out ratios used by peer companies;
- Actions necessary to develop the Polish capital market infrastructure;
- Liquidity requirements of the GPW Group depending on actual and expected market and regulatory conditions, liabilities incurred in current operations and debt service, and optimisation of the GPW Group's financing structure.

Dividend paid in 2017

GPW has paid the owners a dividend for each year since the company went public. On 2 August 2017, the Company paid PLN 90.2 million of dividend. The dividend of PLN 2.15 per share was paid to GPW shareholders who held shares at 19 July 2017 (record date). The dividend yield in 2017 at the closing price on 2 August 2017 was 4.4%.

Table 9 GPW dividend from profits in 2010-2016

Year for which dividend was paid	Dividend paid (PLN'000)	Dividend per share (PLN)	Dividend pay-out ratio[23]	Dividend yield[24]	Dividend record date	Dividend payment date
2016	90 240	2.15	70.71%[25]	4.39%	19.07.2017	02.08.2017
2015	99 054	2.36	80.27%	6.69%	20.07.2016	04.08.2016
2014	100 733	2.40	89.88%	4.93%	15.07.2015	04.08.2015
2013	50 366	1.20	44.45%	3.31%	07.08.2014	26.08.2014
2012	32 738	0.78	30.95%	2.03%	12.07.2013	26.07.2013
2011	60 440	1.44	45.19%	3.84%	06.07.2012	20.07.2012
2010	134 730	3.21	142.28%	6.05%	12.07.2011	27.07.2011

DIALOGUE WITH SHAREHOLDERS AND INVESTORS

GPW aspires to comply with the highest standards of investor communications as it considers its presence on the capital market to be a part of a long-term growth strategy. Pursuant to the investor relations policy approved in January 2015, GPW develops long-term professional relations with all participants of the capital markets and ensures active communications and equal access to information for all investor groups. In 2017, GPW took a number of initiatives and applied a broad range of tools in its on-going communications with the shareholders, investors and analysts, including:

- presentations of the financial results after the end of each quarter within approximately one month except for the annual results presented within approximately two months after the end of the period at meetings of the GPW Management Board with capital market analysts (broadcast live online);
- participation in the Polish Capital Markets Days: a series of seven conferences co-organised by GPW in London, Stockholm, Warsaw, Paris, Frankfurt, Stegersbach (Austria), and Prague;
- participation in two industry conferences dedicated to institutional investors in Warsaw and London;
- more than 100 one-on-one and group meetings and other contacts with representatives of domestic and international institutional investors.

According to the investor relations policy approved in January 2015, GPW voluntarily applies periods of limited communications with capital market participants preceding the publication of financial results. Consequently, the Company neither holds nor takes part in investor meetings two weeks before the publication of financial statements (periodic reports).

As an important part of the Company's open communications, the Investor Relations section of the Company's website regularly provides information relevant to shareholders and investors including the current financial results, investor presentations, dates of events, video recordings of quarterly conferences and the General Meeting, news. GPW also provides an IR alert service in order to communicate current corporate news to subscribers.

GPW BONDS ON THE EXCHANGE

GPW bonds of three series (C, D and E) in a total nominal amount of PLN 245 million were listed on the regulated market operated by GPW and in the alternative trading system operated by BondSpot as at 31 December 2017.

[23] Based on the consolidated profit attributable to the shareholders of the parent entity.
[24] At the share price as at the dividend record date.
[25] Based on the consolidated profit attributable to the shareholders of the parent entity adjusted for the share of profit of associates.

On 6 October 2015, GPW issued PLN 125 million seven-year series C bonds maturing on 6 October 2022. The bonds are unsecured. The bonds are listed in the alternative trading system operated by GPW and BondSpot since December 2015. The series C bonds have fixed interest at 3.19% p.a., interest is paid semi-annually. At the date of issue, the interest rate was the lowest of all corporate long-term fixed-coupon PLN bonds listed on Catalyst. The proceeds from the issue of series C bonds were used for partial redemption of series A and B bonds which were due for redemption on 2 January 2017 but were redeemed early in October 2017. As a result, GPW's series A and B bonds in a total amount of PLN 124.5 million were redeemed by GPW at PLN 101.20 per bond. The price of GPW's series C bond (ticker GPW1022) ranged in 2017 from PLN 100.52 on 2 January 2017 to PLN 105.60 on 7 June 2017.

Series A and series B bonds in a nominal amount of PLN 120.5 million were redeemed on maturity on 2 January 2017. Those were the outstanding series A and B bonds issued at the turn of 2011 to 2012 in a total amount of PLN 245 million. The bonds were introduced to trading on Catalyst (regulated market and alternative trading system) and assimilated under a single ISIN code. GPW's series A and B bonds were unsecured floating-rate bonds. Interest was fixed within six-month interest periods at WIBOR 6M plus a margin of 117 basis points.

High demand for series D and E bonds combined with the margin level confirms the robust position of the Company and strong trust of investors in GPW

Series D and E bonds in a nominal amount of PLN 120 million were issued by GPW in October 2016 and registered in January 2017. Those are five-year bearer bonds. The GPW Management Board decided to issue the bonds in connection with the redemption of the second part of series A and B bonds, maturing on 2 January 2017. Series D bonds were addressed to institutional investors and series E bonds to individual investors. The issue price of series D bonds was PLN 100 per bond. The issue price of series E bonds depended on the date of subscription as follows: PLN 99.88 for subscriptions submitted on 2 January 2017 and PLN 99.89 for subscriptions submitted on 3 January 2017. The total nominal value of the issue was PLN 120 million. Series D bonds were allocated on 29 December 2016 and series E bonds were allocated on 5 January 2017. The series D and E bonds were assimilated under a single ISIN code. The average cost of issue was PLN 0.60 per bond with a nominal amount of PLN 100. The bonds have a fixed interest rate at WIBOR 6M plus a margin of 0.95 percent p.a. The interest rate in the third interest period ended on 31 January 2018 was 2.76%. Interest is paid semi-annually. The bonds are listed on the Catalyst regulated market operated by GPW and on the Catalyst regulated market operated by BondSpot.

The price of GPW's series D and E bonds (ticker GPW0122) ranged in 2017 from PLN 100.65 on 3-4 January 2017 to PLN 102.00 on 23-24 January 2017.

Table 10 Interest on GPW series D and E bonds

Interest Period	First Day of Interest Period	Number of days in Interest Period	Record Date	Last Day of Interest Period and Payment Date
1	Issue Date	Number of days from Issue Date (inclusive) to 31.01.2017 (exclusive)	23.01.2017	31.01.2017
2	31.01.2017	181	21.07.2017	31.07.2017
3	31.07.2017	184	23.01.2018	31.01.2018
4	31.01.2018	181	23.07.2018	31.07.2018
5	31.07.2018	184	23.01.2019	31.01.2019
6	31.01.2019	181	23.07.2019	31.07.2019
7	31.07.2019	184	23.01.2020	31.01.2020
8	31.01.2020	182	23.07.2020	31.07.2020
9	31.07.2020	184	22.01.2021	31.01.2021
10	31.01.2021	181	23.07.2021	31.07.2021
11	31.07.2021	184	21.01.2022	31.01.2022

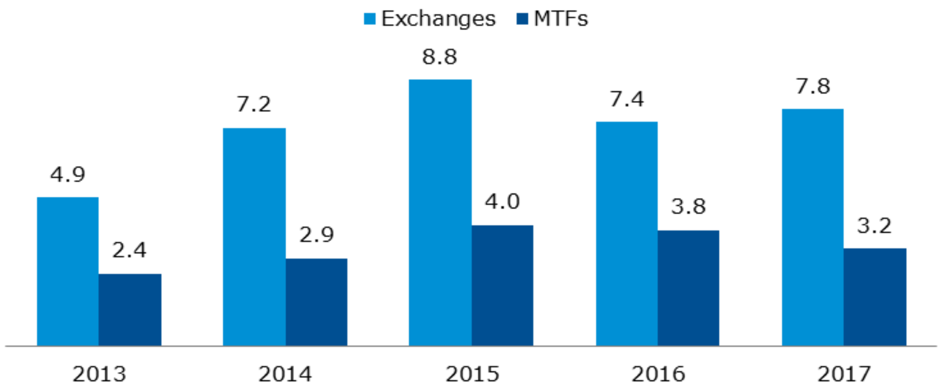
II. ACTIVITY OF THE GPW GROUP

II. 1 Market Environment

FINANCIAL MARKET

Competition of financial instrument trading venues has largely increased as a result of on-going liberalisation of the exchange industry over the past few years. Operators of regulated markets compete for new issuers, investors, liquidity and trade. Another challenge for exchanges is posed by OTC markets[26] and multilateral trading facilities (MTF). They offer trade in the same stocks as those listed on traditional exchanges combined with very short lead times for the execution of orders as well as low trading fees. Some MTFs have been licensed as exchanges, for instance CBOE Europe Equities.[27] At the same time, exchange operators are undergoing mergers and acquisitions on the financial market. In March 2017, the EU Competition Commissioner blocked the merger of the two largest European exchanges, London Stock Exchange and Deutsche Boerse, announced in March 2016, in view of concerns that the merger would largely limit competition of exchanges in Europe, especially that the merged exchanges would in fact have a monopoly with respect to some financial instruments and clearing operations. In November 2017, Euronext announced the plan to take over the Irish Stock Exchange, which is expected in Q1 2018 subject to regulatory approvals.

Figure 8 Comparison of equity trade in Europe on exchanges and MTFs[28] [EUR billion]



Source: FESE – European Equity Market Report, WFE for Borsa Istanbul

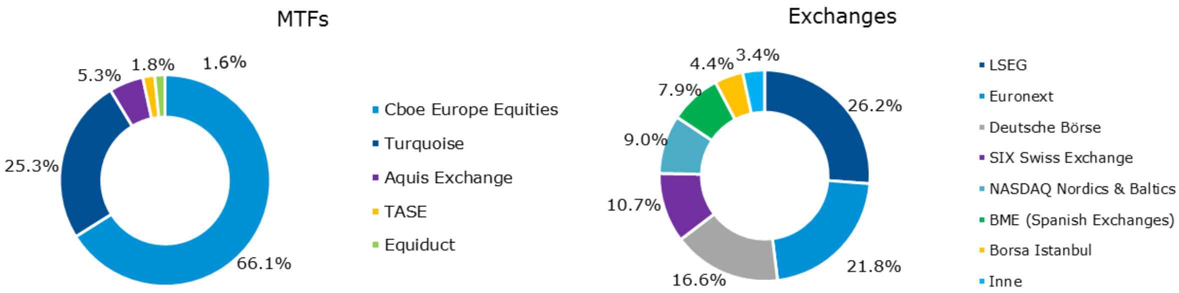
In 2017, MTFs created under MiFID after 2008 generated 29.1% of turnover in stocks on the electronic order book in Europe. The share of MTFs in turnover decreased in the last two years from 34.1% in 2016 (the highest annual percentage) and 31.3% in 2015.

The total value of trade on the electronic order book in Europe (including exchanges and MTFs) was EUR 11.0 trillion in 2017, a decrease of EUR 2.0 trillion or 1.8% year on year. However, the change of the value of trade was different for traditional exchanges and MTFs. The trading in shares on MTFs

[26] OTC (over the counter) market, where trade is made directly between market participants without the mediation of a securities exchange.
[27] On 1 March 2017, BATS Global Markets was taken over by CBOE Holdings.
[28] MTFs and exchanges which originated as MTFs (including CBOE Europe Holdings, Turquoise, Aquis Exchange, and previously Burgundy, NYSE Arca Europe).

decreased from EUR 3.8 trillion to EUR 3.2 trillion in 2017 (down by 16.3% year on year). The trading in shares on exchanges increased by EUR 0.4 trillion or 5.7% to EUR 7.8 trillion in 2017.

Figure 9 Concentration of turnover in stocks on the electronic order book on exchanges and MTFs in Europe in 2017



Source: FESE – European Equity Market Report, WFE

According to the FESE European Equity Market Report[29], MTFs had a much higher concentration of trade in stocks in 2017: the top three MTFs in Europe generated ca. 96.6% of turnover in stocks on all MTFs while the top three exchanges generated 64.7% of turnover in stocks in the European exchange industry.

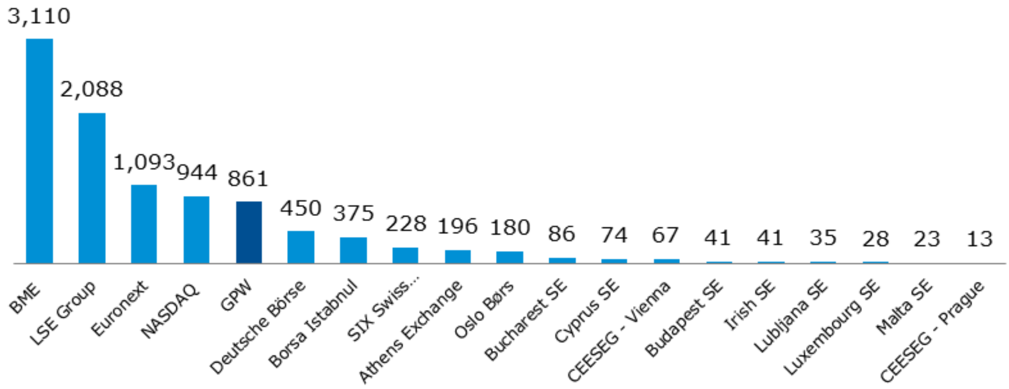
The top five venues which generated the highest turnover in stocks on the electronic order book in Europe in 2017 (72.7% or EUR 8.0 trillion) included: CBOE Europe Equities (19.2%), London Stock Exchange Group (18.6%), Euronext (15.5%), Deutsche Boerse (11.8%), Nasdaq Nordic and Baltics (7.6%). GPW generated 0.51% of the total trade in stocks in Europe in 2017.

Number of Listed Companies

European exchanges listed a total of 9,993 domestic companies at the end of 2017. The Spanish exchange BME had the biggest number of listings (3,110 companies) accounting for more than 31% of all European listings. GPW ranked fifth with 861 domestic companies representing 8.1% of the total number of domestic companies listed on European exchanges. GPW's regulated market lists 482 companies (432 domestic companies and 50 foreign companies) and NewConnect lists 408 companies (401 domestic companies and 7 foreign companies). There were 15 IPOs on the main market and 19 IPOs on the alternative market in 2017.

[29] http://www.fese.eu/statistics-market-research/european-equity-market-report

Figure 10 Number of listings on European exchanges in 2017

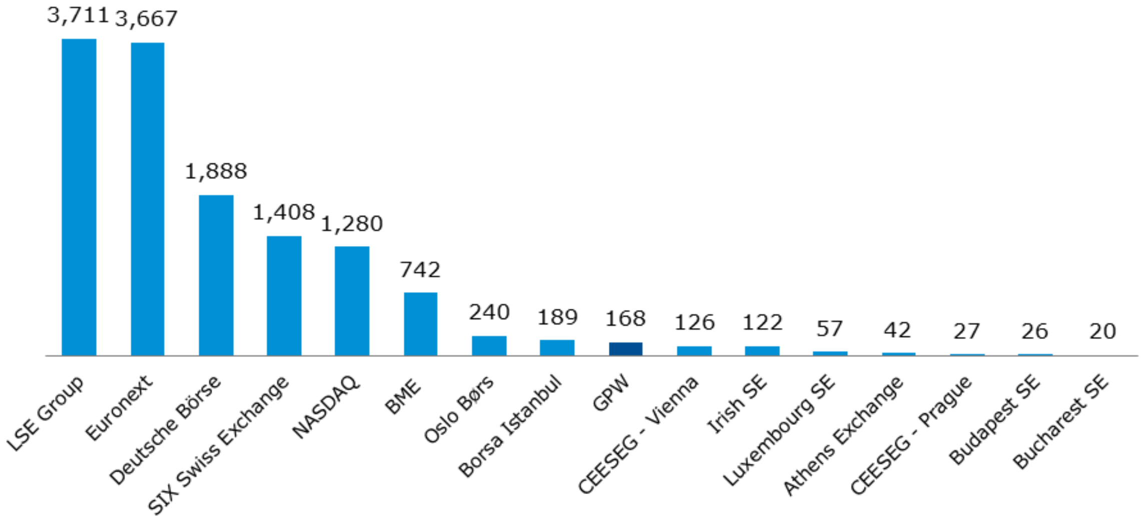


Source: FESE, WFE

Capitalisation of Stock Markets

In 2017, the total capitalisation of all exchanges globally increased by 21.8% to USD 85.3 trillion at the year's end (source: WFE). The biggest increase in capitalisation (25.7%) was reported on the exchanges in Asia and Pacific whose share in the total capitalisation of all exchanges globally was 34.0% at the end of 2017. The US exchanges which have the biggest share in the total capitalisation of all exchanges globally (42.8%) reported an increase of capitalisation by 17.8% to USD 36.5 trillion. Exchanges in EMEA (Europe, Middle East, Africa), including GPW, reported an increase of capitalisation by 24.0% to USD 19.8 trillion. With an increase of capitalisation by 43.0% year on year (in USD), GPW was the sixth biggest EMEA exchange. The biggest global exchange was NYSE with a capitalisation of domestic companies at USD 22.1 trillion, followed by NASDAQ with a capitalisation of USD 10.0 trillion, Japan Stock Exchange – USD 6.2 trillion, Shanghai SE – USD 5.1 trillion, London Stock Exchange – USD 4.5 trillion, Euronext and Hong Kong SE – USD 4.4 trillion each, Shenzhen SE – USD 3.6 trillion, and Deutsche Boerse – USD 2.3 trillion. The share of those nine exchanges in the capitalisation of global exchanges was 73.3% in 2017.

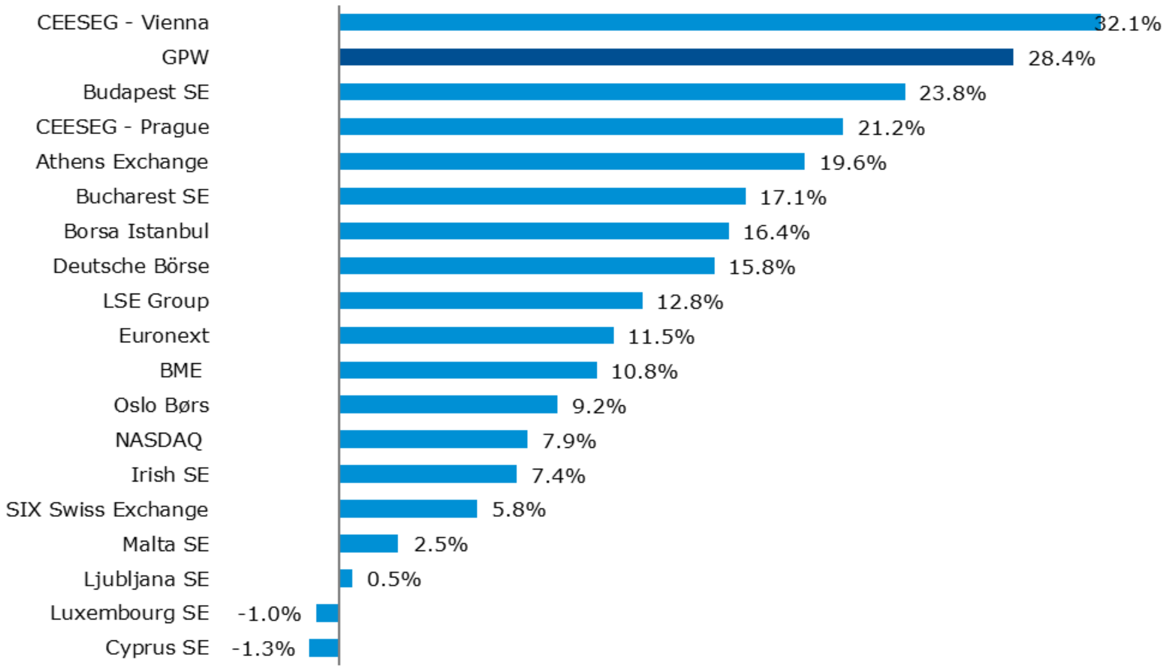
Figure 11 Capitalisation of domestic companies on European exchanges in 2017 [EUR billion]



Source: FESE, WFE

The capitalisation of European exchanges was EUR 13.5 trillion at 31 December 2017 (source: FESE, WFE), an increase of 11.7% year on year. The capitalisation of the biggest European exchanges grew at the average rate: LSE Group reported an increase in the capitalisation of domestic companies by 12.8% and Euronext by 11.5%. Mid-sized exchanged reported the biggest increase in the capitalisation of domestic companies: CEESEG - Vienna by 32.1%, GPW by 28.4%, Budapest Stock Exchange by 23.8%. The share of the top five European exchanges (by capitalisation) remained stable at 88.3% in 2017. GPW's share was 1.24% in 2017 compared to 1.07% in 2016.

Figure 12 Change in capitalisation of domestic companies on European exchanges in 2017



Source: FESE (in EUR), WFE

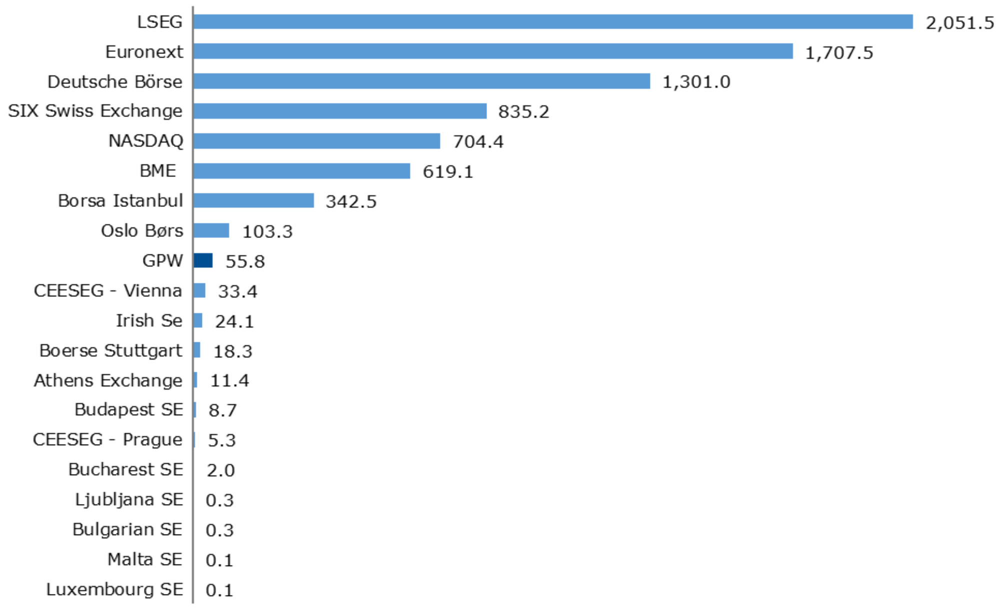
Equity Trading

According to WFE, the total value of trading in shares of domestic companies on the electronic order book was USD 82.7 trillion globally in 2017, a decrease of 4.5% year on year, mainly driven by an 8.4% decrease in the value of trade on US stock exchanges which generated 48.7% of total trading in shares globally in 2017. The value of trading in shares on EMEA exchanges increased by 3.3% mainly due to an increase in the value of trading on Euronext and Deutsche Boerse. Asian exchanges reported a year-on-year decrease in the value of trading in shares by 1.9%.

The value of trading in shares on the electronic order book on GPW increased by 27.8%, the second best result of all European exchanges. The value of trading in shares on the electronic order book on European exchanges was EUR 7.8 trillion in 2017, an increase of 5.2% year on year. The biggest European exchanges reported a single-digit increase in the value of trading in shares; the value of trading on BME remained unchanged; the value of trading on LSE decreased by 1.0% in 2017. In nominal terms, the increase in the value of trading was mainly driven by Deutsche Boerse, Euronext, Nasdaq and SIX Swiss Exchange (in total, by EUR 363.5 million). Borsa Istanbul, CEESEG – Vienna and GPW, whose value of trade increased at a double-digit rate year on year, ranked high in nominal terms as well with an increase in the value of trading year on year by EUR 51.3 million, EUR 15.5 million and EUR 6.4 million, respectively.

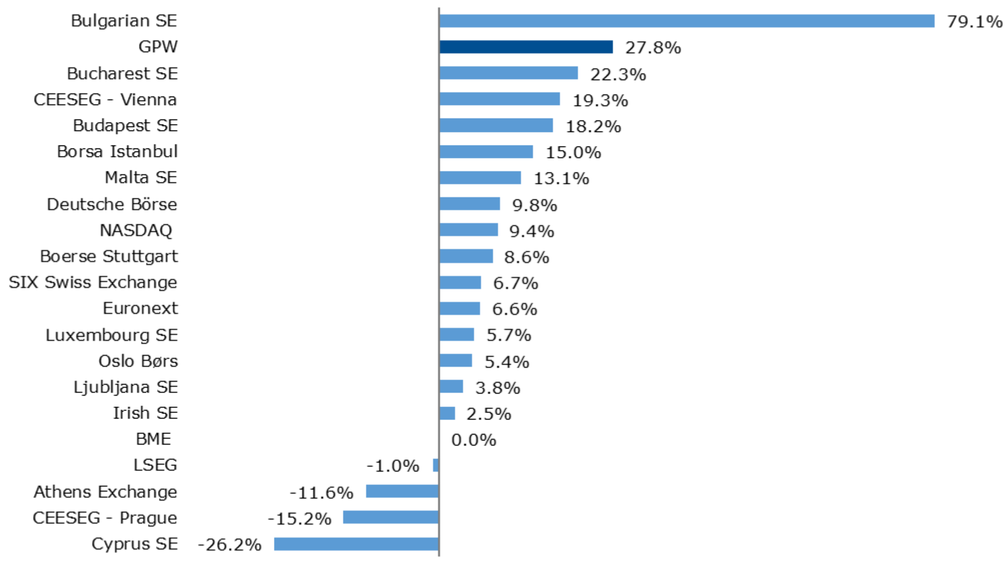
The biggest turnover in shares on the electronic order book on the European market was generated by the LSE Group (EUR 2.1 trillion), followed by Euronext (EUR 1.7 trillion) and Deutsche Boerse (EUR 1.3 trillion), the same top three exchanges as in 2016. The concentration of the top five exchanges with the highest turnover in shares in 2017 was 84.3% of the total turnover in Europe. GPW's share in turnover was 0.71% in 2017 compared to 0.59% in 2016.

Figure 13 Value of trading in shares on European exchanges in 2017 [EUR billion]



Source: FESE, LSEG

Figure 14 Change in the value of trading in shares on European exchanges in 2017

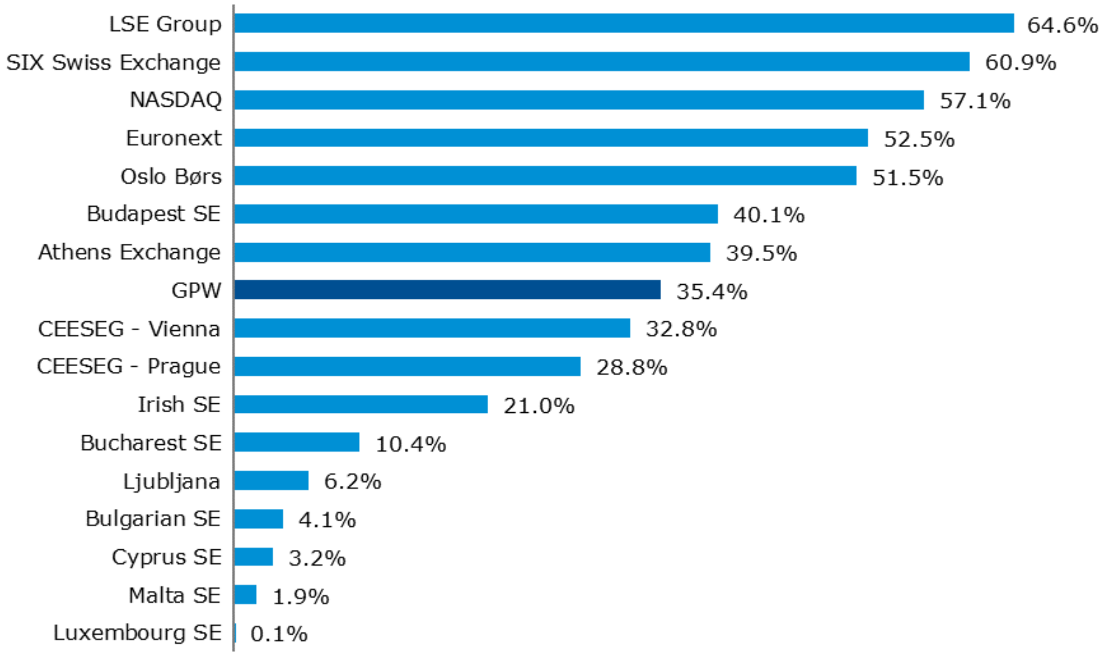


Source: FESE (in EUR), WFE

Velocity ratio

Velocity measured as turnover to average monthly capitalisation on European exchanges was 58.6% in 2017 compared to 64.1% in 2016 (WFE data in USD). GPW's velocity ratio was 34.7% in 2017 compared to 35.1% in 2016. Both capitalisation and turnover on GPW increased proportionately and so the velocity ratio remained stable despite of the significant year-on-year-change of both these values.

Figure 15 Velocity ratio[30] on European exchanges in 2017



Source: WFE

To summarise, 2017 was very successful for GPW compared to other European exchanges. The capitalisation of domestic companies increased by 28.4% and consequently GPW's share in the capitalisation of European exchanges increased from 1.07% in 2016 to 1.24% in 2017. The value of trading in shares increased by 27.8% year on year and GPW's share in the value of trading in shares on European exchanges increased from 0.59% in 2016 to 0.71% in 2017.

COMMODITY MARKET

The European electricity market is fragmented and comprises a dozen different commodity and financial exchanges. Different EU national markets are at different phases of growth and exchanges offer very different products despite ongoing unification of the spot markets. Consequently, market participants either work with a single exchange or decide to join several exchanges depending on their market preferences and must pay a higher cost. The same is true of clearing services. It is expected that exchanges should follow the market by consolidating and integrating clearing houses in order to cover possibly the biggest geographic area and maximise the volume of trading and clearing.

Those exchanges that are required by the CACM Regulation to create competition on the electricity market have opted for one of two strategies: either to protect their interests under monopoly regulations (GME, OMIE) or to consolidate and expand dynamically (EPEX SPOT, NORD POOL). Exchanges have already been consolidating and consolidation may soon come to Central and Eastern Europe. Exchanges operating spot markets have close capital links with Transmission System Operators (NORD POOL, EPEX SPOT) in Western and Northern Europe. The spot market could soon become a regulated market under strong pressure of regulators (OTE, OKTE, HUPX, OMIE, GME), as witnessed in the preparation and approval of market documents under the CACM Regulation and as required to demonstrate cost transparency.

[30] Velocity measured as turnover in 2017 to average capitalisation at the end of each month on European exchanges.

Market solutions under implementation on the European energy markets in accordance with the applicable regulations (CACM, MCO Plan, MNA) prompt TGE to align itself with the regional and European markets in order to ensure:

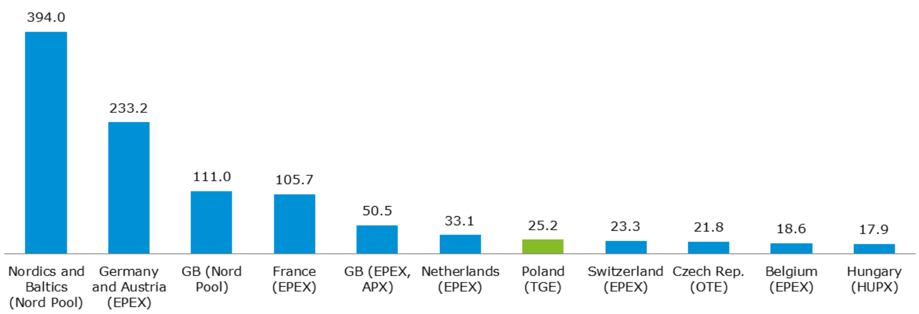
- implementation of TGE's strategy of a reliable and professional electricity exchange;
- conditions of TGE's presence and efficient operation as an energy exchange on the national and European spot market under conditions of competition between exchanges;
- implementation of functions under the ERA President's Letter of Guarantee;
- contractual and technical capacity of full-fledged active participation in market development projects and implementation of EU market mechanisms jointly with other European exchanges.

Energy and Gas Market in Poland and in Europe

The year 2017 was the second consecutive year when liquidity on the exchange electricity market was adversely impacted by a reduction of the volume of mandatory sale on the exchange. Consequently, the volume of trading in electricity on the Commodity Forward Instrument Market decreased as expected. The volume of mandatory sales affected the spot market in 2017, as well, as its trading volume decreased after hitting a historical high in 2016; however, the volume in 2017 was higher than in 2015. The gas market, which was spared major regulatory changes, reported a historically high annual volume of trading on TGE for the second year running. In 2017, it was driven by growing activity on the forward market, where the volume of trading exceeded the historical record set in 2014. This was possible owing to active trading of market participants including contracts with deliveries in 2017 and beyond. On the other hand, the uptrend in volumes of trade on the spot market initiated soon after the market opened (late 2012) came to an end.

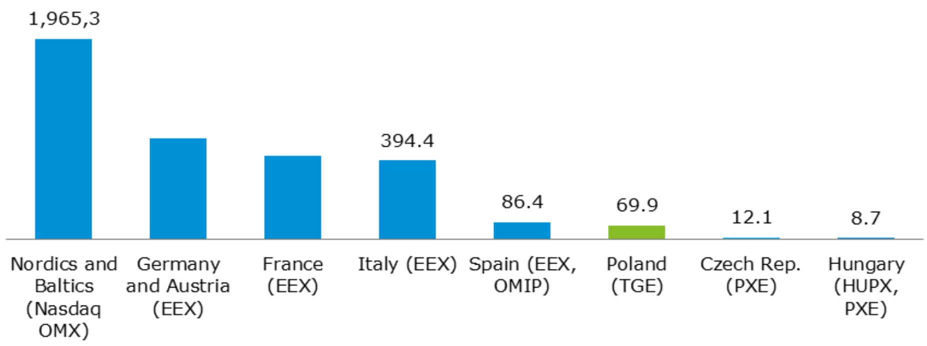
The year 2017 was a difficult time for trade in electricity and gas derivatives in view of the EU Markets in Financial Instruments Directive (MiFID2) which comes into force in January 2018. MiFID2 provides for a new status of such derivatives and imposes new obligations both on organisers of trade in such instruments and on trading entities. Those developments most likely affected the liquidity of trade in futures with financial settlement, which is crucial to the European electricity market. Trade in such contracts decreased substantially, mainly on the Nordic market (Nasdaq OMX), in the Czech Republic (PXE – EEX Group), in Germany, France and Italy (EEX). Another factor on the German market is the planned split of the German-Austrian electricity trading zone. The gas market, where trade mainly includes contracts with physical delivery, did not change as dramatically, although the volume of trading in derivatives on the German and French markets decreased sharply. On the spot market, 2017 was another year of fast growth of trade in natural gas while trade in electricity did not change significantly compared to 2015-2016, especially on the biggest markets.

Figure 16 Volume of trading in electricity on European exchanges in 2017 (spot) [TWh]



Source: TGE based on exchange data

Figure 17 Volume of trading in electricity on European exchanges in 2017 (forward) [TWh]



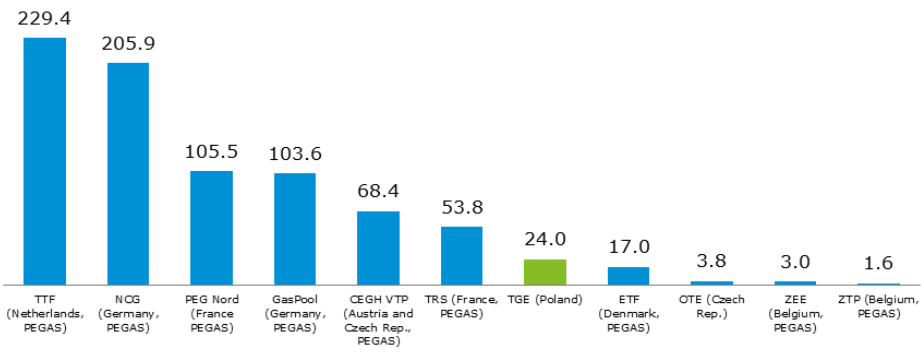
Source: TGE based on exchange data, estimates for EEX

The example of other European countries confirms that the energy exchange has prospects of further growth driven by two factors. First, on the market in electricity, the volume of trading on the exchange may be greater than ever before as compared to OTC trade; second, there is room to grow the overall liquidity of trade in commodities. This is facilitated by the development of infrastructure supporting imports of both commodities as well as the generation of power; just as important is the continued development of TGE's relations with market participants aiming to align its organisation with their specific needs.

The biggest opportunity for growth on the electricity market is opened by the liquidity of the exchange forward market; for gas, which is driven by the OTC platform operated in the TGE Group.

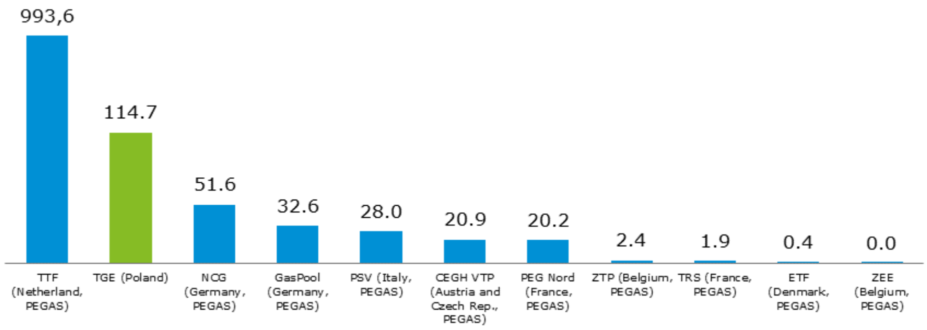
Deregulation of gas prices for industrial customers took effect in October 2017. The decision is good for TGE as the organiser of a wholesale market as it will become more involved in the pricing of products for industrial customers. The regulations imposing mandatory sale of electricity were amended in December 2017. A decrease of trade on the exchange was one of the drivers of the decision to change the level of the obligation set in the Energy Law from 15 to 30 percent of generated energy.

Figure 18 Volume of trading on European gas exchanges in 2017 (spot) [TWh]



Source: TGE based on exchange data

Figure 19 Volume of trading on European gas exchanges in 2017 (forward) [TWh]



Source: TGE based on exchange data

Prices of energy commodities: natural gas and oil, increased in 2017 as expected. Prices on European spot electricity markets also increased with the exception of the Polish market where they remained relatively low. Energy prices in Poland increased substantially only on the forward market, mainly for deliveries in 2018 and 2019.

II. 2 Mission and Strategy of the GPW Group

In 2017, the GPW Group continued to pursue the strategy GPW.2020 approved in October 2014. The Group initiated work to update the strategy in October 2017. The Ministry of Finance in collaboration with the European Bank of Reconstruction and Development is drafting a development strategy for the Polish capital market. The project includes market research, identification of barriers to growth, and recommendations for a strategy of further development of the Polish capital market. The work is expected to be finalised in 2018. In its strategy update, GPW is planning to define the directions of development for the capital market to ensure that both concepts are consistent and planned actions are aligned.

According to the assumptions of the strategy GPW.2020, the Warsaw Stock Exchange plays an important role in the economy providing growth capital to companies and local governments, thus supporting national growth by creating new jobs, fostering innovation, and raising the standards for public companies. The GPW Group addresses the needs of Polish financial institutions, companies and local governments with a full range of available instruments tailored for both large and small market players active in all sectors. This is based on state-of-the-art technology, in compliance with the highest standards, ensuring security of trading on the markets operated by GPW, including the appropriate liquidity of traded instruments, as well as a broad range of products and services.

The GPW Group pursues its strategy through comprehensive development and utilisation of available skills and resources. This is supported by efforts focused on further operational integration of the GPW Group including the consolidation of processes and procedures, the insourcing of certain support services, and the optimisation of real estate.

In addition, the strategy GPW.2020 provides for improved cost efficiency. A savings programme has been put in place covering such cost lines as rent, IT services, external service charges. This savings are used to support the areas with the greatest potential of growth, enabling GPW to better align with the demanding environment.

According to the strategy GPW.2020, the growth of the GPW Group will rely on six pillars:

- a liquid equity market;

- a developed debt market;
- a competitive derivatives market;
- a commodity market attractive to investors;
- a comprehensive offer of information products for investors and issuers;
- new business segments opened based on existing competences of the Group.

Chart 3 GPW's key strategic aspirations, strategy GPW.2020

Equity market	♦ # companies listed on Main Market > 550 ♦ Velocity ratio on Main Market > 50% ♦ NewConnect – important source of new listings for Main Market ♦ NewConnect – improved quality and attractiveness for investors
Debt market	♦ # non-Treasury issues > 1 thou. ♦ Focus on issues > PLN 100 mn ♦ Simplified structure of Catalyst and development of TBSP
Derivatives market	♦ Developed market in electricity and gas derivatives ♦ Active market in interest rate/debt derivatives ♦ New derivatives depending only on clients' needs
Commodity market	♦ Financial market in electricity >60% of domestic consumption ♦ Financial market in gas > 15% of liberalised gas market
Market information	♦ One offer for all sources of data across the Group ♦ Development of index products ♦ Manufacture of tailored-made information products
New Business Segments	♦ Post-trade services: integrated offer to address changing needs for clearing and risk management ♦ Under consideration: coal market, agricultural market, ETP
Operating efficiency	♦ C/I ratio < 0.50 ♦ Organisational and operational integration of the Group

Chart 4 Key aspirations of the GPW Group by 2020

Equity market
- Active acquisition of new issuers
- Activation and acquisition of investors including retail investors
- Acquisition of new Exchange Members
- Simplification and shortening of procedures
- Promotion of short selling and securities lending
- Unlocking the free float
- Promotion of HVP Programme
- Promotion of NC as a source of new listings for MM
- International promotion of companies

Debt market
- Simplified architecture of the corporate debt market
- Simplified procedures and tools on Catalyst
- Focus on sales
- Promoting debt ratings
- Growing activity of banks as debt market participants

Derivatives market
- Development of derivatives based on bonds, interest rates, electricity and natural gas
- Activating the investor pool
- Product development including option strategies based on new technologies

Commodity market
- Development of the gas market based on the potential of energy companies and financial investors
- More attractive offer, attracting active financial investors to other market segments

Information services
- Building an integrated offer through consolidation of data from external sources
- Implementation of new WSE Group information sales standards
- Building a regional index offer and competence centre
- Development of tailor-made indices for asset managers

II. 3 Implementation of the GPW Group Strategy in 2017

The key elements of the GPW Group's strategy include the development of technology and infrastructure and the extension of the range of investment instruments available on the GPW markets. Such efforts provide long-term benefits as they allow the GPW Group to reach out to new groups of investors and secure additional sources of revenue. This section describes the initiatives taken in 2017 under the strategy GPW.2020 in support of the development of the markets operated by the GPW Group.

Technology and security

- **100 percent availability of GPW's trading system:** In 2017, similar to previous years, GPW maintained 100 percent availability of the services provided by GPW's trading system (defined as the ability to place orders, execute trades, set prices, and publish market data).
- **Colocation and support services:** The colocation service was opened to GPW's clients in Q1 2016 and the first client, ERSTE Securities Polska, started to use the service in April 2016. The service is dedicated to algorithmic traders seeking latency sensitive access to GPW markets for themselves and for their clients. As the client base grew, GPW launched new services including remote hands and precision time protocol. In view of growing demand from clients, another 6 full racks were added in the colocation service.

  In 2017, GPW established relations and signed a contract with PICO Global, the technology provider of leading investment banks globally.

  The colocation service is a key part of the capital market infrastructure which supports the prop and algo trading segment and improves liquidity of the order book.
- **Development of a proprietary system for GPW Benchmark** used to compile bank quotes and process fixings of WIBID/WIBOR reference rates. With the fully automated state-of-the-art solution, GPW Benchmark no longer uses the services of Thomson Reuters and performs the function of Calculation Agent.
- **New trading systems on TGE**: On 31 May 2017, TGE launched a new trading system from Nasdaq. The new technology supports TGE's markets with top quality service and are scalable to new commodity and derivative instruments. X-Stream Trading allows TGE to operate many markets, support a broad range of orders and assets, serve market makers, execute strategies on the derivative market, process market data, operate an integrated index calculator, manage risks, maintain real-time positions, control and supervise the market.

  On 15 November 2017, TGE launched as a PCR co-ordinator and operator on the European market Multi-Regional Coupling (MRC). With its new technology, SAPRI, provided by Nasdaq to support cross-border trade in electricity, TGE is one of few European exchanges to operate and compete on the day-ahead exchange market. As an MRC member and PCR participant, TGE can actively contribute to regional market projects and implement EU electricity market mechanisms in co-operation with European exchanges and transmission system operators. Cross-border trade in electricity under PCR is now in place on Poland's borders with Sweden and Lithuania. The model will be used on the other borders of the Polish energy system.

Equities

Trading fee reductions:

- GPW pursues a policy of gradual reductions of trading fees to support the growth of volumes and liquidity on the markets operated by GPW. The year 2017 was the first full year of application of new reduced fees for trading in shares. GPW reduced the basic fees for Exchange Members for transactions in shares and for exchange data on the GPW Main Market and in the NewConnect Alternative Trading System as of 1 January 2016 and reduced the fixed fee on an order from PLN 0.20 to PLN 0.15 as of 1 November 2016. The fee reductions were offered as a promotion with no definitive end date applicable to all broker's orders executed on the electronic order book and in block transactions in shares, rights to shares and ETF units. The reductions were integrated into the GPW price list in 2018. The reductions mainly benefit small orders placed among others by retail investors and DMA.
- GPW pursued an active programme in support of the market makers of shares and derivatives throughout 2017. HVP mini, a new reduced threshold of minimum trade volumes under the High Volume Provider programme, was introduced in June 2017. The new thresholds are PLN 2.5 million on the cash market and 75 futures contracts or options on the derivative market. HVP mini is an integral part of HVP which means that participants of the former automatically become participants of the latter. HVP mini rates are ca. 35% higher than HVP rates. Reduced rates of fees introduced under HVP in June 2017 are available where the average value of broker's orders executed on the electronic order book is at least PLN 2.5 million per session or the average volume of futures contracts and options is at least 75 contracts per session during the month. The promotion previously required at least PLN 5 million per session or 150 contracts per session.
- A promotion with no fees for market makers of non-WIG20 shares was effective throughout 2017. The promotion was designed to support liquidity of trading in shares of companies which do not participate in WIG20 and to support the local brokerage industry. The promotion is a part of the strategy encouraging investor activity with a flexible pricing policy aligned with the needs of different groups of GPW clients.
- The promotion for market makers of WIG20 index futures was extended in 2017. The promotion offers reduced transaction fees to the most active market makers. Market makers pay PLN 0.50 per transaction in futures once they exceed the threshold of 15,000 contracts per month and PLN 0.40 above 30,000 contracts per month. The promotion encourages market makers to be active investors.
- A promotion with no fees for exchange members for trade in bond futures and trade in WIBOR futures was extended in June 2017 until 31 December 2017.
- The Super Market Maker programme was in effect in 2017. The programme supported liquidity of the cash market and the volume of trading in shares of the biggest companies ranking 1 to 7 in the WIG20 portfolio. The programme imposed much higher requirements for market makers' orders on GPW (size, spread, share in turnover) but it also provided participants with reimbursement of part of transaction fees and revenue sharing with the counterparty. The programme was also offered on the derivative market.

In view of alignment with MiFID2, GPW did not introduce any fundamental changes to its price lists in 2017. However, GPW was working throughout 2017 to align its product offer and price list with the new European regulations. The changes took effect at the beginning of 2018.

The pricing policy clearly helped to grow the value of trading in shares (in EUR) on the electronic order book by 27.8% on GPW, the second best result of all European exchanges in 2017

For details of GPW's policy in support of liquidity on the stock market, see section *II.4. Market Environment*.

- **34 companies had their IPOs on both stock markets** (including 7 transfers from NewConnect to the Main Market). According to PwC's IPO Watch Europe Report, GPW ranked third in Europe on a par with the Spanish exchange by the number of IPOs and eighth by the value of IPOs. The IPO of Play Communications SA worth EUR 1.0 billion was the eighth biggest European IPO in 2017.
- **Sustained high liquidity of the Main Market in shares as measured by velocity** due to:
  - ✓ acquisition of new clients including exchange members, market makers and participants of the liquidity support programmes (HVP and HVF);
  - ✓ continuation and introduction of transaction fee promotion programmes;
  - ✓ improvement of the infrastructure and accessibility of the Polish market for global investors (Interactive Brokers, one of the world's biggest online discount brokers, started operating on the Warsaw Stock Exchange in June 2017 as the first remote exchange member to serve retail investors. Deutsche Bank AG became a remote exchange member in June 2017. Polski Dom Maklerski was admitted as an exchange member in October 2017. Societe Generale added trading in derivatives for the account of clients to its operation on GPW in June 2017.);
  - ✓ continued extension of GPW's product offer including three new single-stock futures and structured certificates issued by BNP Paribas Issuance N.V., the fifth issuer of structured products active on GPW;
  - ✓ new Independent Software Vendor (ISV): Embedded Software;
  - ✓ the Warsaw Stock Exchange continued its initiatives to promote the exchange as a venue to raise capital for companies and local governments. GPW with its partners (Bank PKO BP, Private Equity Fund Enterprise Investors, law firm Gessel) organised a series of business breakfasts for companies in the main cities in Poland devoted to raising capital for growth in order to discuss different forms of financing and their complementarity. GPW held one-on-one meetings with more than 60 companies not yet listed on the GPW markets. In 2017, GPW finalised the Polish-Belorussian IPO Centre project including six training sessions in Minsk which introduced the details of raising capital on the GPW markets to Belorussian companies. In 2017, GPW continued the Ambassador Programme launched in 2016. The programme participants were the 11 biggest banks present in Poland. The programme promotes the capital market among bank advisors to help them communicate the opportunities of investing on GPW among their retail clients and other bank officers. The Polish capital market was promoted among international institutional investors at seven investor conferences organised in partnership with leading banks and investment firms in seven European countries;
  - ✓ continued training dedicated to products offered to individual investors in partnership with brokerage houses: 42 training sessions were attended by 3,322 participants.
- **Continued initiatives making NewConnect more attractive for investors**

  NewConnect celebrated its tenth anniversary in 2017. The capitalisation of companies listed on NewConnect is ca. PLN 10 billion. The companies have raised ca. PLN 4.7 billion in IPOs and SPOs on NewConnect over the decade. Sixty companies have transferred from NewConnect to the GPW Main Market over those years, representing ca. 14% of all domestic companies listed on the Main Market. In 2017, GPW continued the promotion of NewConnect among smaller companies which are considering to raise capital in the alternative trading system. The activities included one-on-one meetings and initiatives addressed to start-ups such as IPO workshops and participation in conferences dedicated to start-ups and new technologies.

Debt market

In 2017, Catalyst continued to pursue its strategy of promoting bonds among SMEs, including one-on-one meetings with companies and local governments and GPW's participation in conferences across Poland where it promoted financing with debt issues.

- 154 series of PLN bonds and 12 series of EUR bonds were introduced to trading in 2017.
- 21 new issuers issued and introduced bonds to trading on Catalyst.

The year 2017 brought big issues of banks and insurers including:

- ✓ PZU – PLN 2.25 billion
- ✓ PKO BP – PLN 1.7 billion
- ✓ EIB – PLN 1.5 billion
- ✓ Pekao S.A. – PLN 1.25 billion

GPW pursued a policy in support on investing in public issues on the bond market. Last year set a historical record of public bond issues. The value of public bonds issued under a prospectus and addressed to individual investors was PLN 1.849 billion, 21.6 percent more than in 2016.

Derivatives market

New single-stock futures: to address investor demand, GPW introduced several new classes of single-stock futures in 2017:

- ✓ futures on the shares of POLIMEX-MOSTOSTAL S.A. were introduced to trading on 20 March 2017;
- ✓ futures on the shares of DINO POLSKA S.A. were introduced to trading on 9 May 2017;
- ✓ futures on the shares of PLAY COMMUNICATIONS S.A. were introduced to trading on 10 August 2017.

- Intensified promotion and education concerning interest rate futures. In 2017, GPW in partnership with brokers offered more than 40 training sessions for individual investors devoted to derivatives and other market segments.

Commodity market

Main pillars of TGE's strategy:

The direction of developmental programmes of TGE and its subsidiaries must match the strategy of the GPW Group, the government programmes supporting the development of the Polish energy industry, market conditions, and the EU's proposed implementation of the European internal energy market. Well-designed mid-term and long-term strategies of the company pursued with determination will help to achieve the business goals which include the following:

- Strengthening TGE's position as the biggest trading venue in electricity, natural gas and energy commodities in Poland and in the region by attracting new members, developing diverse products and aligning the organisation with the EU requirements;
- Implementation of MiFID2 by aligning the organisation of the derivative markets in electricity and gas;
- Active participation in the development of the European electricity and gas market.

Electricity market

- **Development of the spot electricity market:**
  - ✓ Maintaining the position of TGE as Nominated Electricity Market Operator (NEMO) on the local energy market, safeguarding the Polish market against acquisitions by the largest foreign exchanges (EPEX Spot and Nord Pool Spot are NEMOs on the Polish market).
  - ✓ Participation in European energy market integration projects: Market Coupling trade on new cross-border connections.
- **Forward electricity market: harmonisation with MiFID2, maintenance and development of liquidity:** Preparation of the Commodity Forward Instruments Market to become an OTF (Organised Trading Facility) under MiFID2. Discretion, which is a specific property of OTFs under MiFID2, was introduced on the Commodity Forward Instruments Market on 29 December 2017. Discretion implemented by TGE means that TGE may increase liquidity of less liquid instruments on the market. Discretion allows TGE to continue the operation of trade on the Commodity Forward Instruments Market and to attract OTC trade in the future. Following the effective date of the law implementing MiFID2 (amendment of the Act on Trading in Financial Instruments, UC86), TGE has 12 months to apply to PFSA for a licence to operate an OTF which will replace the Commodity Forward Instruments Market.
- **Conditions of liquidity necessary to offer acceptable market-based energy prices on the Polish market:**
  - ✓ Concentration of trade in energy and maintenance of market liquidity including mandatory sale of electricity on the exchange;
  - ✓ Active acquisition of new market makers and new exchange members (domestic and international).

Gas market:

- **Develop of the spot gas market:**
  - ✓ Continued development of liquidity of trade to improve security of deliveries for market participants;
  - ✓ Maintenance of liquidity of the Intraday and Day-Ahead Market in gas to ensure balancing of gas market participants in order to retain the status of liquid balancing platform;
  - ✓ Collaboration with the operator Gaz-System to implement the requirements of BAL NC.
- **Forward gas market: harmonisation with MiFID2, maintenance and development of liquidity:** Preparation of the Commodity Forward Instruments Market to become an OTF (Organised Trading Facility) under MiFID2. Discretion, which is a specific property of OTFs under MiFID2, was introduced on the Commodity Forward Instruments Market on 29 December 2017. Discretion implemented by TGE means that TGE may increase liquidity of less liquid instruments on the market. Discretion allows TGE to continue the operation of trade on the Commodity Forward Instruments Market and to attract OTC trade in the future. Following the effective date of the law implementing MiFID2 (amendment of the Act on Trading in Financial Instruments, UC86), TGE has 12 months to apply to PFSA for a licence to operate an OTF which will replace the Commodity Forward Instruments Market.
- **Conditions of liquidity necessary to offer acceptable market-based gas prices on the Polish market:**
  - ✓ Continued operation of the Energy Law requirement of mandatory sale of gas on the exchange at the current level of 55%;
  - ✓ Active acquisition of new market makers and new exchange members (domestic and international).
- **Development of TGE registers:**

- ✓ Increase of the volume of white certificates in the extension of the support system for energy efficiency certificates and simplification of issuance procedures: at this time, the white certificate system is available with no end date;
- ✓ Marketing and information communications to introduce Polish companies and local governments to the benefits of energy efficiency initiatives;

The system of certificates of origin, in particular green certificates, will be gradually phased out in the coming years. Some of the clients of the Register of Certificates of Origin will participate in the new auction system operated outside TGE.

Information services

- **Taking over the function of the organiser of WIBID and WIBOR reference rate fixings**: GPW Benchmark took over the function of organiser and calculation agent of WIBID and WIBOR reference rate fixings. Real-time, delayed and historical reference rates are available on a commercial basis. GPW is responsible for the distribution of GPW Benchmark data as it integrates information services within the GPW Group.
- **Addition of WIBOR data to the GPW Group's product offer**: In 2017, GPW acquired 4 new clients of real-time data, 7 clients of delayed data, 1 client of WIBOR historical data, and 2 clearing houses which use WIBOR in clearing.
- **Continuation of initiatives boosting the sale of non-display data**: In 2017, following focused acquisition initiatives, GPW attracted 11 new clients for non-display data (used in algorithmic trading, risk management, portfolio valuation, and other non-display applications).
- **Client acquisition**: New clients include 4 data vendors in Western Europe and the USA, 1 Belgian operator which uses GPW indices to issue financial instruments, 1 UK operator which calculates indices using GPW data, 7 clients in Poland, Western Europe, USA and Canada using processed data.
- **Continued increase in the number of subscribers of TGE and BondSpot data**.
- **Development of indices**: In pursuit of the strategy of development of indices, GPW introduced a new sector classification of exchange issuers and started to publish three new sector sub-indices: pharma, moto, and clothing. GPW started to publish total return indices mWIG40TR and sWIG80TR; as a result, investors have access to both price and total return indices on GPW including WIG20, mWIG40 and sWIG80.
- **Modification of the product offer and the business model under MiFID2 requirements:** GPW aligned its agreements and price lists with the new regulations and implemented a model of fees for the distribution of delayed data and data used by contractors of data vendors supporting the distribution of data to subscribers. GPW developed a new service: KID (Key Information Document), which facilitates investor access to the documentation of structured products, certificates and derivatives.

New initiaves

- GPW decided to amend the Articles of Association of GPW Centrum Usług to the extent of its core business and to change the name of the company to GPW Benchmark. A newly launched project will develop a system of contribution, calculation and distribution of WIBID/WIBOR reference rate fixings and activate the process. GPW Benchmark S.A. became the Administrator and Calculation Agent of WIBID/WIBOR reference rates as of 30 June 2017.

- On 28 November 2017, GPW, the Polish Development Fund (PFR) and the Credit Information Bureau (BIK) signed a co-operation agreement to create a joint rating agency based on Instytut Analiz i Ratingu. The objective is to close the gap in ratings available in particular in the SME segment. The development of the agency is in line with the Plan for Responsible Development. The agency will launch in H2 2018.
- GPW introduced its own sector classification of issuers on the Regulated Market, NewConnect and Catalyst. The new rules are in line with international standards and best practice. The new classification of companies is accompanied by new sector indices: WIG-pharma, WIG-clothing, and WIG-moto.
- GPW started to calculate and publish two new total return indices, mWIG40TR and sWIG80TR. Total return indices track the performance of stocks in the portfolio including income from corporate actions. Total return indices can be used in other financial instruments including ETFs and investment certificates. GPW calculates price and total return indices WIG20, mWIG40 and sWIG80.
- GPW launched a new service which provides key information documents (KID) of instruments where the underlying is an index or other financial instrument. GPW's service provides current information for instruments traded on the exchange and offers a repository of historical information. GPW's service is competitive to similar services offered by foreign operators.
- Gas Hub: The gas hub became a government project in 2017 as the Council of Ministers adopted the Strategy for Responsible Development. The Strategy provides for the preparation and submission to the Council of Ministers of a gas hub model including regulatory and legislative solutions by the end of 2018. The project is co-ordinated by the Ministry of Energy's Oil and Gas Department. In early 2017, the Ministry of Energy published Project Sheet 176 which names TGE as a project participant. The gas hub is defined as a gas distribution and trade hub in Central and Eastern Europe and the Baltic States. In the project, TGE is responsible for the development of an offer of wholesale trade.

  In 2017, TGE undertook a study of the hub project focusing on trading solutions and structures of existing gas hubs. TGE representatives participated in a gas hub seminar at the Zeebrugge gas hub in Belgium.

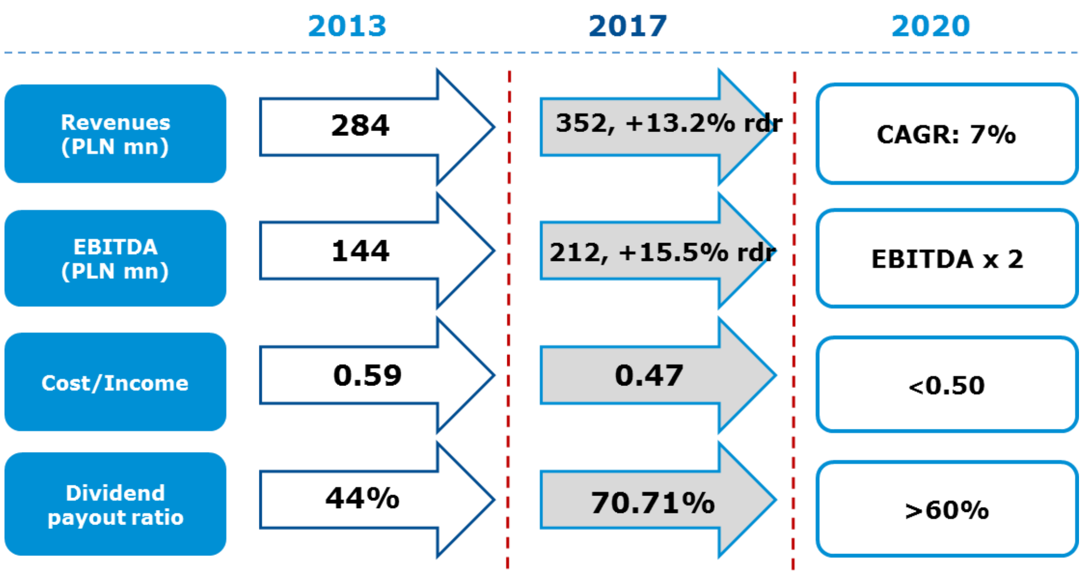
  The gas hub project is complementary to the diversification project Northern Gateway and the regional co-operation initiative Three Seas. The success of these endeavours will improve the technical capacity of gas supplies from different sources to Poland. The capacity is expected to increase to 61 bn m³ of natural gas per year after 2022. The gas hub and its integral part, a gas exchange operated by TGE, will in the future concentrate trade in gas in the region. The project in 2018 will be co-ordinated by the Ministry of Energy's Task Force.

Operational excellence

- **Cost optimisation:** The GPW Group's operating expenses increased by PLN 15.6 million year on year, mainly as a result of one-off events, i.e., expenses related to additional external services in the preparation of the GPW Group for MiFID2/MiFIR. The strict cost discipline is a fundamental principle of GPW's financial policy; as a consequence, in spite of a nominal increase of expenses year on year, the C/I ratio was 47.1% compared to 48.3% in 2016.
- **Integration of the GPW Group:** In 2017, GPW continued the Group's programme launched in 2015 to ensure effective and efficient services for GPW Group companies in different areas with improved quality, standardised methods and scope of work, elimination of duplicated processes, adequate use of available resources, cost reductions, standardisation and simplification of information flows. The following projects were initiated among others: unification and centralisation of accounting and financial processes, HR and payroll processes, development of a single controlling methodology, a single office environment, a shared system of electronic document flows, and common rules of corporate identity across the Group. The relocation of all GPW Group companies to a single location was completed in 2017, optimising the cost of lease and rent of office space. All projects scheduled for 2017 under the programme

were completed. In 2018, integration initiatives will continue, including unification of administration, communication and network services.

Chart 5 2017 in the GPW Group v. ambitions under the strategy



In 2017, the GPW Group focused on the development goals of the GPW.2020 strategy and continued to grow shareholder value. According to the strategy, the Group's consolidated revenue will grow at 7% CAGR while the cost/income ratio will drop to less than 50% by 2020. The Group expects to double its EBITDA in 2020 compared to PLN 144 million in 2013. The development strategy and the development initiatives defined for 2017 contributed to dynamic growth of the Group while the financial targets were exceeded. The GPW Group's sales revenue increased by 13.2% and the C/I ratio was 47.1%.

EXTERNAL DRIVERS OF THE GROUP'S GROWTH IN 2017

Macroeconomic Conditions in 2017

According to initial estimates of the Central Statistical Office (GUS), Poland's gross domestic product (GDP) grew by 4.6% in 2017 and 2.9% in 2016.

GDP growth was driven mainly by strong consumer demand and favourable external conditions including recovery in the eurozone which helped Polish exports. According to the Central Statistical Office, domestic demand increased by 4.7% in 2017 and 2.2% in 2016. Investments improved in H2 2017, in particular public investments. Investments increased by 5.4% in 2017 but decreased by 7.9% in 2016.

Unemployment was 6.6% in 2017, a record low level. Demand for labour in Poland remained strong with a growing shortage of employees. Wage pressures increased in H2 2017.

According to the Central Statistical Office, inflation was 2% in 2017. Inflation was mainly driven by rising fuel and food prices. Despite a faster increase of salaries paid by companies, core inflation net of food and energy prices remained relatively low at 0.7% in 2017.

Despite dynamic GDP growth, the Monetary Policy Council (RPP) kept the interest rates unchanged in 2017 on the argument that the rates kept the Polish economy on track of sustainable growth and ensured macroeconomic balance. The policy was corroborated by the position of the Polish currency on the international currency market. PLN was one of the world's strongest currencies against EUR and USD in 2017.

On 29 September 2017, the rating agency FTSE Russell announced the annual classification of national economies. Poland was promoted from Advanced Emerging Markets to Developed Markets. The decision takes effect in September 2018, which leaves a period of time for transition. The promotion puts Poland among the world's 25 developed economies including Germany, France, Japan, Australia, and the USA. Poland is the first Central and Eastern European economy to be named a Developed Market.

Harmonisation with MiFID2/MiFIR

MiFID2 extends the list of financial instruments, adds new regulations protecting investors, market transparency, corporate governance, as well as additional disclosure and technology requirements for algorithmic trading and trade reporting. It also introduces a new trading system: OTF (Organised Trading Facility).

MiFIR defines the requirements for publication of transaction data and reporting to supervisory authorities, regulates mandatory derivatives trade in organised systems, in particular supervisory actions for financial instruments and derivative positions, and services provided by third-country companies without a branch in the European Union.

The adoption of the MiFID2/MiFIR package largely reorganises the operation of financial markets. For Poland and the European Union, it is another step towards unification of the financial service industry and better investor protection on the capital markets.

In 2017, the preparation of GPW for MiFID2 included harmonisation in three areas:

- <u>modification of IT systems and amendment of regulations applicable to trading</u>: GPW aligned its IT systems with MiFID2/MiFIR. The roll-out took place on 3 January 2018 as required. The modifications applied mainly to the trading system and related systems and included: additional capacity requirements, on-going performance monitoring, higher standards of time synchronisation, adjustment of the format and content of the system's incoming and outgoing messages with additional information requirements under the regulations. The project developed an algorithm testing environment, implemented the kill functionality which allows GPW to cancel orders of an exchange member or its client using direct electronic access (sponsored client), and implemented pre-trade and post-trade transparency for all classes of assets.

  In view of the information requirements under MiFID2/MiFIR, GPW developed mechanisms necessary to compile and archive, for the use of PFSA, orders with additional information including personal data of holders of securities accounts, and developed a dedicated personal data processing system. GPW developed IT solutions to provide PFSA and ESMA with reference data of financial instruments traded on GPW with the required format and content

  In order to comply with the requirements under the regulations, GPW implemented systemic solutions and defined the terms of direct electronic access to GPW's trading system.

- <u>work dedicated to issuers</u>: including mainly alignment of the Exchange Rules with the requirements of Commission Delegated Regulation (EU) 2017/568, which imposes specific requirements of admission of all categories of financial instruments (transferable securities, ETFs, investment certificates, derivatives), and alignment of the Detailed Exchange Trading Rules with the Regulation to the extent of the standard application for admission of all instruments. GPW drafted and published on its website the procedure for verification of compliance of issuers of transferable securities with the obligations under EU law as required under Commission Delegated Regulation (EU) 2017/568. GPW implemented mechanisms necessary to comply with its new obligations under Commission Delegated Regulation (EU) 2017/1005, i.e., publication on GPW's website and notification of PFSA in the event of the suspension or delisting of financial instruments on the exchange. GPW completed an educational campaign addressed to issuers focusing on the requirement to hold a Legal Entity Identifier (LEI).

- <u>implementation of organisational requirements and development of necessary regulations and procedures</u>: In the process preparing GPW for the MiFID2/MiFIR package, we drew up a list of approximately 100 regulatory requirements and worked to draft new internal regulations and to amend existing regulations in order to ensure that the regulatory requirements are well implemented in GPW.

For more information about the impact of MiFID2 on the GPW Group, see section I.1 *Development of the GPW Group in 2018* (financial and commodity market regulations).

II. 4 Business Lines

The activity of the GPW Group is diversified and focuses on two markets: the financial market and the commodity market, where Group companies organise trade in financial instruments and commodities, and offer complementary services.

FINANCIAL MARKET

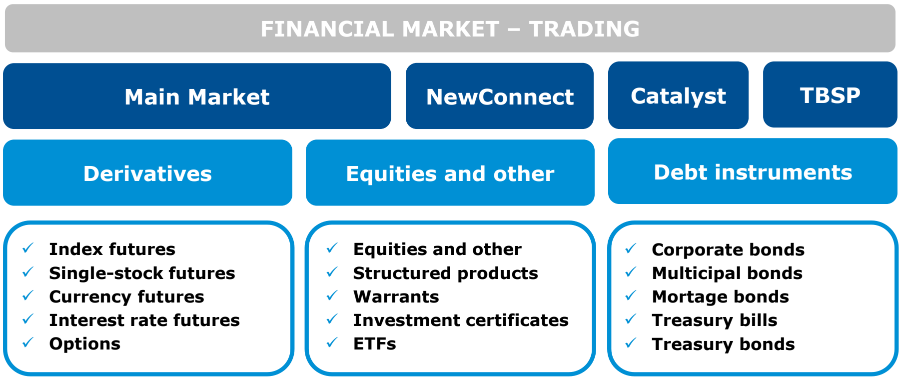
The activities of the GPW Group on the financial market include:

- trading in financial instruments on the regulated market and in the alternative trading system:
  - ✓ trading in shares and other equity instruments on the Main Market and on the NewConnect market,
  - ✓ trading in derivatives on the Main Market,
  - ✓ trading in debt instruments on the Catalyst market organised by GPW and BondSpot and on Treasury BondSpot Poland (TBSP),
- listing, including introduction to trading and listing of financial instruments,
- information services including data from the financial market.

TRADING

Trading encompasses trade in financial instruments on the Main Market and on GPW regulated markets NewConnect and Catalyst, and on Treasury BondSpot Poland.

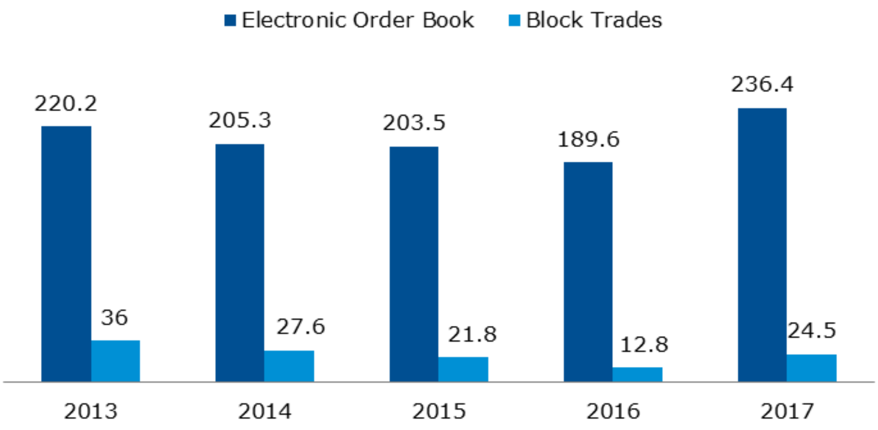
Chart 6 Financial instruments in trading on the GPW Group financial markets



Stock Market

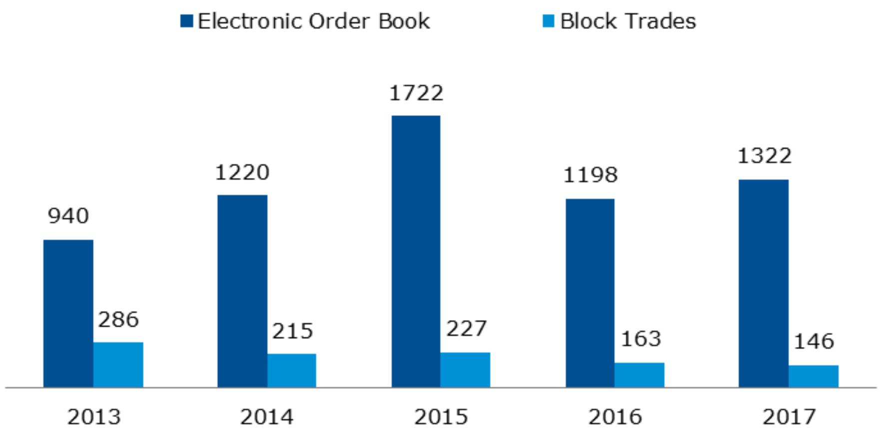
The value of trading in shares on the electronic order book (EOB) on the GPW Main Market was PLN 236.4 billion in 2017, representing an increase of 24.7% year on year. The average daily value of trade on the was PLN 945.8 million, an increase of 25.2% year on year, despite a smaller number of trading days in 2017 (250) compared to 2016 (251). The number of transactions was 20.0 million in 2017, an increase of 4.0% year on year. The value of trading in shares on the electronic order book on the GPW Main Market was particularly high in Q1 2017 and stood at PLN 66.7 billion, the highest figure since Q3 2013.

Figure 20 Value of trading in shares on the Main Market [PLN billion]



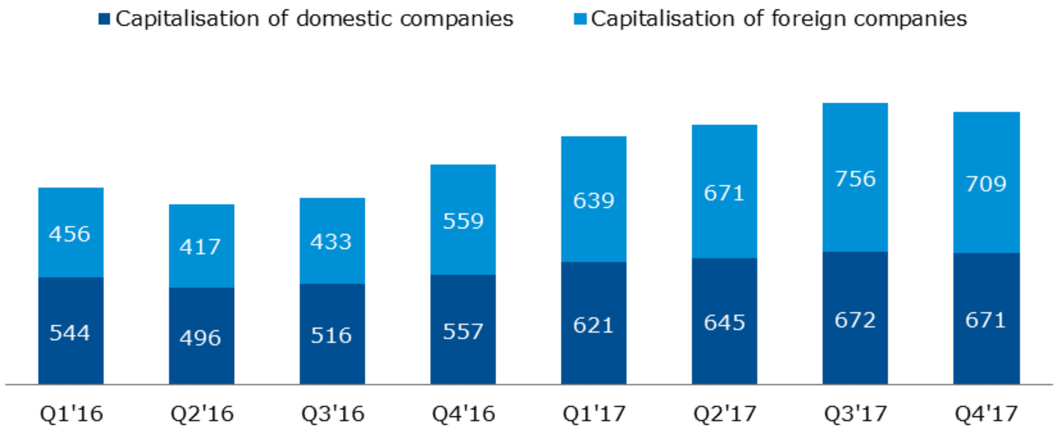
The value of trading on the electronic order book on NewConnect increased by 10.4% year on year to PLN 1,322 million in 2017 and the value of block trades decreased by 10.2% year on year to PLN 146 million in 2017. The number of transactions on the electronic order book was 850 thousand in 2017, a decrease of 0.9% year on year.

Figure 21 Value of trading in shares on NewConnect [PLN million]



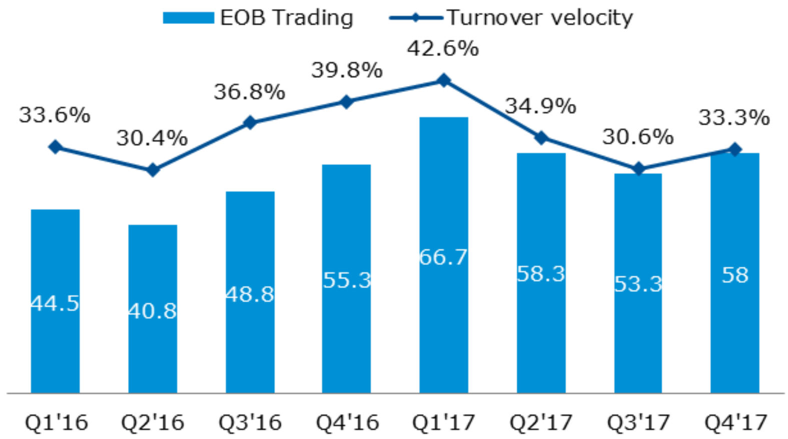
The key drivers of the value of trade on the GPW markets in 2017 included the very strong macroeconomic conditions in Poland: strong GDP growth driven mainly by domestic demand, strong consumption supported by the strong job market, and appropriately restrictive fiscal and monetary policies. The Polish currency was a strong contributor while global risks, including mainly a more restrictive monetary policy and a series of rate hikes in the US, did not hinder growth on the global equity markets. This helped the performance of stocks and indices. The capitalisation of domestic companies listed on GPW increased by 20.4%. With a year-on-year rise of 55.0% (in USD), WIG20 was one of the world's strongest indices in 2017. The Polish stock market benefited from the generally strong sentiment around the Emerging Markets, which generated capital flows to ETFs and active funds. The local drivers of growth in the value of trade included IPOs (worth PLN 7.6 billion on the GPW Main Market, the highest figure since 2011), SPOs, as well as the sale of Pekao: these generated passive capital flows from ETFs as indices changed. Foreign investors made a particularly strong contribution to the growth in the value of trade in equities.

Figure 22 Capitalisation of domestic and foreign companies on the Main Market [PLN billion]



The capitalisation of domestic companies listed on the Main Market was PLN 671.0 billion at the end of 2017 compared to PLN 557.1 billion at the end of 2016 (an increase of 20.4%).

Figure 23 Turnover in shares on the Main Market [PLN billion] and velocity [%]



Velocity increased starting in Q2 2016 and reached its high of 42.6% in Q1 2017. The velocity ratio decreased in the later quarters of 2017. Velocity was 35.3% in 2017 compared to 35.2% in 2016.

GPW takes far-reaching initiatives to improve liquidity on the Main Market, mainly including acquisition of new clients, improvement of infrastructure and availability, and generation of additional volumes among others through active promotional programmes offering reduced transaction fees.

The colocation service was opened to GPW's clients in Q1 2016. The service is dedicated to algorithmic traders seeking the closest possible access to GPW markets for themselves and for their clients. In 2017, GPW established relations and signed a contract with PICO Global, the technology provider of leading investment banks globally. In view of growing demand from clients, another 6 full racks were added in the colocation service. The colocation service is a key part of the capital market infrastructure which supports the prop and algo trading segment and improves liquidity of the order book.

Three new exchange members joined GPW in 2017 and one exchange member extended the scope of its activity. Interactive Brokers, one of the world's biggest online discount brokers, started operation on the Warsaw Stock Exchange in June 2017 as the first remote exchange member to serve retain investors. Deutsche Bank AG became a remote exchange member in June 2017. Polski Dom Maklerski was admitted as an exchange member in October 2017. Societe Generale added trade in derivatives for the account of clients to its operation on GPW in June 2017.

Embedded Software became a new Independent Software Provider (ISV) in 2017. Efforts continue to attract more ISVs.

The HVP and HVF programmes were modified in 2017 and price promotions under the programmes were extended until 31 August 2018. HVP and HVF are special promotional programmes addressed to active investors on the stock and derivative market.

- **High Volume Provider (HVP) programme** is addressed to entities which invest on own account only. Launched by GPW in November 2013, it offers promotional fees to those investors who generate at least PLN 5 million of trading in equities per session on the stock market or 150 thousand futures and options on the derivatives market. HVP mini, an additional threshold of minimum trade volumes under the High Volume Provider programme, was introduced in June 2017. The new thresholds are PLN 2.5 million on the cash market and 75 futures contracts or options on the derivative market. HVP mini is an integral part of HVP which means that participants of the former automatically become participants of the latter. HVP mini rates are ca. 35% higher than HVP rates. The maker-taker price list is not available in HVP mini.
- **High Volume Funds (HVF) Programme**: the programme is addressed to investment funds which actively trading in shares or derivatives on GPW. It was launched in July 2015. Similar to HVP, it is a fee promotion for those funds which generate daily trade in shares exceeding PLN 5 million or 150 futures and options on the derivatives market. The condition of generating average turnover at PLN 5 million on the cash market was waived until the end of March 2017. The velocity ratio of a fund, calculated as the turnover generated within three months to the fund's net asset value, should be at least 200 percent per month. The formula was changed from a one-month to a three-month volume.

Both these programmes on the cash and derivatives markets jointly had 8 participants in 2017. Proprietary traders (participants of the HVP and HVF programmes and a new market maker) generated 11.5% of the value of trading in shares on the electronic order book in 2017; in the best months, their share in trade in equity trade was 13.2%.

In addition to the liquidity support programmes, trading participants benefited from other fee reductions and promotions.

The maker-taker price list available in 2017 to market makers of shares and participants of the High Volume Provider (HVP) programme on the Main Market promoted passive orders on the order book. The price list offers very attractive low trading fees for professional traders present on the order book. The transaction fees for traders who place maker buy and sell orders (entered to the order book) are much lower than fees for taker buy and sell orders (which match an existing order on the order book). The price list is optional which means that market makers of shares and HVP participants may use the maker-taker price list or use the usual price list and promotions.

The Super Market Maker programme was in effect in 2017. The programme supported liquidity of the cash market and the volume of trading in shares of the biggest companies ranking 1 to 7 in the WIG20 portfolio. The programme imposed much higher requirements for market makers' orders on GPW (size, spread, share in turnover) but it also provided participants with reimbursement of part of transaction fees and revenue sharing with the counterparty. The programme was also offered on the derivative market.

A pilot Super Market Maker programme was launched in early 2018 for selected instruments (including WIG20 shares, futures and options, single-stock futures, currency futures). The programme aims to stimulate liquidity of certain products by rewarding market makers who improve the quality of the order book. The programme encourages market makers to decrease spreads and increase the volume or value of trade. The programme will run until 31 August 2018 and GPW may decide to extend it afterwards.

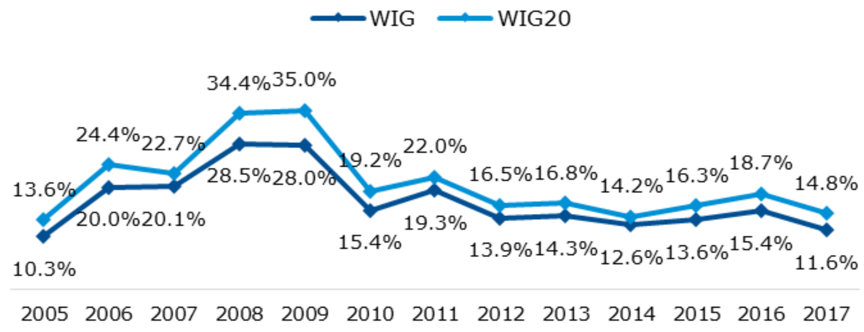
GPW and KDPW_CCP extended until 31 August 2018 a promotion with no fees for market makers on trade in non-WIG20 stocks, which was available throughout 2017. The programme largely helped to improve the liquidity of small and mid-cap stocks.

In view of alignment with MiFID2, GPW did not introduce any fundamental changes to its price lists in 2017. However, GPW was working throughout 2017 to align its product offer and price list with the new European regulations. The changes took effect at the beginning of 2018.

Focused training programmes dedicated to products were offered to individual investors in partnership with brokerage houses. 42 training sessions were attended by 3,322 participants.

All these initiatives were designed to improve liquidity. However, volatility remains a key parameter impacting investors. After a modest recovery in 2015 and 2016, volatility was exceptionally low in 2017.

Figure 24 Annual volatility of WIG and WIG20



Other Cash Market Instruments

The GPW cash market also lists structured products, investment certificates, warrants and ETF certificates.

Table 11 Number of structured products, investment certificates, ETFs and warrants

As at 31 December (#)	2017	2016	2015	2014	2013
Structured products (certificates)	942	784	702	744	550
Structured products (bonds)	1	0	0	4	7
Investment certificates	36	37	30	31	37
ETFs	3	3	3	3	3
Warrants	0	0	0	76	72

In total, GPW listed 942 structured products that were investment certificates, 1 structured product that was a bond, 36 investment certificates and 3 ETFs at the end of 2017, and the total value of trade in those instruments was PLN 1.2 billion in 2017, an increase of 7.9% year on year. Structured products had the biggest share in total trade (76.8%), followed by ETFs (16.2%).

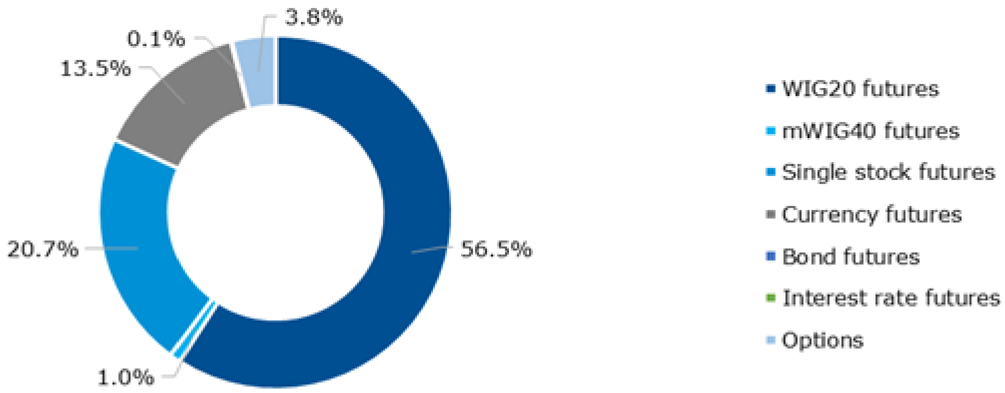
Derivative Market

The Warsaw Stock Exchange operates the biggest derivative market in Central and Eastern Europe. WIG20 futures have for years been the most liquid instrument that generates the highest volume of trading on GPW, representing 59.1% of the volume of trading in all derivatives in 2017 (58.7% in 2016, 54.1% in 2015, 63.7% in 2014, 65.4% in 2013).

Single-stock futures attract growing interest of investors and accounted for 21.7% of the total volume in 2017. The share of currency futures in the volume decreased to 14.1% in 2017 compared to 15.8% in 2016. The volume of trading in single-stock futures increased by 7.4% year on year. The volume of trading in bond futures also increased by 71.8% year on year.

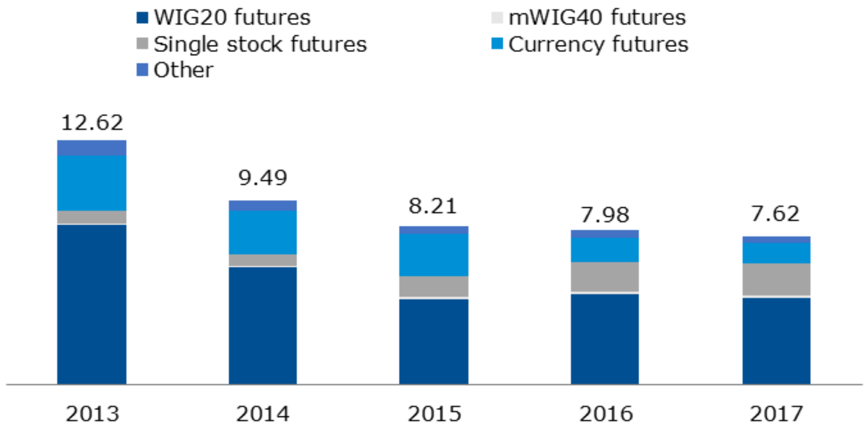
Three new classes of single-stock futures were introduced to trading in 2017 on stocks listed on the Main Market. The futures on shares of Polimex-Mostostal were introduced to trading on 20 March 2017. The futures on shares of two newly listed companies were introduced to trading on 9 May 2017 for Dino Polska S.A. and 10 August 2017 for Play Communications S.A. GPW listed 35 single-stock futures at the end of 2017. The futures multiplier is 100 or 1000, depending on the contract, which means that each contract represents 100 or 1000 shares. The value of a contract is equal to the contract price times the multiplier.

Figure 25 Structure of volume of trading in derivatives in 2017 by category of instrument



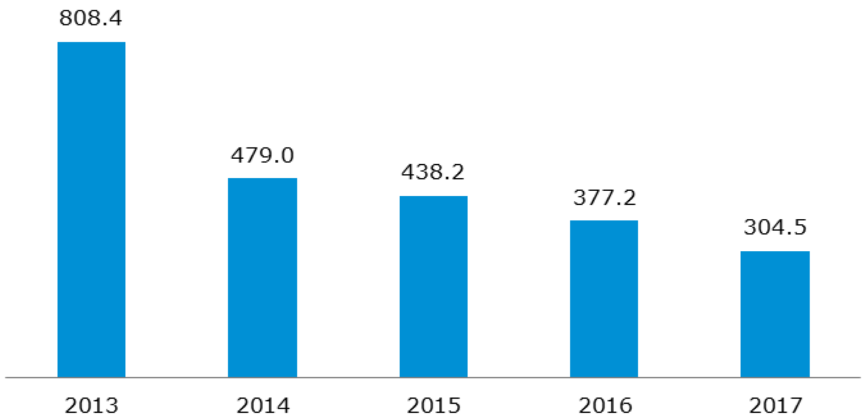
The total volume of trading in derivatives was 7.6 million instruments in 2017, a decrease of 4.4% compared to 8.0 million instruments in 2016. The decrease was mainly driven by a decrease in the volume of trading in WIG20 futures by 3.7% year on year to 4.5 million instruments in 2017 and a decrease of the volume of trading in currency futures by 14.5% year on year to 1.1 million contracts in 2017. The number of open interest was 140.1 thousand as at 31 December 2017, a decrease of 15.1% year on year.

Figure 26 Volume of trading in futures, EOB and block trades [million instruments]



The total volume of trading in options was 304.5 thousand instruments in 2017, a decrease of 19.3% year on year.

Figure 27 Volume of trading in options, EOB and block trades [thousand instruments]



The activity of investors on the derivative market is largely driven by the volume of trading on the underlying instrument market but it is even more sensitive to volatility than investor activity on the cash market. The volatility of WIG20 on the cash market was lower in 2017 than in previous years and reached 14.8% in 2017 compared to 18.7% in 2016. DLR (derivatives liquidity ratio equal to the nominal value of trade in index derivatives to the value of trade in the underlying) of WIG20 futures was 112 in 2017 compared to 110 in 2016.

Similar to the cash market, GPW supports the liquidity of trading in derivatives by offering incentives to providers of liquidity for index futures, single-stock futures, bond futures and options.

In 2017, GPW continued to offer promotions for fees on market maker trade in WIG20 futures. As a condition of the promotion, market makers needed to generate a certain volume of trading. The promotion was available until 31 December 2017. Furthermore, fees charged from exchange members for trade in bond futures and WIBOR futures were reduced to zero in 2017 under a promotional scheme initiated in 2016.

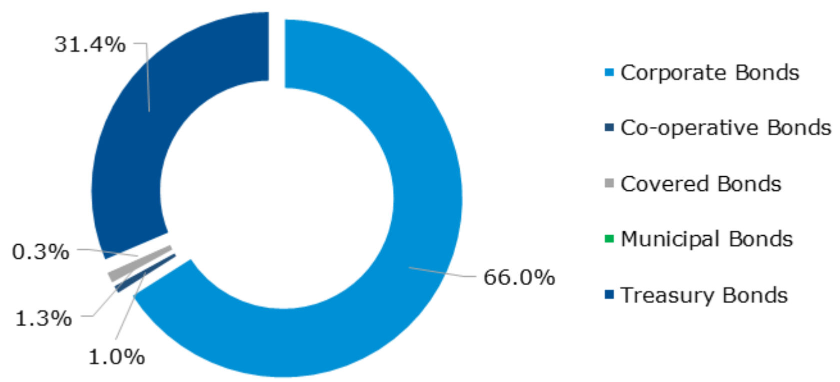
Liquidity on GPW's financial derivative market was additionally supported by the HVP and HVF programmes which continued in 2017. The share of programme participants in the volume of trading in derivatives on GPW in 2017 was 7.3% for index futures and 6.7% for single-stock futures.

Debt Market

The GPW Group offers trade in debt instruments on Catalyst, which is comprised of regulated and alternative trading systems operated on the trading platforms of GPW and BondSpot. The following instruments are traded on Catalyst:

- corporate bonds;
- municipal bonds;
- co-operative bank bonds;
- convertible bonds;
- covered bonds;
- Treasury bonds.

Figure 28 Structure of trade on Catalyst (EOB and block trades) in 2017 by instrument



The value of trade in non-Treasury instruments on the electronic order book on the markets operated within Catalyst was PLN 1,514 million in 2017 as compared to PLN 1,377 million in 2016 (an increase of 9.9%) and the value of block trades was PLN 386 million in 2017 as compared to PLN 770 million in 2016. The total value of trade in non-Treasury and Treasury instruments on Catalyst was PLN 2,783 million in 2017 as compared to PLN 3,131 million in 2016, representing a decrease of 11.1%.

Figure 29 Value of trade on Catalyst, EOB and block trades [PLN million]

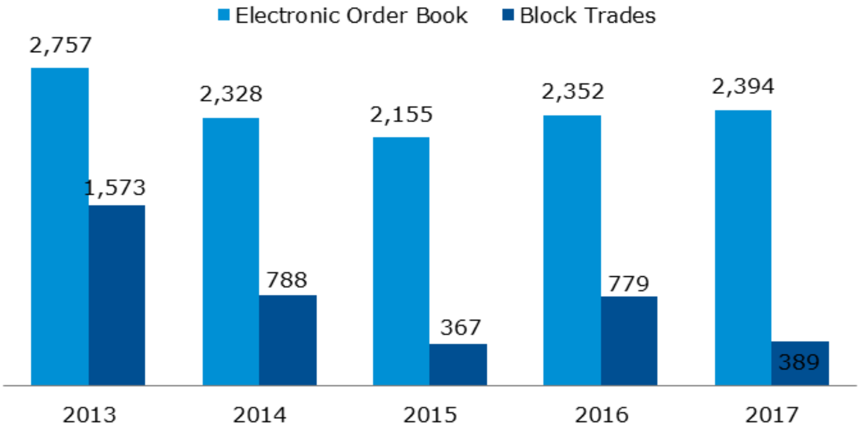
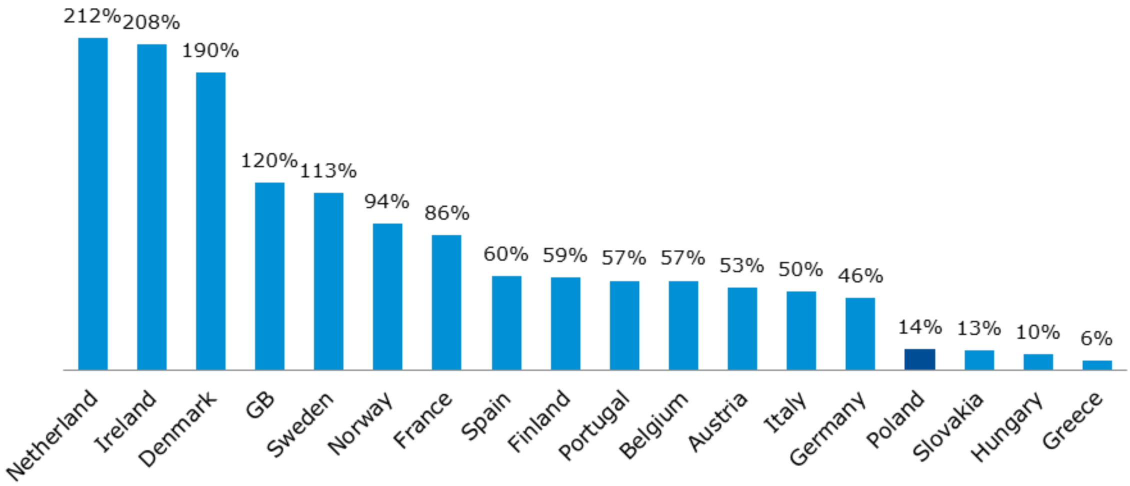


Figure 30 Outstanding non-Treasury bonds to GDP [%]



Source: BIS (non-Treasury bonds as at the end of H1 2017), IMF (GDP at the end of October 2017)

In 2017, GPW offered a range of initiatives in Poland to introduce companies and local governments to financing options available on all GPW markets. Regional conferences presented ways to raise capital by issuing bonds. Initiatives addressed to local governments included training in bond issues for city treasurers and GPW's participation in conferences dedicated to the debt market in Poland. GPW hosted a stand and participated in panels at the Local Government Capital and Finance Forum in Katowice and took part in the Modern Local Government Forum in Warsaw.

Treasury BondSpot Poland

Treasury BondSpot Poland (TBSP) operated by BondSpot S.A. is an electronic Treasury bond market and an integral part of the Treasury Securities Dealer system operated by the Ministry of Finance with the support of the National Bank of Poland and the banking industry. The main objective of the Treasury Securities Dealer system is to minimise the cost of public debt by improving liquidity, transparency and effectiveness of the Treasury securities market. TBSP includes a market of cash transactions and a market of conditional transactions (repo).

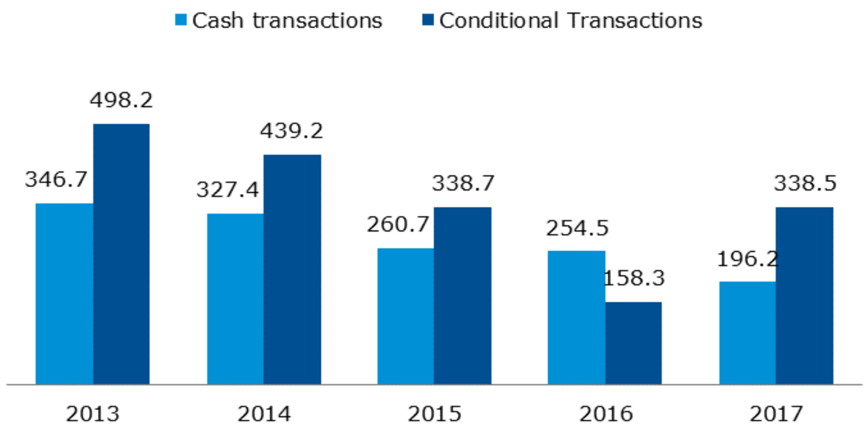
TBSP offers trade in Treasury securities (Treasury bonds and bills). In general, all wholesale Treasury bonds in PLN and Treasury bills are introduced to trading. TBSP listed 32 series of Treasury bonds with a nominal value of PLN 603.1 billion at the end of 2017. No Treasury bills were listed at the end of 2017.

TBSP also offers trade in EUR-denominated Treasury bonds. TBSP listed 17 series of Treasury bonds in EUR with a nominal value of EUR 30.4 billion at the end of 2017.

In January 2016, Treasury BondSpot Poland was selected by Treasury securities market participants (banks) as the electronic market within the Treasury Securities Dealer competition organised by the Minister of Finance for another three-year period. This consolidates the position of TBSP as the benchmark market in Treasury securities.

The total number of transactions on Treasury BondSpot Poland was 13.5 thousand in 2017. The total value of trade was PLN 534.7 billion, an increase of 29.5% year on year. The average value of trade per session was PLN 2.1 billion. The share of cash transactions and conditional transactions (BuySellBack/SellBuyBack and Repo Classic) in total trade on Treasury BondSpot Poland was 36.7% and 63.3%, respectively, in 2017.

Figure 31 Value of trade on Treasury BondSpot Poland [PLN billion]



The value of cash transactions in PLN instruments was PLN 196.2 billion in 2017, a decrease of 22.9% year on year. The value of conditional transactions was PLN 338.5 billion in 2017, an increase of 113.8% year on year.

In 2017, the Polish bond market was impacted by strong capital flows resulting from the activity of the main central banks. On the one hand, FED's monetary policy included three interest rate hikes in 2017 (five in the monetary policy tightening cycle initiated in December 2015); on the other hand, ECB continued its quantitative easing in pursuit of economic growth and to fend off deflation. These activities impacted the market interest rates and bond prices on the core markets, which in turn impacted prices and yields on the local market.

The prices of Polish bonds were also driven by local factors including Poland's strong economy, faster growth, improved fiscal position, return to inflation and the resulting increase of expectations of a turn in the policy of the Monetary Policy Council (RPP). The activity of participants of the market in Treasury securities, in particular repos, was directly impacted by high liquidity in the Polish banking sector and stabilisation of bank activity in this market segment following a strong decrease in the value of transactions caused by deleveraging after the bank tax was imposed in February 2016.

As at the end of 2017, TBSP had 33 market participants (banks, credit institutions, investment firms), including:

- 21 market makers on the cash market, including 14 Treasury Securities Dealers;
- 5 market takers on the cash market;
- 7 institutional investors (2 on the institutional cash market, 4 on the cash and conditional market, 1 on the cash market).

LISTING

Listing includes admission and introduction to exchange trading and listing of securities on the markets organised and operated by the GPW Group.

GPW listed 890 companies at the end of 2017 (482 companies on the Main Market and 408 on NewConnect), including 57 foreign issuers (893 listings including 61 foreign issuers at the end of 2016).

Figure 32 Number of domestic and foreign companies – Main Market

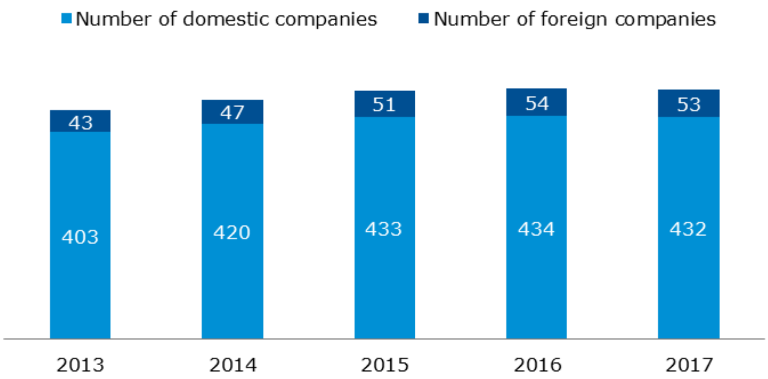
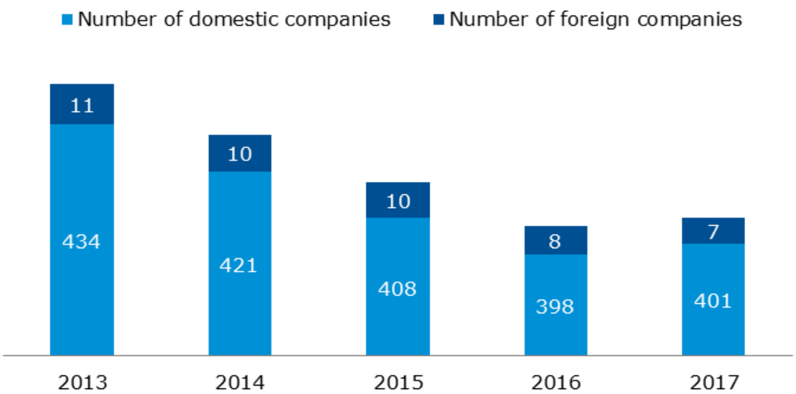


Figure 33 Number of domestic and foreign companies - NewConnect



The total capitalisation of domestic and foreign companies on GPW's two equity markets was PLN 1,389 billion at the end of 2017 compared to PLN 1,126 billion at the end of 2016, an increase of 23.5% year on year. The change of capitalisation was different in different sectors. The capitalisation of most sectors increased in 2017. The biggest year-on-year increase of capitalisation was reported by commercial banks (PLN 50.3 billion), extraction and production operators (PLN 15.5 billion), and clothing and footwear manufacturers (PLN 9.9 billion). The biggest year-on-year decrease of capitalisation was reported by pharmaceutical distributors (PLN 2.2 billion).

Figure 34 Change of capitalisation of domestic companies in 2017 – 20 sectors with the biggest change of capitalisation year on year by value [PLN million]

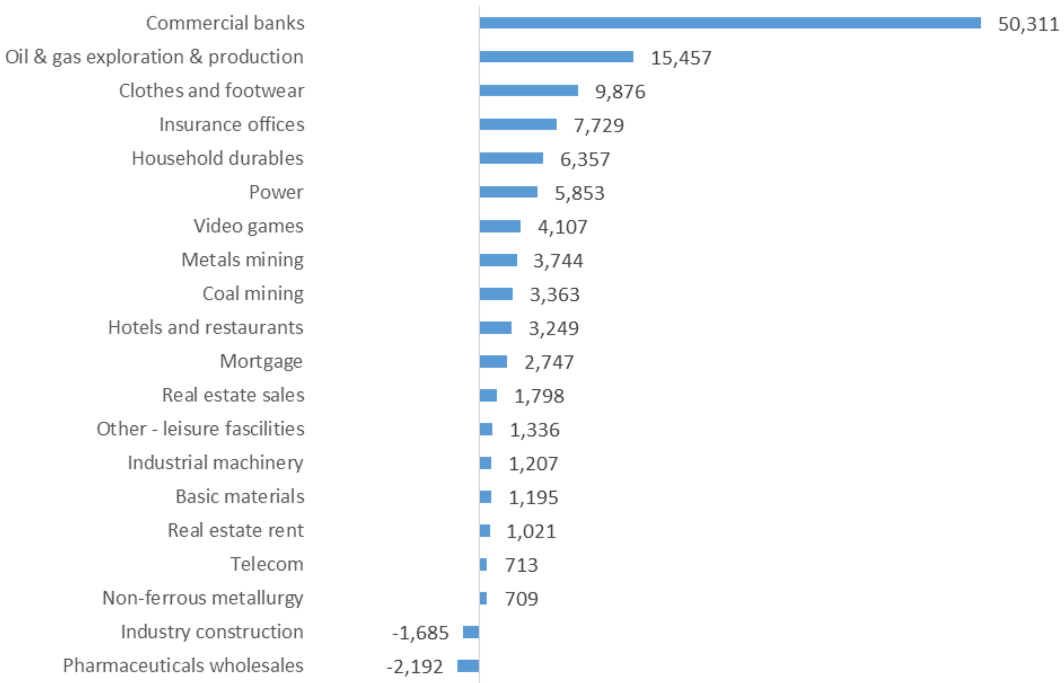
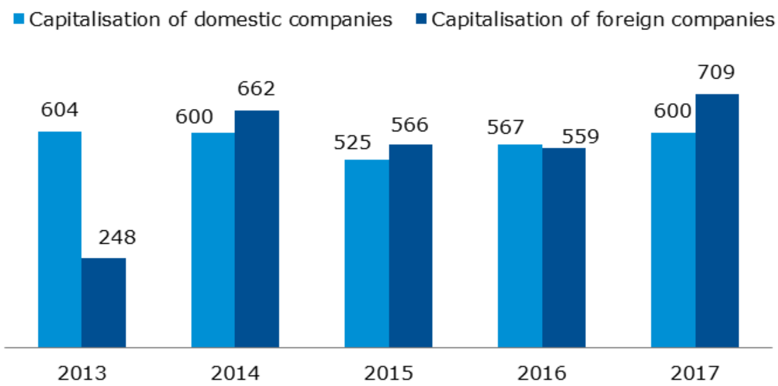


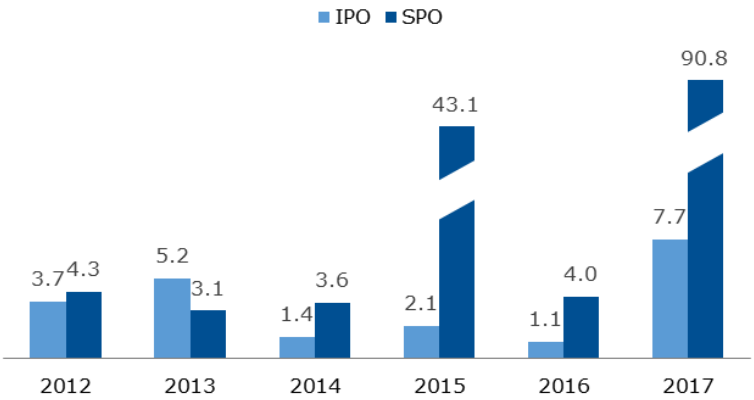
Figure 35 Capitalisation of domestic and foreign companies – Main Market and NewConnect [PLN billion]



There were 34 IPOs on GPW's two stock markets in 2017 (including 7 companies which transferred from NewConnect to the Main Market) compared to 35 IPOs in 2016. The IPO of Play Communications S.A. worth PLN 4.4 billion in Q3 2017 was the biggest private IPO in GPW's history and the second biggest IPO in Europe in Q3 2017. The total value of IPOs on the two stock markets was PLN 7.7 billion in 2017 (PLN 1.1 billion in 2016) and the value of SPOs was PLN 90.8 billion in 2017 (PLN 4.0 billion in 2016). The strong increase in the value of SPOs in 2016 was driven by the SPO of UniCredit S.p.A worth PLN 55.9 billion in Q1 2017.

For information on GPW's acquisition initiatives, see section II.3 *Implementation of the GPW Group's Strategy in 2017*.

Figure 36 Value of IPOs and SPOs – Main Market and NewConnect [PLN billion][31 32]



The number of IPOs both on the Main Market and NewConnect was similar in 2017 and 2016. There were 18 IPOs on NewConnect in 2017, compared to 15 IPOs in 2016. Similar to 2016, seven issuers transferred from the alternative market to the Main Market. With 408 listings (including 7 foreign companies), the capitalisation of NewConnect was PLN 9.6 billion at the end of 2017.

The nominal value of non-Treasury debt listed on Catalyst was PLN 95.8 billion at the end of 2017, an increase of 17.1% year on year. Catalyst listed 566 series of non-Treasury debt instruments at the end of 2017. Issuers whose instruments were listed at the end of 2017 included 19 local governments, 121 enterprises and 19 co-operative banks. Including the State Treasury, the number of issuers on Catalyst was 161 at the end of 2017 compared to 176 at the end of 2016. The total nominal value of non-Treasury debt instruments listed on Catalyst was PLN 95.8 billion at the end of 2016, as compared to PLN 81.8 billion at the end of 2016.

INFORMATION SERVICES ON THE FINANCIAL MARKET

GPW collects, processes and sells market data from all of the financial markets operated by the GPW Group. The status of GPW as the original source of information on trading and its strong brand and diversified business activity within the GPW Group enable the Company to successfully reach various groups of market participants with advanced information adjusted to individual needs.

The main clients using information provided by GPW are specialised data vendors who deliver the data made available by the Company in real time to investors and other market participants. Amongst the vendors there are information agencies, investment firms, internet portals, IT companies and other entities.

As at 31 December 2017, the GPW Group's information services clients were 52 data vendors, including 27 domestic and 25 foreign ones, with nearly 244.8 thousand subscribers (including 17.8 thousand subscribers using professional data feeds). At the end of 2017, GPW had data vendors in such countries as the United Kingdom, the USA, France, Germany, Switzerland, Denmark, Norway, Ireland, the Netherlands, and Cyprus.

The GPW Group's product offer was expanded in 2017: in addition to GPW, TGE and BondSpot data, the Group started to sell GPW Benchmark data as well. It acquired 4 vendors of real-time WIBID/WIBOR data, 7 vendors of delayed data, 1 client using historical data, and 2 clearing houses which use WIBOR data in clearing.

Thanks to intensified acquisition initiatives, GPW attracted 11 new clients for non-display data (used in algorithmic trading, risk management, portfolio valuation, and other non-display applications). The sales of licences for use of non-display data were the main driver of growth in this business line in 2017.

[31] Including dual-listed companies.
[32] There were two SPOs of Banco Santander SA worth PLN 33 billion in aggregate in Q1 2015 and an SPO of UniCredit S.p.A worth PLN 55.9 billion in Q1 2017.

Table 12 Number of data vendors and subscribers, as at 31 December

	2017	2016	2015	2014	2013
Number of real-time data vendors	52	51	54	58	58
- local	27	27	30	31	34
- foreign	25	24	24	27	24
Number of real-time data subscribers (thousand)	244.8	224.6	221.1	240.3	261.9
- number of subscribers using professional data feeds	17.8	14.3	15	15.1	16.2
Number of companies using GPW's non-display data	53	43	-	-	-
Number of licensees using GPW indices as underlying instruments of financial products	15	18	18	16	17

In addition to GPW, TGE, BondSpot and GPW Benchmark data, the Company also provided data vendors in 2017 with reports of issuers listed on NewConnect and Catalyst.

The Company's information services also include:

- delivery of processed data and indicators;
- services for licensees issuing financial instruments with the use of GPW indices as underlying instruments;
- licences on GPW data for use in the calculation and publication of clients' proprietary indices;
- calculation of indices for clients;
- licences for television stations using real-time data feeds for limited presentation in public financial programming;
- licences for clearing houses to use GPW Group data.

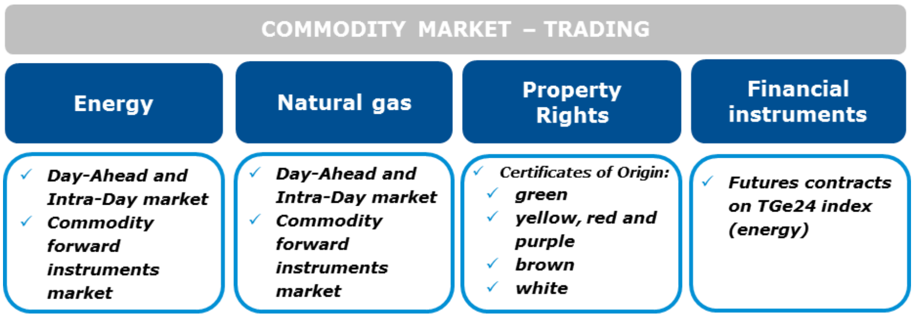
COMMODITY MARKET

The activity of the GPW Group on the commodity market is concentrated in the Towarowa Giełda Energii Group which is comprised of TGE, its subsidiary Izba Rozliczeniowa Giełd Towarowych, as well as the OTC platform InfoEngine. The activity of the Towarowa Giełda Energii Group includes:

- operation of a commodity exchange which offers trade in:
  - ✓ electricity;
  - ✓ natural gas;
  - ✓ emission allowances;
  - ✓ property rights in certificates of origin of electricity, biogas and energy efficiency;
  - ✓ commodity derivatives settled in cash;
- operation of the Register of Certificates of Origin and the Register of Guarantees of Origin;
- operation of the trade reporting system TGE RRM;
- clearing of transactions on the commodity exchange.

TRADING

Chart 7 Trade on TGE commodity markets



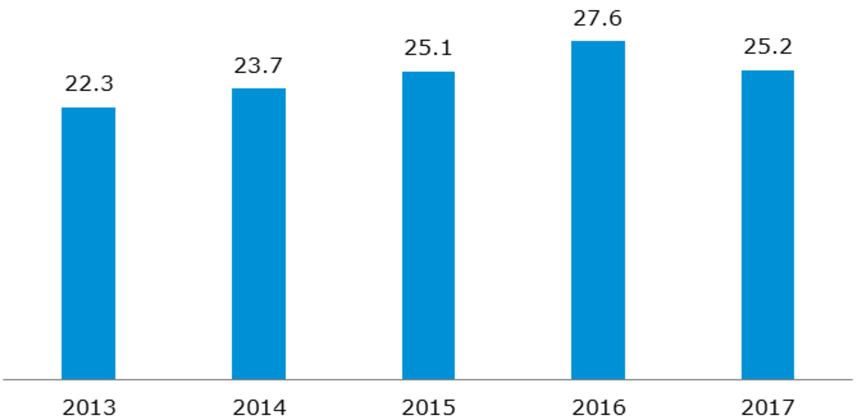
Electricity Market

Day-Ahead and Intra-Day Market

The Day-Ahead and Intra-Day Market is a market in electricity with physical delivery and offers short-term electricity buy and sell transactions (spot market). This TGE market lists hourly instruments for each hour of delivery day as well as block instruments. Trade on the Day-Ahead Market takes place two days before and one day before the day of delivery. Trade on the Intra-Day Market takes place one day before the day of delivery and on the day of delivery.

The volume of spot trade in electricity decreased by 8.6% year on year to 25.2 TWh in 2017. The decrease was caused among others by a reduction of the volume of mandatory sales imposed on producers.

Figure 37 Volume of trading in electricity on the Day-Ahead and Intra-Day Market [TWh]

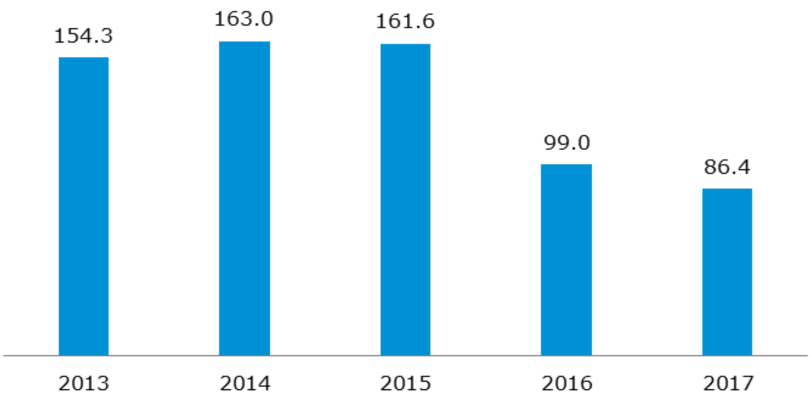


Commodity Forward Instruments Market in Electricity

The Commodity Forward Instruments Market in electricity offers trading in standard forward instruments for delivery of the same quantity of electricity on every hour of delivery. Contracts are executed on a weekly, monthly, quarterly and annual basis.

The volume of trading in electricity on the Commodity Forward Instruments Market was 86.4 TWh in 2017, a decrease of 12.7% year on year. The decrease in the volume of trading was due among others to the reduced volume of mandatory sales of energy on the exchange under Article 49a(2) of the Energy Law. Another driver was uncertainty about the implementation of MiFID2 in national law in H1 2017, which caused a sharp decrease of trading volumes also in other EU Member States.

Figure 38 Volume of trading in electricity on the Commodity Forward Instruments Market [TWh]



Gas Market

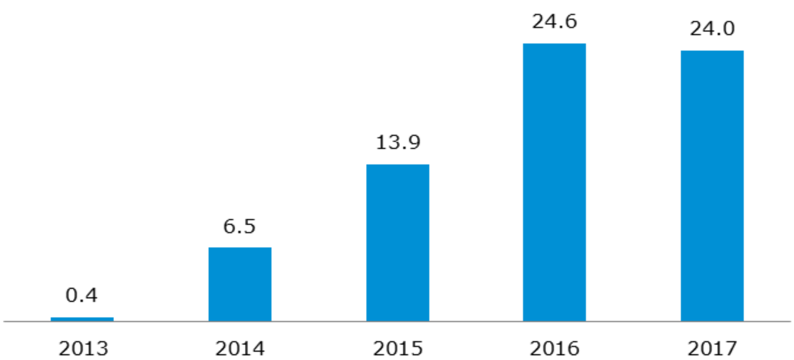
Day-Ahead and Intra-Day Market in Gas

The gas exchange celebrated its fifth anniversary in 2017. The gas exchange in Poland opened on 20 December 2012. The Commodity Forward Instruments Market opened first, followed by the Day-Ahead Market in Gas.

The Day-Ahead Market in Gas lists the following types of contracts: BASE with delivery on 24 hours of the next day of the same quantity of gas in every hour of the day, and WEEKEND with delivery on two days (Saturday and Sunday) of the same quantity of gas in every hour of the day (between 47 and 49 hours). On 30 July 2014, TGE launched the Intra-Day Market in Gas. The Intra-Day Market in Gas lists hourly instruments with delivery on the day of trading.

The volume of trading on the gas spot markets was 24.0 TWh in 2017, representing a decrease of 2.5% year on year. The volume of trading on the Day-Ahead Market in Gas was 19.3 TWh (a decrease of 1.9% year on year) and the volume of trading on the Intra-Day Market in Gas was 4.7 TWh (a decrease of 4.7% year on year).

Figure 39 Volume of trading in natural gas on the Day-Ahead and Intra-Day Market [TWh]



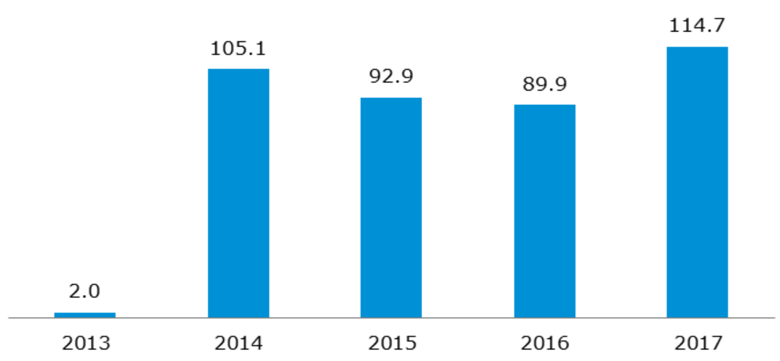
Commodity Forward Instruments Market in Gas

The total volume of trading on the Commodity Forward Instruments Market in Gas was 114.7 TWh in 2017, an increase of 27.6% year on year.

The total volume of trading on the gas markets was 138.7 TWh in 2017 (an increase of 21.1% year on year). The share of the spot market in the total volume of trading on the gas markets was 17.3% in 2017 compared to 21.5% in 2016. This percentage underscores the importance of TGE as a trading platform for the balancing market. The spot market plays an important function for the operator Gaz-System whose instructions include the calculation formula of the average price for balancing.

In those five years, the gas exchange has become an important, integral element of the Polish gas market. It ensures safe and transparent trade. The aggregate volume of spot and forward transactions stood at 469.8 TWh in 2012-2017. The gas market has 111 participants.

Figure 40 Volume of trading in natural gas on the Commodity Forward Instruments Market [TWh]



Property Rights Market

TGE operates a Property Rights Market in certificates of origin of electricity produced:

- from renewable energy sources (PMOZE and PMOZE_A, known as green certificates),
- in high-efficiency cogeneration (PMGM, known as yellow certificates; PMEC, known as red certificates; and PMMET, known as purple certificates),

Furthermore, the Property Rights Market lists:

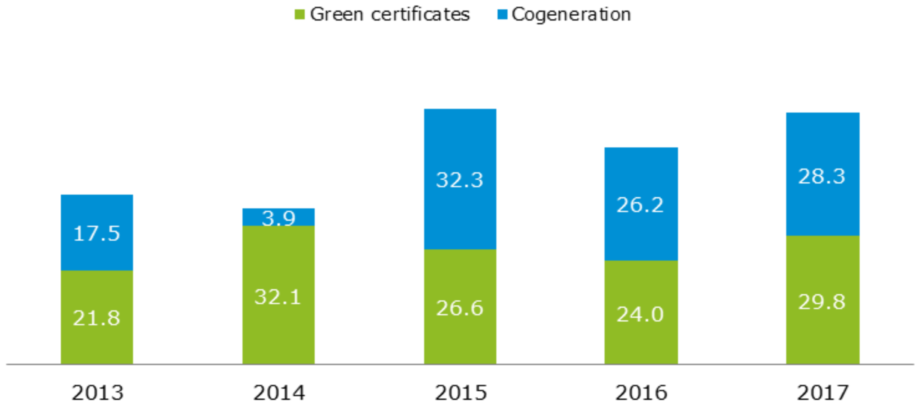
- property rights in certificates of origin of biogas (PMBG, known as brown certificates),
- property rights in certificates of origin of agricultural biogas (PMOZE-BIO, known as blue certificates),
- property rights in energy efficiency certificates (PMEF, known as white certificates).

The Property Rights Market is a part of the support scheme for producers of energy from renewable energy sources. It allows producers of energy from renewable energy sources, cogeneration, biogas and holders of energy efficiency certificates to sell property rights, and energy operators required to pay substitution fees or to cancel certificates of origin to meet that obligation.

The volume of trading on the Property Rights Market is driven by the number of certificates issued in the Register of Certificates of Origin: increased production of energy generates the obligation to issue more certificates of origin, which in turn generates an increase of the volume of certificates of origin available on the market.

The total volume of trading in property rights for electricity on the spot market was 58.0 TWh in 2017 compared to 50.2 TWh in 2016, an increase of 15.6% year on year. At the same time, the volume of trading in property rights to certificates of energy efficiency increased sharply year on year from 314.8 ktoe in 2016 to 399.9 ktoe in 2017.

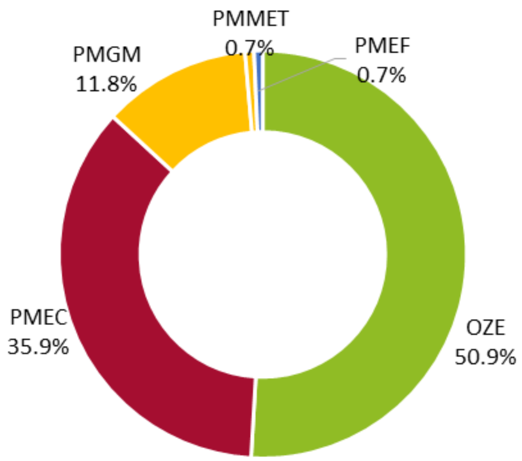
Figure 41 Volume of trading in property rights to certificates of origin [TWh]



The volume of trading in property rights in certificates of origin of electricity generated from renewable energy sources was 29.8 TWh in 2017, an increase of 24.2% year on year. Bigger supply of certificates in 2017 and growing demand generated additional turnover in 2017.

The volume of trading in certificates of origin of energy from cogeneration,[33] i.e., red and yellow certificates, was 28.3 TWh in 2017 (an increase of 7.9% year on year).

Figure 42 Structure of the volume of trading in property rights in 2017 by type of certificate



Forward contracts on property rights in certificates of origin of energy generated from renewable energy sources were in trading from January 2016 to December 2017 and allowed market participant to secure prices and deliveries of property rights in the future. The volume of trading in property rights on the forward market was 1.1 TWh in 2017 compared to 0.5 TWh in 2016. Forward transactions in RES can be settled on the existing terms up to 3 January 2018.

[33] Cogeneration – technological process where electricity and heat are generated simultaneously in a combined heat and power plant. Thanks to lower consumption of fuel, cogeneration provides material economic benefits and environmental advantages over separate generation of heat in a traditional heat plant and of electricity in a condensation power plant.

REGISTER OF CERTIFICATES OF ORIGIN

The Register of Certificates of Origin is a system of registration and recording of:

- certificates of origin which confirm that electricity was generated in high-efficiency cogeneration;
- certificates of origin which confirm that electricity was generated from renewable energy sources (RES);
- certificates of origin which confirm that agricultural biogas was produced and introduced to the gas distribution network;
- energy efficiency certificates which confirm that the project improved energy efficiency;
- and recording of property rights under such certificates.

The main functions of the Register of Certificates of Origin include:

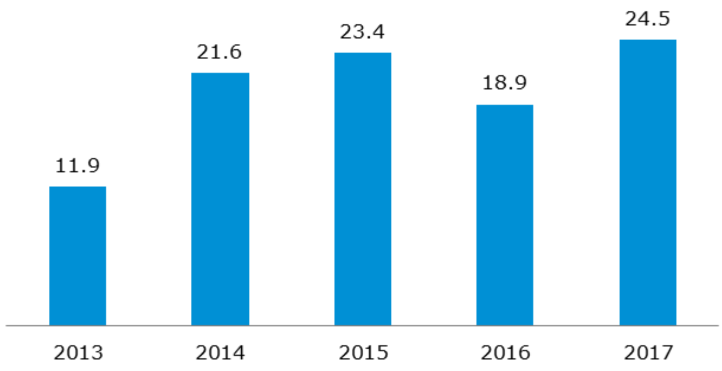
- to identify entities entitled to property rights in certificates of origin;
- to identify property rights under certificates of origin and the corresponding quantity of electricity;
- to register certificates of origin and the resulting property rights;
- to record transactions in property rights and balances of property rights in certificates of origin;
- to issue documents confirming property right balances in the register, used by the Energy Regulatory Office for cancellation of certificates of origin.

Certificates Issued and Cancelled (Register of Certificates of Origin)

RES – Green Certificates

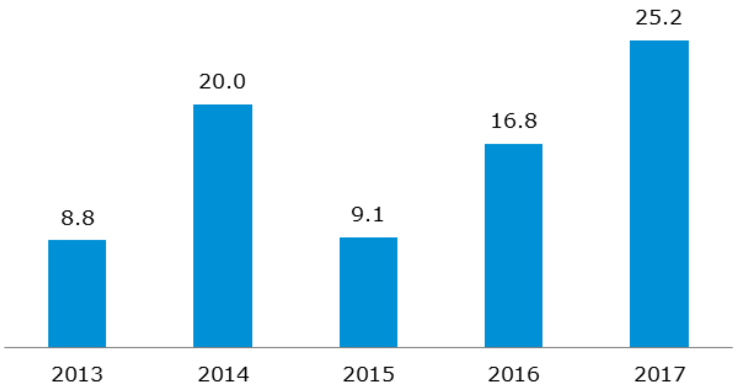
The volume of issued green certificates was 24.5 TWh in 2017, an increase of 29.3% year on year. The increase in the volume of issued green certificates was mainly driven by wind energy. Additional generation of wind energy and more efficient issuance of certificates by the Energy Regulatory Office resulted in a significant increase in the volume of issued certificates.

Figure 43 Volume of issued RES property rights [TWh]



The volume of certificates cancelled has been rising but the volume of cancellations in a year depends on the Energy Regulatory Office. The strong fluctuation of volumes results from infrequent notification of cancelled certificated by the Energy Regulatory Office. The total volume of green certificates cancelled was 25.2 TWh in 2017 compared to 16.8 TWh in 2016.

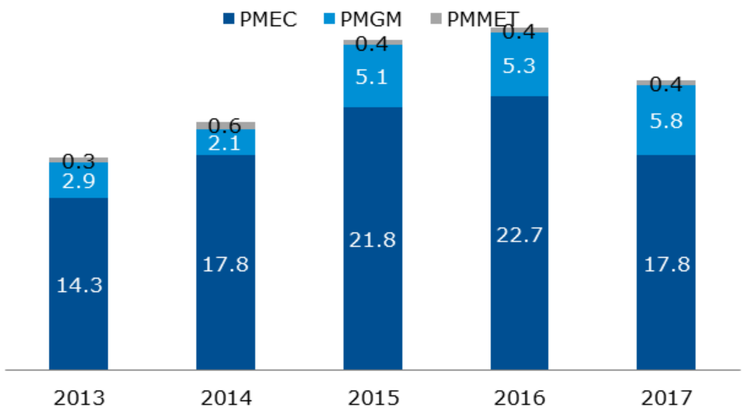
Figure 44 Volume of cancelled RES property rights [TWh]



Cogeneration: Red, Yellow, and Purple Certificates

The total volume of issued cogeneration certificates was 24.0 TWh in 2017, a decrease of 15.2% year on year. Cogeneration certificates of origin report stable volumes in line with expectations. Fluctuations of volumes of cogeneration certificates are natural and were particularly strong with respect to issued certificates in 2017.

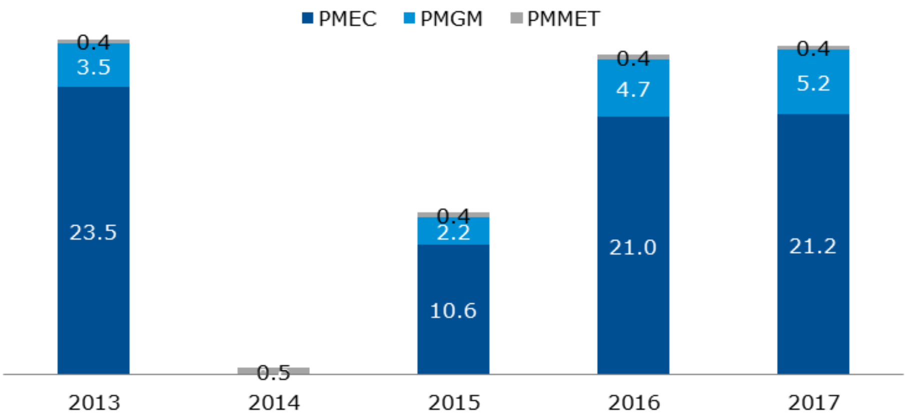
Figure 45 Volume of issued cogeneration property rights (TWh)



The total volume of red, yellow, and purple certificates cancelled was 26.9 TWh in 2017 compared to 26.1 TWh in 2016.

In the current legal system, the market of red, yellow, and purple certificates includes three series of instruments with a tenor of 18 months: one full calendar year plus another six months of the following year as required by law for eligible companies to complete mandatory cancellation of cogeneration certificates. There could be differences in trading volumes from year to year because subsequent series of 18-month instruments overlap during the year. The situation is stable from the perspective of an instrument rather than a calendar year. This situation has prevailed over the past few years.

Figure 46 Volume of cancelled cogeneration certificates of origin (TWh)



Energy Efficiency: White Certificates

549 thousand toe of white certificates were issued in 2017, an increase of 17.1% year on year compared to 468 thousand toe in 2016. The volume of cancelled white certificates increased by 13.8% year on year to 148 thousand toe in 2017.

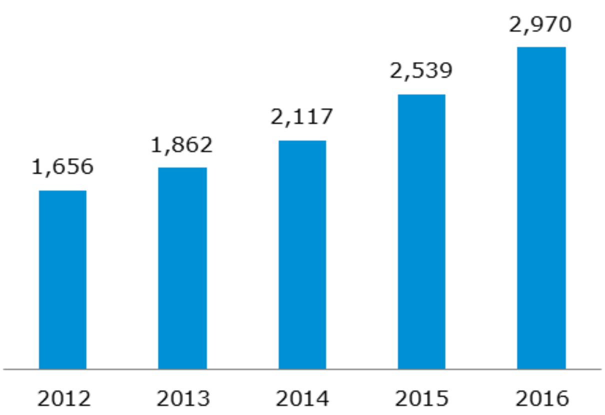
The bigger supply of energy efficiency certificates (white certificates) was driven by the closing of the fifth record-high tender for energy efficiency projects in 2017, which improved the volume of trading as well as cancellations. The increase in cancellations and trade was also driven by changes to the way that white certificates can be cancelled as limitations were imposed on the option of paying a substitution fee.

Number of Participants of the Register of Certificates of Origin

The Register of Certificates of Origin had 3,444 participants at the end of 2017. In 2017, 474 companies became members of the Register of Certificates of Origin (431 companies in 2016).

A large part of the new members are beneficiaries of white certificates (energy efficiency certificates) following the completion of the fifth tender for energy efficiency projects held by the President of the Energy Regulatory Office.

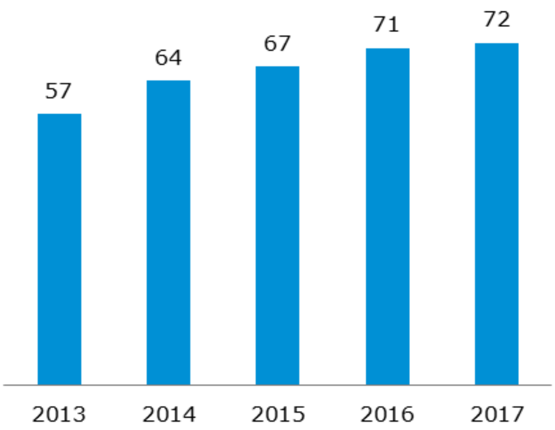
Figure 47 Number of participants of the TGE Register of Certificates of Origin



NUMBER OF TGE MEMBERS

Two new companies joined TGE as members in 2017. TGE had 72 members at the end of 2017.[34] By offering training programmes and examinations for Exchange Brokers, TGE facilitates active participation of members on the market, especially for foreign entities. In 2017, 79 Exchange Broker certificates were issued, including 25 certificates of brokers who passed the examination in English. In 2017, TGE completed 11 training programmes, including 9 programmes for the Exchange Commodity Market and 3 programmes for the Financial Instruments Market.

Figure 48 Number of TGE members



REGISTER OF GUARANTEES OF ORIGIN

TGE operates a Register of Guarantees of Origin and organises trade in guarantees of origin.

The Register of Guarantees of Origin launched in September 2014 and registers energy from renewable sources and OTC trade in environmental benefits of its production. Unlike certificates of origin, guarantees do not involve property rights or a support scheme for renewable energy sources: they are issued for information only. There is no obligation to acquire guarantees but they can be used by entities to prove that a certain quantity of consumed energy was generated from renewable sources. TGE offers trade in guarantees of origin of energy since November 2014.

According to the regulations, the Energy Regulatory Office issues guarantees of origin which are then uploaded to the IT system of the Register of Guarantees of Origin operated by TGE. System users can trade in guarantees of origin or transfer them to end users as proof that energy was generated from renewable sources.

The volume of trading in and submissions of guarantees of origin increased substantially in 2017 while the volume of guarantees registered in the Register of Guarantees of Origin remained stable. The awareness of producers of electricity from RES is rising and so is the interest of international operators in Polish guarantees of origin. The number of participants of the register increased significantly from 255 at the end of 2016 to 330 at the end of 2017.

[34] Some members of the markets operated by TGE operate on more than one market.

Table 13 Register of Guarantees of Origin

	Issued	Sold	Transferred
	TWh	**GWh**	**GWh**
2014	4.87	-	11
2015	7.23	635	732
2016	12.3	591	702
2017	12.6	2548	2875

TRADE REPORTING – TGE RRM

TGE offers a Registered Reporting Mechanism (RRM) to electricity and gas market participants under the requirements of REMIT and its Implementing Regulations.

Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency (REMIT) and its Implementing Regulations require market participants to report orders and trades on the wholesale electricity and gas market to the Agency for Cooperation of Energy Regulators (ACER).

Under the REMIT Implementing Regulations, the obligation to report trades on organised trading platforms took effect on 7 October 2015. As of that date, all TGE energy and gas market participants are required to report their orders and trades on those markets. The OTC trade reporting obligation took effect on 7 April 2016.

Under REMIT and its Implementing Regulations, only Registered Reporting Mechanisms (RRM) authorised by ACER are eligible to report trades.

The TGE RRM reporting service supports:

- reporting of orders and trades on organised trading platforms;
- reporting of OTC trades.

Until the end of 2017, there were:

- 15,924,175 reported operations on exchange orders
- 8,254,186 reported exchange orders
- 3,158,648 reported exchange transactions
- Over 95,000 reported OTC transactions
- Over 107,200 exchange transactions sent to ARIS
- Over 24,850 OTC transactions sent to ARIS
- Reporting services for more than 550 clients – ACER has registered 605 entities, which means that we report for more than 90% of participants of the Polish energy market.

More than 1,475 users have access to the TGE RRM system.

FINANCIAL INSTRUMENTS MARKET

In February 2015, TGE was authorised by the Minister of Finance to operate a financial instrument exchange. The decision of the Minister of Finance allowed TGE to open market consultations on the structure of new instruments. As a result, following the approval given by the Polish Financial Supervision Authority for the terms of trade in electricity futures programmes, TGE launched the Financial Instruments Market in November 2015.

Market participants were offered trade in futures based on electricity prices, later to be followed by instruments linked to the price of natural gas. The terms of operation of the TGE Financial Instruments

Market are similar to those applicable for years on the GPW futures market. The underlying instrument is the TGe24 index calculated on the basis of transactions at the first fixing on the Day-Ahead Market in electricity. Eligible as members of the TGE Financial Instruments Market are local and international investment firms and other buyers and sellers of financial instruments acting on own account, provided that they fulfil the conditions of trading on the regulated market.

However, the adoption of MiFID2 and the preparation of TGE and its members for MiFID2 implementation in the Polish legal system required a range of modifications as well as a anew TGE market structure.

Listing of TGe24 futures on the regulated market was discontinued on 29 November 2017. Trade in emission allowances on the TGE commodity market stopped on 30 December 2017 as those became financial instruments under MiFID2. Efforts are underway to move trade in such instruments to the regulated market following the implementation of MiFID2 in Poland. Trade in RES futures on the TGE commodity market stopped on 28 December 2017 as those also became financial instruments. Work is underway to reopen trade in RES futures as a financial instrument on the transformed Commodity Forward Instruments Market following the implementation of MiFID2.

Consultations with market participants were carried out in 2017 concerning proposed modifications to the planned implementation of MiFID2 in Polish national law applicable to the energy and gas market and development of a formula of transformation of the Commodity Forward Instruments Market into an Organised Trading Facility (OTF).

Discretion, which is a specific property of OTFs under MiFID2, was introduced on the Commodity Forward Instruments Market on 29 December 2017. Discretion implemented by TGE means that TGE may increase liquidity of less liquid instruments on the market. Discretion allows TGE to continue the operation of trade on the Commodity Forward Instruments Market and to attract OTC trade in the future. Following the effective date of the law implementing MiFID2, TGE has 12 months to apply to PFSA for a licence to operate an OTF which will replace the Commodity Forward Instruments Market.

The developed solutions ensure harmonisation with the requirements of MiFID2 that is optimal for market members in line with national and EU law. With a view to transformation of the markets and traded instruments under the new legal requirements, and as agreed between TGE and PFSA, IRGiT does not need to become a CCP in order to clear instruments currently traded on TGE.

CLEARING

Izba Rozliczeniowa Giełd Towarowych (IRGiT), which is a subsidiary of TGE, offers clearing of transactions of TGE members on its markets.

In 2017, IRGiT continued operations launched in 2010 as an exchange clearing house for the TGE Exchange Commodity Market and operations launched in 2015 as a clearing house and settlement institution for the TGE Financial Instruments Market. IRGiT clears all volumes of transactions in electricity, gas and property rights on the exchange market in Poland.

The total volume of cleared transactions in electricity and gas was 460 TWh in 2017 (including the volume of transactions executed in 2017 and forward transactions executed in previous years and cleared in 2017) while the total volume of cleared transactions in property rights was 47.5 TWh in 2017.

In 2017, IRGiT actively participated in the development of a new model of trade and clearing under MiFID2. IRGiT developed a clearing model for the planned structure of the commodity market which allows market participants to use preferred forms of collateral and existing membership models. The new clearing model under MiFID2 ensures low costs of market participation.

In 2017, IRGiT supported TGE in the implementation of a new trading system dedicated to cross-border transactions. IRGiT developed a risk management model for transactions in SAPRI. The functionalities of IRGiT's clearing system (X-Stream Clearing), developed and implemented in 2016, ensured that members could offset their credits and debits from transactions on all markets served by IRGiT including cross-border trade.

INFORMATION SERVICES ON THE COMMODITY MARKET

Information services on the financial market and the commodity market are described in section II.4 *Information Services on the Financial Market*.

II. 5 International Activity of the GPW Group

The Warsaw Stock Exchange works to reinforce its position as the CEE leader through expansion of the international client base including issuers, brokers, investors and data vendors, and through initiatives designed to promote the Polish market and Polish companies among international investors.

In 2017, GPW continued to develop liquidity support programmes (HVP and HVF) where the biggest volume of trading is generated by remote exchange members. GPW continued to promote the Polish market and GPW-listed companies internationally by holding investor events in partnership with brokers and investment banks around the world and by participating in international conferences and investor meetings. The investor event series Polish Capital Market Days initiated in 2015 included seven meetings in 2017: in London, Stockholm, Warsaw, Paris, Frankfurt, Stegersbach and Prague.

In 2017, steps were taken to develop the commodity market, its participation and contribution to the integration of European energy markets.

GPW REPRESENTATIVE OFFICES OUTSIDE POLAND

The Representative in London was hired in June 2013 to enhance GPW's acquisition activities on that market. In 2017, the Representative focused on supporting relations with GPW's business partners including exchange members, investors and providers of technology services for GPW and its clients.

The Representative Offices in London has no separate legal personality and does not carry on any profit earning independent business operations. In all its activities, the Representative Office acts on behalf and for GPW to the extent of powers of attorney granted by the GPW Management Board.

DEVELOPMENT OF A NETWORK OF FOREIGN INVESTMENT FIRMS – EXCHANGE MEMBERS

In 2017, GPW expanded its acquisition activities addressed to GPW's business partners including existing and prospective exchange members, investors and providers of technology services.

Interactive Brokers, one of the world's biggest online discount brokers, started operation on the Warsaw Stock Exchange in June 2017 as the first remote exchange member to serve retain investors. Deutsche Bank AG became a remote exchange member in June 2017. Polski Dom Maklerski was admitted as an exchange member in October 2017. Societe Generale added trade in derivatives for the account of clients to its operation on GPW in June 2017. GPW had 53 members, including 28 local members and 25 remote members, at the end of 2017. The share of remote exchange members in trade increased modestly. The share of remote members in EOB trade in shares was 31.7% in 2017 compared to 31.1% in 2016.

Table 14 Share of local and remote GPW members in EOB trade in shares on the Main Market

	2017	2016	2015	2014	2013	2012
Local	68.3%	68.9%	74.9%	78.3%	77.8%	89.0%
Remote	31.7%	31.1%	25.1%	21.7%	22.2%	11.0%

ATTRACTING FOREIGN ISSUERS

One of the key goals of the GPW Group is to strengthen the position of the regional financial hub by making the Warsaw Stock Exchange the market of first choice for investors and issuers in Central and Eastern Europe. GPW took many initiatives to promote the Polish capital market among issuers in the CEE region.

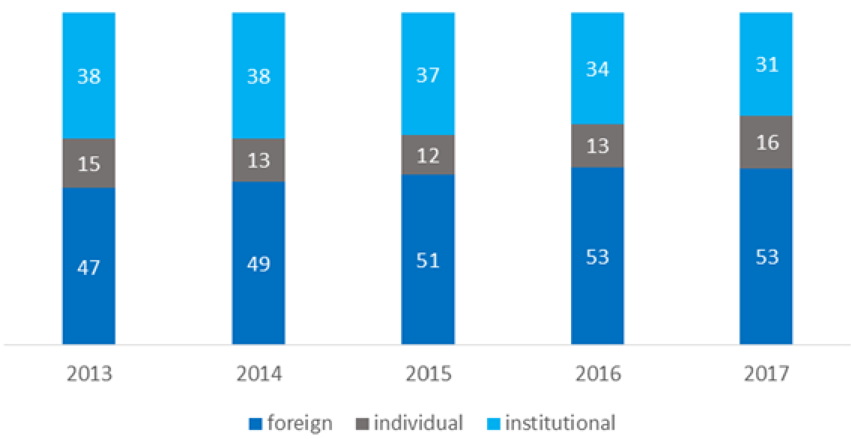
In 2017, GPW organised and held six training sessions for Belorussian companies in Minsk which introduced the details of raising capital on the GPW markets. The workshops followed from the Polish-Belorussian IPO Centre project, initiated in late 2016 to facilitate access of Belorussian companies to modern sources of financing on the Polish capital market.

As at the end of 2017, the GPW markets listed shares of 56 foreign companies, including 49 foreign companies listed on the Main Market and 7 companies on NewConnect, with a total capitalisation of PLN 752.2 billion compared to PLN 558.9 billion in 2016. Foreign companies listed on GPW as at 31 December 2017 originate from 19 countries, mainly the Netherlands (9 issuers), Luxembourg (7 issuers) and Germany (5 issuers). 27 companies are dual-listed and 23 are single-listed on GPW.

SHARE OF FOREIGN INVESTORS IN TRADING ON GPW MARKETS

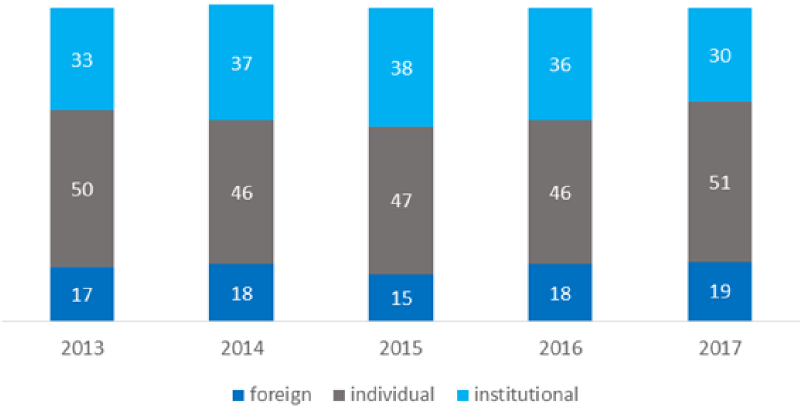
According to GPW's research, foreign investors generated 53% of turnover in shares on the GPW Main Market in 2017, the same as in 2016.

Figure 49 Share of investors in trade in shares on the Main Market (%)



Foreign investors' activity on the futures market increased by 1 percentage point to 19% in 2017 compared to 18% in 2016.

Figure 50 Share of investors in trade on the futures market (%)



INTERNATIONAL ACTIVITY OF TGE IN 2017

TGE joined the European energy market projects and signed multilateral co-operation agreements (PCR, INC, CORE/CEE), operating agreements (MRC) and accession declarations (XBID AS). Irrespective of the legal form, TGE accepted the project co-management rules, co-financing rules, operating procedures and mutual exchange of information. Each project has an internal decision-making structure which is typically managed by a Steering Committee. Operations are managed by an Operating Committee. Working Groups are responsible for legal and technical issues including design work, tests, procedures, and financials. Working Group members usually communicate through conference calls while the Steering Committees meet regularly. Each project follows governance procedures or rules of internal order which define the format and frequency or dates of meetings, the rules of documentation, and other organisational issues.

In 2017, TGE representatives actively participated in the activity of working groups of the following international projects: Price Coupling of Regions - PCR, Multi Regional Coupling - MRC, Interim NEMO Committee - INC, CORE/CEE, Cross-Border Intra-Day – XBID/ XBID Accession Stream. Unfortunately, HR shortages, in particular with respect to exchange operations, IT and legal affairs, stood in the way of complete representation in all working groups. According to the rules and mutual obligations, each company which is a project or market participant is represented in each working group to protect its interests. While all meetings are minuted and comments or objections can always be raised, direct presence at meetings is the most productive for of participation.

In Q1 and Q2 2017, TGE and its PCR Project partners tested new software releases using hardware purchased and installed by TGE according to advanced technical standards of the PCR EUPHEMIA algorithm. An additional MPLS line was put in place to ensure redundancy of TGE's interactions with other exchanges which are MCR operators or co-ordinators.

The trading system X-Stream Trading was rolled out on the Commodity Forward Instruments Market and the Property Rights Market in May 2017. The legacy system CONDICO continued to be used for both trading sessions on the Day-Ahead Market. NASDAQ's SAPRI was rolled out in mid-November and supports the Day-Ahead Market together with X-Stream Trading (X-Stream Trading for the morning session, Sapri for the afternoon session) under new cross-border market operating agreements for the connections with Sweden and Lithuania with the participation of NORD POOL, PSE, SvK and LITGRID.

TGE started PCR production on the European Day-Ahead market on 15 November 2016. 16 November was the first day of energy deliveries in the new technological model. This completed the TGE PCR go-live as TGE became an MRC operator/co-ordinator. Since 15 November 2017, TGE is an active market broker as one of five exchanges: TGE, EPEX SPOT, OMIE, GME, NORD POOL. This allows TGE to work as NEMO on the markets with no NEMO monopoly in the multi-NEMO functionality.

In 2017, TGE together held discussions with the stakeholders of the intraday market for connections of Poland with Sweden and Lithuania: PSE, SvK, LITGRID, EPEX SPOT and NORD POOL, concerning co-operation and a potential agreement to develop a Local Implementation Project (LIP) which would allow TGE to join XBID on the intraday market.

On 5 June 2017, the President of the Energy Regulatory Office approved Multi-NEMO Arrangements (MNA) drafted by PSE for the Polish energy market. As a result, TGE together with EPEX SPOT and NORD POOL opened negotiations with PSE to prepare operating agreements, a new version of the Transmission Network Code (TNC) and other regulations necessary to safely operate the multi-NEMO day-ahead market. It is expected that two new NEMOs will launch operations competitive to TGE on the Polish spot electricity market in October 2018.

In December 2017, the Interim NEMO Committee (INC) presented draft agreements for the day-ahead market: ANDOA (NEMO Co-operation Agreement) and DAOA (NEMO – Transmission System Operator Agreement), and agreements for the intraday market: ANIDOA (NEMO Co-operation Agreement) and IDOA (NEMO – Transmission System Operator Agreement), as well as ANCA (All NEMO Co-operation Agreement) for NEMOs which will apply to all exchanges, a master agreement for the European market to replace the existing PCR co-operation agreement.

Price Coupling of Regions – PCR (day-ahead market)

PCR is an agreement of the co-owners of the market coupling algorithm. PCR is a decentralised model. As a single auction mechanism, it combines price areas managed by energy exchanges operating in the different areas. The model solution provides price coupling of day-ahead markets on all borders of EU Member States. The project standardises IT solutions by developing a shared trading algorithm (EUPHEMIA) and a data exchange and communication system (PCR Matcher & Broker (PMB)) used to calculate electricity prices and allocate transmission capacities in Europe.

Towarowa Giełda Energii S.A. is a full member of PCR since Q4 2015. In December 2016, TGE received all required acceptance certificates necessary to obtain the PCR operator and co-ordinator status. TGE is a co-owner of the IT solutions together with the exchanges NORD POOL, EPEX SPOT, GME, OMIE, OTE and OPCOM. TGE is entitled to actively participate in regional market projects and implement EU mechanisms of the electricity market.

Multi-Regional Coupling – MRC (day-ahead market)

Multi-Regional Coupling is a market created with the integration of regional markets in 2014-2015 and has been gradually extended. MCR is a pan-European project of operating integration of day-ahead markets in electricity and Europe's biggest and most liquid market which covers ca. 90% of European demand for energy. Following accession in July 2015, TGE is a full member of MRC. TGE is an active MCR operator since 15 November 2017. Poland participates in MCR via the links Swe-Pol Link and Lit-Pol Link. TGE's participation in the project is part of its on-going business.

CORE Day Ahead Flow Based Market Coupling (previously CEE FB MC) (day-ahead market)

The project involves the calculation of available transmission capacities for connections between the region's national markets by transmission system operators. The project covers Central and Eastern Europe and integrates the region's national markets (CORE) with MRC. It will design algorithms used by transmission system operators to calculate available cross-border transmission capacities according to the flow based allocation methodology. The implementation should open the Western and Southern borders of Poland to the cross-border exchange market in H2 2019.

XBID, XBID AS and XBID LIP (intraday market)

The European intraday electricity market XBID is expected to launch in Q2 2018. TGE participates in the work of XBID Accession Stream, a group of companies preparing to join the project, and is an XBID observer.

The final decision on the format and date of TGE's XBID accession will follow consultations with the Energy Regulatory Office and the Polish Financial Supervision Authority. TGE is working locally with the exchanges NORD POOL and EPEX SPOT and with the operators PSE, SvK and LITGRID to open a cross-border intraday market in the Local Implementation Project in order to create the technical capacity of TGE to join XBID in 2019.

In Q4 2017, TGE announced that it is reviewing the option of opening additional auctions on the intraday market under the model proposed by NORD POOL. The solution requires the implementation of the EUPHEMIA algorithm and the SAPRI software and possibly also X-Stream software. Conceptual work will be initiated in 2018.

MNA – Multi-NEMO Arrangements (Polish day-ahead market)

Meetings of stakeholders including PSE, TGE, EPEX SPOT and NORD POOL took place in Q4 2017 in order to confirm their arrangements and project work. PSE co-ordinates the project work under the MNA.

INC – Interim NEMO Committee – co-ordination and project work (intraday and day-ahead markets)

The Interim NEMO Co-operation Agreement (INCA), signed by all NEMOs – European energy exchanges which operate electricity spot markets, including TGE, took effect in March 2016. The Interim NEMO Committee (INC) was appointed. The CACM Regulation requires all NEMOs to prepare a range of documents and submit them for approval of the regulators according to a predefined timeline. The first and most fundamental document is the MCO Plan which describes the operation of the single day-ahead market and intraday market in electricity. The MCO Plan was submitted in April 2016 and approved by the regulators, including the Energy Regulatory Office, in June 2017.

THE GPW GROUP AS A MEMBER OF INTERNATIONAL ORGANISATIONS AND INITIATIVES

FESE

The Warsaw Stock Exchange has co-operated with the Federation of European Securities Exchanges (FESE) since 1992. GPW was granted the status of associated member in 1999 and has been a full member of FESE since June 2004. FESE represents 35 exchanges which organise trading in equities, bonds, derivatives and commodities through 18 full members from 27 countries as well as 1 affiliated exchange and 1 non-European observer member.

Capital Market Union

In 2015, the Warsaw Stock Exchange was involved in consultations of the Capital Market Union project, designed to create a single capital market across the 28 European Union member states. GPW welcomed the Green Paper which provides for a greater role of the capital market in financing of the EU economy, especially SMEs. In the opinion of GPW, the main objective is to support initiatives which facilitate market access, improve market transparency and encourage mid-term and long-term investing. However, the Capital Market Union concept should take into account the importance of regional capital markets to the national economies.

Sustainable Stock Exchanges (SSE)

GPW is a member of the Sustainable Stock Exchanges (SSE) since December 2013. SSE is a UN initiative of global exchanges which promote the development of corporate social responsibility and sustainable development on their home capital markets. SSE was created in 2009 by the United Nations to exchange members’ experience in the development and promotion of corporate social responsibility and responsible investment among investors, public companies, regulators and capital market infrastructure institutions. GPW was the ninth exchange to join SSE, the first one in Central and Eastern Europe. SSE had 68 members at the end of 2017.

FIX Trading Community

GPW became a member of the FIX Trading Community in 2014. It is a non-profit industry-driven body which brings together close to 300 financial companies: banks, exchanges, brokers, the buy side, ISVs. The organisation supports dialogue and exchange of information concerning the best practice and standards of messaging on the financial market. The flagship achievement of the FIX Trading Community is the creation and development of the FIX messaging protocol broadly used in the financial industry.

Association of European Energy Exchanges EUROPEX

EUROPEX is the association of European commodity and financial energy exchanges which represents exchange markets in electricity, gas and derivatives. TGE is a EUROPEX member since 2005. TGE takes active part in the working groups Power Markets, Gas Markets, Environmental Markets, Financial Markets, Integrity & Transparency.

The mission of EUROPEX is to enhance competition on the European market by ensuring transparent price setting and implementing a single European market in electricity and gas enabling convergence of prices as well as benefits for customers. EUROPEX participates in the development of market solutions and engages in dialogue with EU authorities and other European institutions which contribute to the development of the markets.

Association of Power Exchanges (APEx)

The Association of Power Exchanges (APEx) is an international organisation of world energy exchanges and transmission system operators. It has 50 members around the world. APEx supports the development of energy markets. Its key initiatives include development of a platform for exchange of information and experience among its members. TGE is an APEx member since 2000.

Association of Futures Markets (AFM)

AFM is an organisation of 21 financial and commodity exchanges around the world. AFM has its principal offices in Budapest, Hungary. AFM holds its AFM Annual Conferences as a platform for exchange of information and experience between exchanges. The mission of the Association is to promote and encourage the development of new derivatives markets and to support their growth. TGE is an AFM member since 2014.

Co-operation with European exchanges in working groups of the PRICE COUPLING OF REGIONS (PCR)

Price Coupling of Regions (PCR) was established to develop a solution that would link day-ahead markets in electricity using a unique algorithm for the calculation of energy prices across Europe (Euphemia) and to ensure effective allocation of cross-border transmission capacities. This is key to achieving the overarching EU objective of creating a harmonised European electricity market in order to improve liquidity, efficiency and social welfare.

TGE's co-operation and participation in the Polish-Lithuanian Chamber of Commerce

In 2015, TGE became a member of the Polish-Lithuanian Chamber of Commerce which works to create conducive conditions for Polish-Lithuanian economic initiatives, dynamic trade exchange between the two countries, investment flows, and elimination of barriers to co-operation of businesses in Poland and Lithuania. The Chamber supports the exchange of expertise and experience among its members. The Chamber holds monthly club meetings for its members to facilitate networking and knowledge sharing.

EACH – European Association of CCP Clearing Houses

IRGiT representatives take part in plenary meetings, teleconferences and work of the Policy Committee, the Risk Committee and the Legal Committee of the European Association of CCP Clearing Houses EACH. IRGiT takes active part in consultations of draft European regulations.

II. 6 Development of the GPW Group in 2018

The development of the GPW Group in 2018 will be driven among others by the following internal and external factors.

INTERNAL DRIVERS

Update and Implementation of the GPW Group's Strategy

- Implementation of initiatives in the GPW Group's key areas (stock market, debt market, money market, derivative market, commodity market, information services for investors and issuers);
- Identification of new areas of development and implementation of new projects;
- Continued optimisations to enhance organisation and improve integration within the GPW Group.

GPW's Potential Decisions to Modify Trading Fees

GPW was working in 2017 to align its trading fees with MiFID2. The new solutions effective as of January 2018 include:

- two categories of market makers: ordinary and extended;
- changes to the calculation of fees charged to HVP participants;
- single maker-taker fees under the maker-taker programme for market makers of non-WIG20 shares;
- new calculation formula in the Order to Trade algorithm.

The new legislative environment may require a further review and potential modification of fees charged on the financial and commodity markets.

EXTERNAL DRIVERS

Macroeconomic Situation, the Government's Economic Policy, Conditions on the Exchange

GPW's results will be driven in equal measure by the activity of investors on the capital market and by the overall economic conditions.

According to European Commission forecasts, GDP growth will be 4.2%[35] in 2018, slowing down to 3.6% in 2019. Growth is expected to be driven mainly by growing domestic demand and favourable trends on the labour market. Growth of private consumption will be driven among others by an inflow of migrants to the Polish job market. Investments should rise in early 2018 owing to available EU funds and growing production capacity. Exports are expected to continue rising as well. The economy will be supported by record-strong consumer sentiment. However, the Commission expects consumption to slow down at the end of the time horizon of the forecast (2019) as higher inflation will reduce disposable incomes of households while growth of employment will slow down.

The situation on the labour market will be largely impacted by the pension system reform implemented in October 2017 and by growth of wages which started in 2017 and will continue in 2018.

The improving labour market will boost inflation, including mainly prices of services. According to the Commission forecast, inflation will rise to 2.5% in H2 2018. Price pressures will mainly affect the service industry, largely driven by the general conditions on the job market.

[35] European Commission, Winter 2018 Interim Economic Forecast.

The Commission expects the risks of the forecast to be balanced. The risks include a shortage of skilled labour, which could slow down further growth of investments. Continued wage growth could boost inflation. Uncertainty about the legal environment could adversely impact growth expected in 2018. Positive drivers could include less uncertainty about economic legislation (including the energy industry), which could accelerate private investments. Continued growth of employment and more stable migration to Poland could bolster private consumption.

The European Commission affirmed its assessment of stable and strong growth of Poland's economy, taking into account economic policy measures and their implications within the time horizon of the forecast. External risks include the future trade and economic policy of the USA as well as broader geopolitical tensions. Economic developments in China, the weak condition of the European banking industry, and on-going negotiations with the UK concerning Brexit are among the potential risks that could adjust the forecast.

Competition of Multilateral Trading Platforms (MTF)

Trade in Polish stocks participating in WIG30 on the pan-European trading facility Turquoise present on the European market is possible since October 2015. No trades in Polish stocks were made on the MTF in 2017. However, trade in GPW-listed stocks on the MTF may increase in the future. Likewise, other European MTFs may also offer trade in Polish stocks.

The launch of trade in Polish stocks on MTFs could grow the overall value of trade in such stocks, including among others arbitrage and trade by investors active on MTFs with no access to GPW. This would make the Polish stock market more popular and facilitate access to the market. However, it is not unlikely that MTFs could also attract part of the trade currently handled by GPW.

Final Shape of the Pension System Reform in Poland

In July 2016, the Government published a proposal of a further reform of the pension system involving the nationalisation of a part of savings in open-ended pension funds and a transfer of 25% of liquid assets (cash, foreign stocks, bonds) to a Demographic Reserve Fund. The remaining 75% of the assets (Polish stocks) would remain in open-ended pension funds, which would eventually be transformed into traditional investment funds. The details of the planned pension system reform are still unknown. According to the original plan, the reform was expected to take effect in 2018 but the date has been delayed.

In 2017, the work on the pension system reform included the planned development of employee capital plans (PPK). The project promotes long-term pension savings. Unlike investments in pension funds, PPK savings would be held privately by individuals. Participation in the programme will be voluntary but each employer will be required to set up a plan for employees. Payments to employee capital plans will originate from three sources. One of them are basic contributions paid by the employer at 1.5% of the salary with the option of an additional contribution at 2.5%. Another source are contributions paid by employees at 2% with the option of an additional contribution at 2%. The total contributions will thus range from 3.5% to 8% of the salary. The government will contribute to the programme with one-off initial contributions of PLN 250 and annual contributions of PLN 240. PPK resources will be paid into investment funds whose risk profile will change depending on the members' time to retirement. Early withdrawals will be allowed for individuals taking mortgage loans or in the event of a serious illness (25% of savings). The project aims to support further development of the Polish capital market. As an alternative to bank loans, the programme will generate new cash flows to the stock market. The rotation of assets of converted pension funds will also generate additional capital for the stock market. The planned conversion of pension funds into investment funds could release part of the free float on GPW thanks to improved liquidity of securities now locked in pension fund portfolios.

The announced reform was welcomed by participants of Poland's capital market and foreign investors. The legislative process of employee capital plans is expected to launch in 2018. The programme is expected to open in early 2019.

The value of Polish stocks in pension fund portfolios increased by 22.1% to PLN 141.9 billion as at the end of 2017 (source: PFSA).

Promotion of Poland as Developed Market in FTSE Russell Ranking

FTSE Russell, the leading global index provider, announced the upgrade of Poland from Advanced Emerging Markets to Developed Markets in late September 2017. Poland's promotion to Developed Markets is a reward for the development of the Polish economy and the local capital market. The promotion puts Poland among the world's 25 developed economies including Germany, France, Japan, Australia, and the USA. Poland is the first Central and Eastern European economy to be named a Developed Market. The decision takes effect in September 2018, which is when new investors are likely to join GPW. Poland's share in the Developed Markets index as of September 2018 is still unknown but it is likely to trigger new capital flows to the Polish capital market.

Financial and Commodity Market Regulation

- **MiFID2 and the financial market** – Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (EU Official Journal L 173 of 12.06.2014 p. 349) (MiFID2) took effect on 2 July 2014. The Member States were required to harmonise national laws with the Directive by 3 January 2018. The draft amendment of the Act on Trading in Financial Instruments, currently in the legislative process, implements MiFID2 in Polish law.

  The draft Act requires the Company to implement detailed rules for outsourcing contracts and to comply with additional regulations concerning members of the Company's authorities including a limitation on the number of positions held on the authorities of other companies. The amended Act will require operators of regulated markets to appoint a nomination committee of adequate size, structure and scope, responsible among others for recommending candidates to the management board and for regular assessments of the management board.

  The draft Act largely increases the minimum financial penalties that could be imposed on the Company or persons responsible for infringements of regulations applicable to the Company to EUR 5 million. From the perspective of GPW, such heavy financial penalties, which are incommensurate with the conditions of business on the local market, could increase the costs and risks of the Company's business. The financial penalties could also have an adverse impact on recruitment for positions in companies which operate a regulated market.

- **MiFID2 and the commodity market** – MiFID2 introduces a new system of trading in financial instruments: Organised Trading Facility (OTF). According to MiFID2, all multilateral systems of trade in financial instruments must operate as an MTF, OTF or regulated market. The preparation of TGE and market participants for the implementation of MiFID2 in Polish law in 2017 included the following key initiatives:

  - ✓ consultations with market participants concerning proposed modifications to the planned implementation of MiFID2 in Polish national law applicable to the energy and gas market;
  - ✓ consultations with market participants concerning the development of a model of transformation of the Commodity Forward Instruments Market to become an Organised Trading Facility (OTF). Following the effective date of the law implementing MiFID2, TGE has 12 months to apply to the Polish Financial Supervision Authority for a licence to operate an OTF ;
  - ✓ development, in communication with the Polish Financial Supervision Authority, of the concept of discretion, approved by PFSA and implemented on 29 December 2017 on the Commodity Forward Instruments Market;
  - ✓ development and implementation, in communication with market participants and the Polish Financial Supervision Authority, of modifications to TGE markets necessary to harmonise them with the MiFID2 requirements including the following initiatives:

    - Listing of TGe24 futures on the regulated market was discontinued on 29 November 2017;
    - Trade in emission allowances on the TGE commodity market stopped on 30 December 2017 as those became financial instruments under MiFID2. Efforts are underway to

move trade in such instruments to the regulated market following the implementation of MiFID2 in Poland;

- Trade in RES futures on the TGE commodity market stopped on 28 December 2017 as those also became financial instruments. Work is underway to reopen trade in RES futures as a financial instrument on the transformed Commodity Forward Instruments Market following the implementation of MiFID2;
- Amendment of the TGE Rules;
- Far-reaching IT work necessary to prepare the technical infrastructure for the requirements of MiFID2 and its implementing regulations, including the requirements for trading facilities under the new regulations and overall reporting to supervisory authorities.

The developed solutions ensure harmonisation with the requirements of MiFID2 that is optimal for market members in line with national and EU law. With a view to transformation of the markets and traded instruments under the new legal requirements, and as agreed between TGE and PFSA, Izba Rozliczeniowa Giełd Towarowych does not need to become a CCP in order to clear instruments currently traded on TGE.
Discretion, which is a specific property of OTFs under MiFID2, was introduced on the Commodity Forward Instruments Market on 29 December 2017. Cases where orders may be executed on a discretionary basis are defined in the Directive. From 3 January 2018 until TGE is authorised as an OTF operator, the Commodity Forward Instruments Market will operate as a PreOTF offering trade in the same instruments that were traded on the Commodity Forward Instruments Market. Trading will follow the same rules as previously applicable on the Commodity Forward Instruments Market subject to discretion. Trade on PreOTF will be recognised for the purpose of fulfilment of the obligation to sell production on the exchange. Following the effective date of the law implementing MiFID2 (amendment of the Act on Trading in Financial Instruments, UC86), TGE has 12 months to apply to PFSA for a licence to operate an OTF which will replace the Commodity Forward Instruments Market.
Considering that the Ministry of Finance expects MiFID2 to be implemented in Polish law at the turn of March to April 2018, TGE will have the legal and technical preparedness for the implementation of MiFID2 in Poland.

- **Benchmarks Regulation and the financial market –** Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 took effect on 1 January 2018.
  For GPW Benchmark, the Regulation provides detailed rules of administration of WIBID and WIBOR reference rates including the mandatory authorisation by PFSA as administrator of WIBID and WIBOR reference rates by the end of 2019. From 1 January 2018 to 31 December 2019, GPW Benchmark will use the transitional period allowed under the Regulation for WIBID and WIBOR reference rates and take steps to fully comply with the regulatory requirements and to obtain the necessary authorisation from PFSA.
  The Regulation provides for administrative penalties that may be imposed on individuals for infringements of the Regulation. Sanctions will apply only after PFSA issues the authorisation. This will generate financial risks for the Company's business.

- **Renewable Energy Sources Act:** The Renewable Energy Sources (RES) Act took effect on 1 July 2016. It implements a new support scheme for the production of energy from renewable energy sources be based on auctions. Auctions will be held by the Energy Regulatory Office. Auction winners who offer the lowest price for energy generation will receive support for a period of 15 years. The existing system of green certificates of origin will be phased out. All producers who generated electricity before 30 June 2016 are still eligible to receive certificates of origin. Generation of energy after 1 July 2016 allows producers to participate in auctions but they are not eligible to apply for certificates of origin. The Renewable Energy Sources Act was amended in 2017. The amendment changed the rules of calculation of the unit substitution fee, replacing a fixed fee of

300.03 PLN/MWh with a fee linked to an index based on EOB transactions in the previous calendar year. The amendment impacted the prices of non-EOB transactions indexed to the unit substitution fee but it had no impact on the revenue of the TGE Group. The potential impact of amendments to RES regulations on the business of TGE is discussed in section *II.7. Risks and Threats*.

- **CO_2 Trading Act** effective as of September 2015 enables TGE to grow a new business segment by becoming the national platform authorised to organise CO_2 primary market auctions (currently Poland sells them on the German exchange EEX). TGE received the conditional approval of the Polish Financial Supervision Authority to operate a CO_2 allowances platform on 20 December 2016. In the next step, TGE will participate in a tender for the operation of an auction platform for Polish emission allowances opened by the Ministry of Environment. As the last step, TGE needs to be entered into the list of auction platforms in Annex III to Commission Regulation 1031/2010. Operation of an auction platform will help to develop the market operated by TGE which offers trade in emission allowances and to improve liquidity of the market. With the launch of the auction platform, financial instruments on delivery of emission allowances will be introduced into trading.
- **Energy Efficiency Act:** The Energy Efficiency Act took effect on 1 October 2016. It modifies the white certificate system. Previously, the President of the Energy Regulatory Office opened tenders for white certificates. White certificates of origin were granted to tender winners. The new Act eliminates tenders: from now on, certificates of origin of energy efficiency will be issued by the President of the Energy Regulatory Office on the same terms as other types of certificates of origin. Furthermore, the new Act imposes limits on the performance of the obligation to acquire white certificates by the payment of a substitution fee as follows: 30% of the obligation for 2016, 20% of the obligation for 2017, 10% of the obligation for 2018. The new regulations provide for a gradual increase of the unit substitution fee (the unit substitution fee is 1,000 PLN/toe for 2016, 1,500 PLN/toe for 2017, and will be increased by 5% of last year's unit substitution fee for 2018 and each subsequent year). Those market players which previously met the obligation by paying the substitution fee exclusively, will start to operate on TGE. Under the new Act, the obligation may be fulfilled by paying a substitution fee above the caps only if the market player demonstrates that it has placed buy orders for property rights on the exchange but was unable to buy property rights in the absence of trade or because the price of property rights exceeded the substitution fee. The new solutions will boost investments in energy efficiency and improve liquidity of trade in white certificates on TGE.
- **CACM Regulation – TGE as NEMO in the market competition mode**l: The Third Energy Package of September 2009 is a key element of EU legislation governing the European electricity markets. Under these regulations and the 2011 decisions of the European Council, the governments of the EU Member States made commitments to jointly develop a spot electricity market. The CACM Regulation published in July 2015 specifies the obligations of exchanges and operators and the powers of regulators. For TGE, its authorisation as NEMO on 2 December 2015 triggered focused involvement in international intraday and day-ahead market projects. With the publication of the CACM Regulation, TGE is subject to specific requirements to implement the new market solutions according to a predefined timeline. As a NEMO on the spot electricity market and an authorised commodity exchange, TGE is supervised by the Polish Financial Supervision Authority. On the other hand, as a NEMO, TGE and IRGiT are supervised by the Energy Regulatory Office, which may revoke the authorisation. The CACM Regulation requires NEMOs to prepare a range of spot market documents and submit them for approval of regulators. The Interim NEMO Committee (INC) was appointed under the Interim NEMO Co-operation Agreement (INCA) in 2017. The first and most fundamental document to be prepared jointly was the Market Coupling Operations Plan (MCO Plan). The MCO Plan, which was approved by the Regulators' Forum with the participation of the Energy Regulatory Office in June 2017, defines the operating rules of single electricity markets: SDAC (Single Day Ahead Coupling) under the PCR model and SIDC (Single Intraday Coupling) under the XBID model. The INC platform has developed other documents for the day-ahead and intraday markets including the specifications and requirements for algorithms, minimum and maximum prices, commercial products, and operating procedures. TGE prepared the Polish version of the documents and submitted them to the Energy Regulatory Office. The European spot market is to be launched by June 2018, i.e., within 12 months following the approval of the MCO Plan by the regulators, but the exchanges are expecting to continue joint work in the INC at least in 2019.

- **Energy Law** of 10 April 1997, consolidated text effective as of 18 January 2018 incorporating amendments under the Capacity Market Act of 8 December 2017 (Journal of Laws of 2018, item 9), requires energy operators which produce electricity to sell at least 30% of electricity produced within the year (previously 15%) among others on commodity exchanges. Energy companies trading in gas fuels are required to sell at least 55% of natural gas on an exchange. The amendments will impact the activity of certain participants of TGE. This could restrict the liquidity of trade in electricity and the attractiveness of the commodity market for other participants, affecting the volume of trading in such commodities and the resulting revenue.

Internal Energy Market

The objective of integration of the European market as a coherent harmonised internal market (Internal Electricity Market – IEM) is to enable all market players to participate in cross-border trade in electricity. The target market coupling (MC) solution for day-ahead markets is the Price Coupling of Regions (PCR) developed by Western European exchanges while the Cross-border Intra-day model (XBID) is the MC solution for the intraday market.

TGE started PCR production on the European Day-Ahead market on 15 November 2016 and became an MRC operator/co-ordinator. TGE is an active market broker as one of five exchanges: TGE, EPEX SPOT, OMIE, GME, NORD POOL. This allows TGE to work as NEMO on the markets with no NEMO monopoly in the multi-NEMO functionality. As a result, TGE may expand to foreign markets. At the same time, other NEMOs may enter the Polish electricity market. It is expected that two new NEMOs will launch operations competitive to TGE on the Polish spot electricity market in October 2018.

The European intraday electricity market XBID is expected to launch in Q2 2018. TGE participates in the work of XBID Accession Stream, a group of companies preparing to join the project, and is an XBID observer. The final decision on the format and date of TGE's XBID accession will follow consultations with the Energy Regulatory Office and the Polish Financial Supervision Authority. TGE is working locally with the exchanges NORD POOL and EPEX SPOT and with the operators PSE, SvK and LITGRID to open a cross-border intraday market on the border with Lithuania and Sweden in the Local Implementation Project in order to create the technical capacity of TGE to join XBID in 2019.

II. 7 Risks and Threats

The operation of the Warsaw Stock Exchange Group is exposed to various risks, both external related to the market conditions and Poland and globally, the legal and regulatory environment, and internal related to the operating activities of the Group companies.

In pursuit of its strategic goals, in view of the special sensitivity of different business segments to many risks beyond the control of the GPW Group, the GPW Group actively manages its risks aiming to mitigate or eliminate their potential adverse effect on the Group's results.

GPW RISK MANAGEMENT

The goal of GPW risk management is to ensure that all material risks of GPW's activity are properly measured, reported and controlled and do not pose a threat to the operational stability and continuity of the Company. The risk management system includes a range of processes, organisational solutions, technology tools and documented rules for risk management. The key assumptions and principles of the Company's risk management system derive from the GPW Risk Management Strategy approved by the GPW Management Board and regularly reviewed to bring it in line with changes of the GPW risk profile and the market environment.

The key role in the risk management system is that of the Exchange Supervisory Board supported by the Audit Committee in supervising the GPW risk management system through on-going monitoring and assessment of the GPW risk management system approved by the Exchange Management Board. Risk management is a responsibility of the Exchange Management Board supported by the Risk Management Committee. The Company's Management Board drafts, approves and implements GPW's risk management strategy and takes the key decisions affecting the risk levels. The GPW risk management process is monitored and controlled by the Compliance and Risk Department. Business process owners and participants are responsible for on-going risk management, including identification of risks in the area of their responsibility, monitoring, controlling and taking actions to mitigate such risk. Effective operations and assessment of the risk management system as well as its adequacy for the GPW risk profile are regularly reviewed by the Internal Audit Department.

GPW builds an organisational culture which focuses on effective risk management, compliance with procedures, as well as enforcement of the rules of conduct. For this purpose, steps are taken in order to raise GPW employees' awareness of risk management responsibilities at each level of the GPW organisation, including training, a dedicated risk management section of the corporate portal available to employees, and on-going advice.

Chart 8 GPW risk management process

The GPW risk management process is continuous and includes the following elements:

- **Risk identification** – identification of existing and potential sources of risk which impact or may impact GPW's financial position.
- **Risk assessment** – analysis of internal and external threats to GPW's operation in order to determine the risk profile.
- **Risk prevention or acceptance** – application of any of the following strategies:
  - ✓ risk mitigation;
  - ✓ risk transfer, e.g., transfer of risks of a threat in whole or in part to a third party;
  - ✓ risk avoidance by taking no action involving the threat;
  - ✓ risk acceptance.
- **Risk review** – periodic review of the effectiveness of the existing risk management system and its adequacy for the GPW risk profile.
- **Risk monitoring** – monitoring the gap between risks and projections or benchmarks. Risk monitoring is an early warning system and triggers management actions when adverse change to the GPW risk profile is identified.
- **Risk reporting** – regular reporting of risk measurements, actions taken or recommendations to withhold actions to the GPW authorities.

GPW's risk management strategy covers the following risks:

- Non-financial risks:

  - ✓ business risk, including: economic environment risk, strategic risk, competition risk, project risk,
  - ✓ operational risk, including legal risk,
  - ✓ compliance risk,
  - ✓ reputation risk.
- Financial risks:
  - ✓ credit risk,
  - ✓ liquidity risk,
  - ✓ market risk,

The order in which individual risks are discussed below does not reflect the extent of their relative importance for the Group, the probability of their occurrence or their potential impact on the GPW Group's operations.

RISKS RELATED TO THE MARKET ENVIRONMENT

Risks of the geopolitical and economic situation globally

The Group's business depends on conditions on the global financial markets. Economic trends in the global economy, especially in Europe and the USA, as well as the geopolitical situation in neighbouring countries impact investors' perception of risks and their activity on financial and commodity markets. As global investors evaluate geographic regions from the perspective of potential investment, their perception of Poland and GPW may decline in spite of a relatively stronger macroeconomic situation compared to other countries of the region. Less active trading by international investors on the markets operated by the GPW Group could make the markets less attractive to other participants and reduce the amount of charged trading fees, which are the main source of the Group's revenue. Combined with a stable cost level, this could reduce the GPW Group's potential profit.

Risk of the economic situation of other countries

The economic situation and market conditions in other countries could impact the perception of the Polish economy and its financial markets. Although the economic situation of other countries could be materially different from the economic situation in Poland, investors' risk aversion caused by the economic situation of other countries could reduce the volume of trading in financial instruments on GPW. In particular, an economic slowdown or crisis in Europe or unexpected economic crises in other parts of the world, especially caused by difficulties of some countries with the repayment of debt, could affect the assessment of investment risk in European economies and consequently cause a shift to safe havens, which could have an adverse impact on investors' activity and sentiment and consequently an adverse impact on the activity of the Group, its financial position and results.

Risk of the economic situation in Poland

The conditions in the Polish economy impact strongly investors' activity and sentiment on the Polish market and consequently the level of turnover on the markets of the Group. Changes in the state of the Polish economy affect the business and investment activities of issuers whose securities are listed on the markets operated by the Group, including their financial results, which in turn may affect the prices of these securities, the volume of transactions, as well as activities related to issuing new securities. Changes of investors' activity and sentiment on the Polish market have a direct impact on the turnover on the GPW Group's trading revenue. In periods of economic instability and under conditions of risk aversion, the Company's revenue may decrease; even combined with a strict cost discipline, this could reduce the GPW Group's profits. GPW's listing revenue depends directly on the prices of listed instruments. Furthermore, perception of higher risks of investment in Polish assets could restrict access to capital which could be invested on GPW and could adversely impact prices of assets traded on the markets organised and operated by the Group. Changing FX rates could have an adverse impact on investment decisions and their frequency, which could affect the volume, value and number of transactions on GPW and consequently also the Group's revenue.

Risk of market and political events beyond the GPW Group's control

The volume of trading, the number of new listings and demand for the GPW Group's products and services are affected by economic, political and market developments, both domestic and global, that are beyond the Group's control, including in particular:

- general trends in the global and domestic economy and on financial markets;
- changes in monetary, fiscal and tax policies;
- the level and volatility of interest rates;
- inflation pressures;
- changes in foreign exchange rates;
- adoption of the euro as the currency of Poland (causing potential changes to monetary and fiscal policy or causing changes in the allocation of investor portfolios);
- change of Poland's credit rating;
- institutional or individual investors' behaviour;
- volatility in the prices of securities and other financial instruments;
- availability of short-term and long-term funding;
- availability of alternative investment opportunities;
- legislative and regulatory changes; and
- unforeseen market closures or other disruptions in trading.

These events could have a significant impact on the activity of GPW Group clients, mainly issuers and investors. Their low activity could affect the Company's trading and listing revenue, revenue from introduction of financial instruments, and consequently information services, and it could affect the GPW Group's profit.

Risk of competition from other exchanges and alternative trading platforms

The global exchange industry is strongly competitive. In the European Union, competition in the trade and post-trade sectors is amplified by legal amendments designed to harmonise legislation of the EU member states and integrate their financial markets. Hence, the Group is exposed to the risk of competition from other exchanges and alternative trading platforms whose presence on the Polish market could adversely impact the activity of GPW. In particular, the GPW Group may face competition of multilateral trading facilities (MTF) and other venues of exchange and OTC trade. Their activity on the Polish market could take away part of the trading volumes handled by the platforms operated by the Group and exert additional pressures on the level of transaction fees.

Risk of competition from MTFs and other platforms on the Polish market and other Central and Eastern European markets

The liberalisation of the European exchange industry under MiFID2 has caused the emergence of alternative trading platforms in the past few years, including multilateral trading facilities (MTF). The competition from MTFs in Central and Eastern Europe is still limited. The launch of active trade in Polish stocks by MTFs could impact the value of trade in stocks on GPW. Fees charged by MTFs are low compared to the fees charged by exchange operators including GPW, which could exert price pressures and cause attrition of the market share, adversely impacting the activity of the Group, its financial position and results.

Risk of price competition

The trading cost on large foreign exchanges and MTFs is lower than on GPW, mainly due to the relatively small size of the market in Poland. Consolidations in the global exchange sector and the development of MTFs may increase pressures to reduce fees charged for trade on the financial markets. As a result, GPW clients could exert pressures on GPW to reduce listing and trading fees, affecting GPW's revenue.

RISKS RELATED TO THE LEGAL ENVIRONMENT

Regulatory risk related to the Polish legal system

The GPW Group operates primarily in Poland. The Polish legal system and regulatory environment can be subject to significant unanticipated changes and its laws and regulations may be subject to conflicting official interpretations. The capital market and the commodity market are widely subject to government regulation and increasingly strict supervision. Regulatory change may affect the GPW Group as well as existing and prospective customers of its services. For instance, regulatory changes may affect the attractiveness of listing or trading on the markets organised and operated by GPW or the attractiveness of services provided by the Group. Such changes could also encourage companies listed on GPW to transfer to other markets which offer competitive listing costs or more flexible listing or corporate governance requirements. Furthermore, institutions other than the authorities (e.g., KDPW, KDPW_CCP) could impose rules which impact the Group similar to laws, affecting the competitiveness and attractiveness of the markets operated by the Group. Attrition of a significant proportion of clients for the Group's services or less active investor trading on GPW could have an adverse impact on the activity of the Group, its financial position and results.

The ability of the Group to comply with the applicable laws and regulations largely depends on its ability to develop and maintain the adequate systems and procedures. There is no guarantee that the Group will be in a position to comply with future amendments of laws and regulations or that such amendments will have no adverse impact on the activity of the Group, its financial position and results.

Regulatory risk related to EU law

European Union regulation increasingly impacts the GPW Group, especially in the area of trading and post-trade services. It could hurt the competiveness of smaller European exchanges, such as GPW, in favour of larger market players. Changes to regulations could require the harmonisation of the Group's trading systems and operations, which could entail additional capital and operating expenditures, resulting in reduction of the Group's profit.

Risk of the implementation of MiFID2

Under EU regulations, trading facilities are required to publish quarterly reports on the quality of order execution in the format defined by ESMA. The publication of reports allows investors to compare the quality, speed and cost of order execution ("best execution") on different trading facilities. A positive outcome of the comparison could attract new market participants to GPW. Otherwise, GPW may face the risk of member attrition.

Another requirement for trading facilities and clearing houses is to offer non-discriminatory access of other market participants to infrastructure. The requirement forces GPW Group companies to take steps necessary to maintain their competitive advantage. In the absence of such steps, they may face the risk of attrition of market share.

European unification of outsourcing regulations affords the opportunity to provide such services within the GPW Group, which may reduce costs.

Risk of non-compliance with regulatory requirements and recommendations of the Polish Financial Supervision Authority applicable to the activity of the Group

The Group is supervised by the Polish Financial Supervision Authority. The Group may be unable to comply with all regulatory requirements and recommendations of the supervisory authority and thus it may be exposed to future proceedings and sanctions (including cash penalties) imposed due to the

Group's non-compliance or alleged non-compliance with its obligations under the applicable laws and regulations as well as recommendations of the supervisory authority. Any such proceedings against the Group and resulting sanctions could have a material adverse impact on the activity of the Group, its financial position and results. The Group has never before failed to comply with regulatory requirements and recommendations of the supervisory authority.

Risk of regulations governing open-ended pension funds in Poland

Open-ended pension funds are an important group of participants in the markets operated by the GPW Group. As at the end of 2017, open-ended pension funds held shares representing 21.5% of the capitalisation of domestic companies and 43.0% of shares traded on the Main Market (among shareholders holding less than 5% of the shares of a public company or classified as financial investors). Legislative amendments announced by the Ministry of Economic Development in July 2016, which would replace open-ended pension funds with other collective investment undertakings and restrict or eliminate cash flows to/from pension funds, could impair the activity of this investor group on GPW. They could also augment the risk of a large surplus of shares listed on GPW and curb the interest of other investors in such shares. As a consequence, this could cause a significant decrease of trade in financial instruments including shares on GPW, a reduction of the number and value of issues of shares and bonds admitted and introduced to trading on GPW, and consequently a reduction of the GPW Group's revenue and profit.

Risks of changes to the Energy Law

Changes to the mandatory public sale of electricity and natural gas may have an adverse impact on the activity of GPW's subsidiary, TGE, and its financial standing. The Energy Law requires energy companies which generate electricity to sell at least 30% of electricity produced within a year among others on commodity exchanges. Energy companies trading in gas fuels are required to sell at least 55% of high-methane natural gas introduced to the transmission grid within the year on an exchange. Amendments to or cancellation of these requirements could reduce the activity of certain participants of TGE. This could restrict the liquidity of trade in electricity and natural gas and the attractiveness of the commodity market for other participants, affecting the volume of trading in such commodities and the resulting revenue. The Energy Law requires energy companies which generate electricity and are entitled to compensation for early termination of long-term power and electricity contracts to sell the remaining amount of generated electricity (not covered by the 30% obligation to sell produced electricity on commodity exchanges) in a way that ensures equal public access to energy in an open tender. The obligation implies that energy must be sold on a market organised by the operator of a regulated market in Poland or on commodity exchanges. The number of entities subject to the obligation decreases with time, which could reduce their activity on TGE, the liquidity of trade in electricity, and the attractiveness of the commodity market for other participants.

Risk of the Renewable Energy Sources Act

TGE operates among other things trade in property rights to certificates of origin of electricity from renewable energy sources as well as the Register of Certificates or Origin. The Renewable Energy Sources Act implements a new support scheme for the production of energy from renewable energy sources based on auctions, which is to replace the existing support system. The existing system of green certificates of origin will expire on or before 31 December 2035. The support scheme may be phased out even earlier as certificates of origin are available within 15 years after the first day of power generation in an installation. For RES installations which were the first to produce energy eligible for green certificates of origin in 2005, the period of 15 years under the Act will expire in 2020, after which the existing support scheme will be gradually phased out over the years. Furthermore, the Renewable Energy Sources Act allows market players eligible for support under certificates of origin to move to the auction system earlier than after 15 years. Consequently, some of them may move to the auction system early, which could affect the results of the Group.

Risk of phasing out the cogeneration support scheme

The existing support scheme for cogeneration expires on 30 June 2016 following the fulfilment of the obligations for 2018. After that date, the TGE Group will no longer earn revenue from the operation of the register, organisation of trade and clearing of property rights in cogeneration certificates. The market has voiced arguments in favour of extension of the support scheme for existing units necessary to protect their profitability and in favour of introduction of a support scheme for new units.

Risk of amendments to and interpretations of tax regulations

The Polish tax system is not stable. Tax regulations are frequently amended, often to the disadvantage of taxpayers. Interpretations of regulations are also changed frequently. Such changes could not only raise the tax rates but also add new specific legal instruments, extend the scope of taxation, or even impose new tax burdens. Changes of tax laws could also be driven by the implementation of new rules under EU legislation following the interpretation of new tax regulations or amendments of existing tax regulations. Frequent amendments of laws governing corporate taxation and different interpretations of applicable tax regulations by tax authorities could be to the disadvantage of the GPW Group, adversely impacting its activity and financial position.

Risk of internal regulations of the Company

The ability of the Group to comply with all applicable laws in a changing regulatory environment is largely dependent on the implementation and maintenance of a compliance, audit and reporting system as well as on the ability to attract and retain qualified staff responsible for the processes. The Group's policies and procedures of identification, monitoring and management of compliance risk could be insufficiently efficient. Management of legal and regulatory risk requires among other things that the rules and procedures applicable in the Group support adequate monitoring, registration and verification of many transactions and events. The Group can give no guarantee that its policies and procedures will be effective at all times or that it will be able at all times to adequately monitor and property assess compliance risks to which it is or may be exposed. Non-compliance with laws and standards could reduce the activity of participants, issuers and investors, adversely impacting the activity of the Group, its financial position, results and outlook.

Risk of potential litigation due to the Group's infringement on intellectual property rights of third parties

The Group's competitors and other legal and natural persons were likely to obtain and are likely to obtain in the future intellectual property rights in products or services related or similar to the types of products or services which the Group offers or intends to offer. The Group may be unaware of all protected intellectual property rights which may be at risk of infringement by the Group's products, services or technologies. Furthermore, the Group cannot be certain that its products and services do not infringe on the intellectual property rights of third parties and that third parties will raise no claims against the Group due to such infringement. If the Group's trading system or at least one of its other products, services or technologies is considered to infringe on the rights of third parties, the Group may be forced to discontinue the development or introduction into trading of such products, services or technologies, to obtain a necessary licence from the holders of intellectual property rights, or to modify such products, services or technologies to avoid infringement of such rights. If the Group is forced to discontinue the development or introduction into trading of some products or is unable to obtain a necessary licence, it may have a material adverse impact on its activity, financial position and results.

Risk of ineffective protection of intellectual property

The Group protects its intellectual property under agreements concerning trademarks, copyrights, protection of trade secrets, non-disclosure agreements and other agreements with its suppliers, subsidiaries, affiliates, clients, strategic partners and others. The measures implemented by the Group may be insufficient, for instance, to prevent appropriation of information. Furthermore, protection of intellectual property rights of the Group may require significant investments of funds and human resources, which could have an adverse impact on the Group's activity, financial position and results.

Risk of potential breach of competition laws by the Company

GPW has a dominant position on the Polish market. Consequently, the Company is subject to certain limitations including the prohibition of abusing the dominant position and using anti-competitive practices under Polish and EU competition laws. Competition authorities (President of the Office of Competition and Consumer Protection (UOKiK), Commission) may monitor compliance with such limitations. If the Company is found to be in breach of any such limitations, the competition authorities may require the Company to take specific measures in order to discontinue an anti-competitive practice or to discontinue abusing the dominant position, and impose sanctions including cash penalties on the Company up to 10% of revenue earned in the year preceding the year when the penalty is imposed. Such measures could have a material adverse impact on the Group's activity, financial position and results.

OPERATIONAL RISKS

Risk of loss of the Group's reputation and client trust necessary to process exchange transactions

The Group operates in a sector where strong reputation and trust of clients (including issuers, financial intermediaries, and investors) are particularly important. The Company has achieved a relatively high volume of trading and a high number of IPOs among others owing to its reputation and clients' trust. In view of the role of the Group on the Polish capital market, its reputation could be harmed any malfunctions of the trading system, trading interruptions, operational errors, disclosure of client information, litigation, press speculations and other adverse events. Unexpected changes of regulations governing the capital market and the commodity market in Poland, as well as actions of other participants of the exchange market, including issuers, financial intermediaries, competitive trading platforms and the media, in breach of accepted standards of conduct or good practice, could undermine overall trust in the Polish capital market and the Group. Furthermore, there is a risk that employees of the Group could be in breach of the law or procedures while measures taken by the Group to identify and prevent such behaviour could in certain cases be ineffective, resulting in sanctions and causing a serious harm to the reputation of the Company. No events have ever had a material adverse impact on the reputation of the Group or trust of clients.

Risk of attracting and retaining qualified staff of the Group

Effective management of the GPW Group's business requires recruitment of highly qualified employees. The skills of the Group employees are scarce due to the unique nature of the GPW Group's operations. Any increased turnover of key employees could temporarily affect the GPW Group's effectiveness in view of the lengthy training process necessary to prepare new staff for such positions. This could have an adverse impact on the activity of the Group, its financial position, results, ability to achieve strategic targets, and outlook.

Risk of industrial disputes

Most of the employees of the Company are members of the Trade Union of Exchange Employees, the sole trade union active in GPW since 2005. Trade unions are entitled to coordinate and consult opinion-making activities (including those related to restructuring of the Company). No industrial action has ever been filed by Group employees. However, there is no guarantee that the Group will not be involved in a future dispute which could have an adverse impact on its activity, revenue, results or financial position.

Risk of trading system malfunction

Safety and continuity of trading are among the key functions of GPW. The Group's operations are strongly dependent on the effective functioning of its trading systems, which are subject to the risk of outages and security breaches. The reliability of the Group's trading systems is as important as their efficiency. In the event that any of the GPW Group's systems, or those of its third-party service providers, fail or operate slowly, it may cause any of the following to occur: unanticipated disruptions in services provided to the Group's market members and clients; slower response times or delays in trade executions; incomplete or inaccurate recording or processing of trades; financial losses and liability to clients; litigation or other claims against the Group, including formal complaints with the Polish Financial Supervision Authority, proceedings or sanctions. Malfunctions in the trading system and other integrated IT systems could delay a trading session and therefore cause a reduction in the volume of trading and affect confidence in the market, which could have a material adverse effect on the Group's results, its financial position or development prospects. Furthermore, the Group may be forced to make additional material investments in security in order to improve security measures or mitigate existing issues, or to improve its reputation harmed by a potential security breach. Such factors could have an adverse impact on the Group's activity, financial position or results.

Risk of technological changes

The exchange industry has experienced and will continue to experience fast technological progress, evolving requirements and preferences of clients, launches of products and services integrating new technologies, as well as the emergence of new industry standards and practices. To remain competitive, the Group must continue to strengthen and improve its ability to respond to changes combined with the productivity, availability and functionality of automatic trading and communication systems. This will require the Group to continue attracting and retaining highly qualified staff and to invest heavily in continuous upgrades of its systems. Otherwise, the Group's systems may become less competitive, causing client attribution and reduction of the volume of trading, which could have an adverse impact on the activity of the Group, its financial position and results.

Risks of necessary upgrades of GPW's trading system

The trading system UTP was implemented by the Company on 15 April 2013. The Company has recently implemented a major system upgrade to align it with applicable regulatory requirements (MiFID2/MiFIR). Although UTP now represents the highest global standard and meets growing requirements of market participants, there is no guarantee that it need not be upgraded in the next five years. This could require material investments of the Company.

There can be no guarantee that the capital expenditures of the Company required to upgrade UTP or replace IT hardware will have no material adverse impact on the activity of the Group, its financial position and results.

Risk of the Group's risk management methods

The Group is exposed to market risk, regulatory risk, and financial risks including credit risk and liquidity risk of the Group's investment portfolio, as well as operational risk of its activity. The Group has an insurance cover against risks including natural disasters, theft and burglary, vandalism, improper use of electronic equipment and inadequate power parameters. Furthermore, the Group has third-party liability insurance. The Company has no third-party liability insurance for its operations, including potential damage incurred by Exchange Members and participants of trading due to IT system malfunctions. The Company believes that it has sufficient protection under the agreements signed with Exchange Members and participants of trading. These risk management measures and insurance policies may be insufficient to protect the Group against all risks to which it is exposed. The Group may not be in a position to effectively manage its risks, which could have an adverse impact on the activity of the Group, its revenue, results and financial position.

Risk of dependence of the Group's activity on third parties over which the Group has limited or no control

The GPW Group's activity depends on third parties, including KDPW, KDPW_CCP, as well as several third-party service providers including mainly IT service providers. The ICT systems operated by the GPW Group for trading in financial instruments and commodities are highly specialised and customised, and are not widely used in Poland or elsewhere. Consequently, there is limited choice in service providers for such systems. There can be no assurance that any of the GPW Group's providers will be able to continue to provide their services in an efficient manner, or that they will be able to adequately expand their services to meet the GPW Group's needs. System interruption or malfunction or the cessation of important services by any third party in whole or in part and GPW Group's inability to make alternative arrangements in a timely manner could strongly affect the Group's operation, financial position and results.

Risk of failure to implement the Group's strategy

The strategy of the Group provides among other things for improved attractiveness of GPW for a growing group of market participants, development of GPW's international activity, and reinforcement of its position as a regional financial hub, in particular by investing in state-of-the-art technologies, diversification and expansion of GPW's activity by adding new products and services. The achievement of these goals depends on a range of factors which are beyond the Group's control, in particular market conditions and the overall economic and regulatory environment. Furthermore, the Group may pay significant costs of new products or services which may not provide the Group with expected revenue in the final analysis. If the launch of such products or services fails to increase revenue, the resulting costs may exceed the amount of revenue, reducing the Group's working capital and profit on operations. The Group's failure to achieve strategic targets could have a material adverse impact on the activity of the Group, its revenue, financial position and results.

Risk of new investment projects

In its efforts to update the strategy and to identify potential development opportunities, the Company may enter into transactions with third parties. This involves potential limitations under regulations of other countries. The identification and implementation of development initiatives requires time and expenditures which could impact financial results. GPW is looking for ways to strengthen its business and leverage opportunities of further development. As a result, the Group is in a position to launch new products and grow its presence on other markets. If development solutions prove ineffective, this could impact the Group's financial results.

Risk of actions taken by the Company's dominant shareholder where such actions are not in the interest or go against the interest of the Company or its other shareholders

According to the GPW Articles of Association, the voting rights of shareholders who hold more than 10% of votes at the General Meeting are capped. However, the limitation does not apply to the Company's dominant shareholder, the State Treasury, which holds 14,688,470 shares of GPW with voting rights (each share confers two votes according to the GPW Articles of Association). The State Treasury held 51.76% of the total vote as at the end of 2017. Furthermore, the limitation on the voting rights does not apply to shareholders who hold more than 10,493,000 series A preferred shares (i.e., more than 25% of all preferred shares of the Company). Consequently, the State Treasury controls the Company and any other shareholder may use the exemption if it acquires more than 10,493,000 preferred shares (i.e., more than 25% of all preferred shares of the Company) from the State Treasury.

A shareholder holding the majority of votes at the General Meeting may elect most of the members of the Exchange Supervisory Board and may control the composition of the Management Board. With its corporate rights, the State Treasury or another dominant shareholder that acquires shares of the Company from the State Treasury may directly influence resolutions passed by the authorities of the Company. The State Treasury has, and a dominant shareholder that buys shares from the State Treasury may have, material influence over the activity of the Company, including the development of its strategy and directions of growth, the election of members of the Supervisory Board (subject to the regulations concerning the election of independent members) and of the Management Board. The Company is unable to anticipate how the State Treasury or another dominant shareholder will exercise its rights and how their actions may impact the activity of the Company, its revenue and financial results, and its ability to implement the strategy. The Company is unable to anticipate whether the policies and actions of the State Treasury or another dominant shareholder will be aligned with the interests of the Company. It should be noted that changes of shareholders of GPW could result in a change of the entity which has material influence over the Company or a situation where GPW has no dominant shareholder.

Risk of the take-over of the functions of fixing organiser

The GPW Group acting through the subsidiary GPW Benchmark S.A. took over the preparation of WIBID and WIBOR reference rates on 30 June 2017. GPW Benchmark S.A. will continue to harmonise with Regulation (EU) No 2016/1011 of the European Parliament and of the Council, among others by applying for the authorisation as administrator within the meaning of the Regulation. GPW Benchmark S.A. is required to apply to the Polish Financial Supervision Authority for the authorisation as administrator of WIBID and WIBOR reference rates within the transitional period of harmonisation with the Regulation until the end of 2019. Potential disputes or reservations concerning the preparation of reference rates by the Group company could have an adverse impact on its perception by market participants and on its reputation, and entail third-party liability of the Group. Once the status of administrator is granted in connection with the application of Regulation 2016/2011 as of the beginning of 2018, any breach of the administrator's obligations could lead to civil, administrative or criminal liability.

Business risk of TBSP's loss of reference Treasury securities market status

Treasury BondSpot Poland is exposed to a regular risk once every three years that it may not be selected by the Treasury Securities Dealers and/or not approved by the Ministry of Finance as the electronic market which is the reference trading platform of Treasury debt. TBSP generates most of the Group's revenue from trade in Treasury securities. The Group's revenue from trade in Treasury securities depends among others on the terms of trade in Treasury securities compared to competitive trading venues and OTC trade and on TBSP's reference market status. The Group has no direct control of the volume, value and number of transactions in Treasury securities on TBSP but it takes steps to make the market more attractive, including the provision of a broad range of functionalities and quality services offered on competitive terms.

Risk of reduced benefits of the Company's investment in KDPW

The Company holds 33.33% of KDPW equity. The KDPW Group (with KDPW as the parent entity and KDPW_CCP as its subsidiary) is responsible for the operation and supervision of the depository, clearing and settlement system for financial instrument trade in Poland, with the exception of trade in Treasury bills where clearing and settlement are operated by the National Bank of Poland. As a minority shareholder, GPW has limited strategic and operational influence over the activity of KDPW. KDPW's business model may be adversely impacted by a range of factors reducing its profits, including price pressures or reduced trading. Lower profits of the KDPW Group including the dividend paid out by KDPW could have an adverse impact on future profits of the Group, which could in turn have a material adverse impact on the financial position and results of the Group.

Risk of TGE's function of Nominated Energy Market Operator for the Polish price area in the market competition model

The legal and organisational position of TGE following the implementation of CACM is complex because risks for TGE materialise with the competitive activities of other exchanges on the Polish electricity market.

TGE was nominated as NEMO by the President of the Energy Regulatory Office on 2 December 2015; EPEX SPOT was nominated on 5 April 2016; NORD POOL was nominated on 22 April 2016. The nomination of two other exchanges as NEMOs in Poland required the Polish Power Grid Company (PSE) to draft regulations and contracts creating a legal framework for the operation of multiple NEMOs on the market. In its participation in the drafting of MNA, TGE proposed solutions protecting fair competition and the introduction of uniform regulations ensuring standard effective supervision of all NEMOs by the Energy Regulatory Office and the Polish Financial Supervision Authority.

The implementation of the competitive model with no interim period is a challenge for TGE because EPEX SPOT and NORD POOL are the biggest European spot energy markets. TGE's outlook could suffer in the absence of equal terms of supervision of all NEMOs. It should be noted that EPEX SPOT and NORD POOL have great ambitions: they have requested NEMO nominations in practically all markets open to competition and work as partners offering services on NEMO monopoly markets.

As an important factor impacting TGE's activity on the spot electricity market, the nomination as NEMO implies a new strategic and business dimension and consequently new challenges and risks. Challenges faced by TGE include the following objectives:

To ensure appropriate operating procedures of the spot electricity market under the European models PCR and XBID and their efficient implementation;

To ensure good relations with market participants and other stakeholders (administration, regulators, supervisory authorities, transmission network operators);

To review conformity of IT software and hardware with the standards of the European projects and quickly respond to changing need of the projects. To ensure operating security procedures. To participate in IT testing and training;

To monitor the operation of other NEMOs and secure information impacting TGE's business decisions. To participate in the development of specific multi-NEMO solutions in 2017;

To train local staff, participate in knowledge transfer sessions and learn from companies with longer seniority in the projects. To arrange examinations under the PCR and XBID requirements. To participate in working groups of PCR, MRC, LIP, XBID.

TGE's decision to operate as a NEMO on foreign markets will follow in-depth financial due diligence to ensure that the marketing spending and capital expenditures may be recouped. The concerns are amplified by the absence of an agreement between regulators and an agreement between regulators and NEMOs as to the split of the cost of market development and refinancing. In this regard, as in other areas, pan-European and local arrangements are expected to be reached in 2018.

The day-ahead market will be the first market to witness competition of exchanges in H2 2018. MNA expansion to foreign markets with EPEX SPOT's presence on the Nordic market and NORD POOL's presence on the Continental market is expected to start in 2018. Consequently, TGE's potential plan to expand to other markets implies that it will be the "third option" to two large market players. TGE's decision to expand as a NEMO to other markets is not expected before 2019.

Risk of regulatory fees

GPW and KDPW are required to pay contributions towards the annual budget of the Polish Financial Supervision Authority in respect of capital market supervision. The amount of the fees is defined on the basis of the expected cost of supervision over the Polish capital market within the year and the estimated revenue of the Polish Financial Supervision Authority from market participants. In 2015, the fees paid by the GPW Group and KDPW represented close to 100% of the capital market supervision budget of the Polish Financial Supervision Authority. The Act of 12 June 2015 amending the Act on Capital Market Supervision and certain other Acts extended the group of entities which finance market supervision and modified the amount of fees contributed by different institutions. As a result, as of January 2016, the fees paid by the GPW Group decreased substantially (by about one half). GPW has no control of the amount of the fees and it is unable to anticipate the amount to be paid to the Polish Financial Supervision Authority in a given year; consequently, it cannot predict the impact of the fees on the cash flows of the Group. An increase of the fees may have an adverse impact on the activity of the Group, its financial position and results.

Risk of development of Aquis Exchange

Aquis Exchange Limited ("Aquis Exchange"), GPW's subsidiary which operates an MTF in London, is a start-up; in such cases, it may take longer than expected to achieve business targets. Aquis Exchange's revenue is currently lower than its costs. Aquis Exchange's loss is recognised in the consolidated statement of comprehensive income under the share of profit/loss of associates. Aquis Exchange's share in the European equity market was 1.58 as at the end of 2017 compared to 0.93% as at the end of 2016.[36]

[36] Source: FESE

On 19 February 2018, the GPW Management Board decided to start negotiations of the boundary conditions of a potential sale of the stake in the associate Aquis Exchange if Aquis decides to implement an IPO, as announced by the Company in Current Report 3/2018. The terms, conditions and parameters of the potential transaction will be subject to negotiation. The potential agreement will be conditional on satisfactory outcome of the negotiations and required corporate and administrative approvals.

Development of Aquis Exchange that is slower than expected, its failure to improve financial results within the time horizon expected by the shareholders, adverse impact of external factors or absence of a decision to implement an IPO could have an adverse impact on the value of shares held by GPW or cause GPW to lose potential gains on the sale of its stake in Aquis Exchange.

FINANCIAL RISKS

Financial risks, i.e., price risk, credit risk, cash flow risk and liquidity risk to which the entity is exposed, are analysed in the Notes to the Consolidated Financial Statements of the GPW Group.

Risk of interest rate hikes

The Company is exposed to a risk of interest rate changes due to debt instruments issued by GPW with variable interest maturing on 31 January 2022. A sharp increase of the interest rates including the base rate of the bonds could boost the cost of servicing the liabilities under the bonds and have an adverse effect on GPW's financial position and results.

Risk of material periodic volatility of revenue and profits due to unforeseeable revenue levels and relatively high fixed costs

The Group's sales revenue and net profit are strongly dependent on a range of external factors which are beyond the Group's control, including the activity of investors and the prices of financial instruments listed on the markets organised and operated by the Group; consequently, the Group's sales revenue could vary from period to period. A decrease in the value of IPOs on GPW could have an adverse impact on revenues from fees for admission and introduction to trading on the exchange and listing revenues. If its sales revenue decreases, the Group may be unable to reduce its operating expenses, which could have a material adverse impact on its operating profit.

Risk of dependence of a large part of the Group's sales revenue on trade in shares of a limited number of issuers and trade in futures by a limited number of Exchange Members

The Group is exposed to the risk of concentration of trade among a small number of investment firms operating on GPW. In 2017 (according to GPW data), no Exchange Member had a share of more than 10% of trade in stocks on the electronic order book on the Main Market, two Exchange Members had a share between 9% and 10%, and another 20 Exchange Members had a share between 1% and 9%. Furthermore, there were four Exchange Members that had a share of more than 10% each in the volume of trading in futures, jointly representing 59.6% of the volume of trading in futures. The loss of one or more of such Exchange Members could have a material adverse impact on the activity of the Group, its financial position or results.

Furthermore, the revenue from trading in equities and other equity-related securities represented 31.1% of the Group's total sales revenue in 2017. In that period, the top five companies with the biggest share in trade on GPW generated 45.3% of the average monthly value of trade in shares on the electronic order book on the Main Market while the top 10 companies generated 59.3%. The concentration of a large part of the Group's revenue in the context of a small number of issuers and securities generates material risks. In particular, if those and other major issuers decide to have their shares delisted, it could have an adverse impact on the activity of the Group, its financial position, results and outlook.

Risk of dependence of a large part of the Group's revenue from derivatives on trade in WIG20 futures

Trade in derivatives is the Group's second largest source of revenue from trading on the financial market and accounted for 8.4% of the Group's sales revenue from trading on the financial market and 3.4% of the Group's total revenue in 2016. The vast majority of the Group's revenue from trade in derivatives was generated by trade in a single product: WIG20 futures. A large decrease in trade in WIG20 futures could have an adverse impact on the revenue from trade in derivatives, which could have a material adverse impact the activity of the Group, its financial position and results.

Risk of dependence of the Group's revenue from trade in commodities on the propensity of producers to sell energy and gas on the exchange

The Group's revenue from trade in commodities depends among other things on the propensity of producers to sell energy and gas on the exchange above the required mandatory level. The mandatory sale on the exchange currently applies to 30% of produced energy and 55% of gas. Trading on the exchange above the required mandatory volumes is up to energy and gas producers to decide. The Group has no direct control of the volume, value and number of transactions on the exchange. The Group's revenue depends among other things on the attractiveness of trade in commodities compared to other exchanges and trading platforms. Reduced supply of energy or activity of trading participants could have a material adverse impact the activity of the Group, its financial position and results, impacting the ability of the Company to pay for and redeem the bonds and impacting the value of the bonds.

Risk of insufficient insurance cover

In view of the insurance cover held by the Group, certain types of damage may not be covered by insurance or may be covered by partial insurance only. Furthermore, the Group could incur material losses or damage covered by no insurance or by limited insurance only. Consequently, the Group may have insufficient insurance cover against all damage that it could potentially incur. In the event of damage that is not covered by insurance or damage exceeding the sum insured, it may erode the Group's capital. Furthermore, the Group may be required to redress damage caused by events not covered by insurance. The Group may also have liability for debt and other financial commitments related to such damage. Furthermore, the Group cannot guarantee that there will be no future material damage exceeding the Group's insurance cover. Any damage not covered by insurance or damage exceeding the sum insured could have an adverse impact on the activity of the Group, its financial position and results.

OTHER RISKS

Other risks, which are unknown or considered irrelevant at this time, may also have a material negative effect on the GPW Group's operation, financial position and results.

II. 8 Other Information

MATERIAL AGREEMENTS

The GPW Group concluded no material agreements in 2017.

RESEARCH AND DEVELOPMENT

The GPW Group's research focuses on prospects of development of new trading platforms and products. The initiatives completed in 2017 are described in section *II.3. Implementation of the GPW Group's Strategy in 2017.*

LITIGATION

GPW is not a party to any litigation where the value of liabilities or receivables would represent at least 10% of its equity.

III. CORPORATE GOVERNANCE

III. 1. Statement of Compliance with Corporate Governance Rules

TERMS AND SCOPE OF COMPLIANCE WITH CORPORATE GOVERNANCE RULES

GPW in 2017 consistently complied with the rules and recommendations of the Code of Best Practice for GPW Listed Companies 2016 and the Corporate Governance Rules for Supervised Institutions issued by the Polish Financial Supervision Authority.

GPW accepted the corporate governance rules laid down by the trading organiser as of the date of admission of the Company's shares to trading on the regulated market on 5 November 2010. As of 1 January 2016, GPW follows the Code of Best Practice for GPW Listed Companies 2016. The Code is available on the GPW website (http://www.gpw.pl) under the listed companies corporate governance tab.

GPW complies with all of the recommendations of the Code of Best Practice for GPW Listed Companies 2016 applicable to the Company. GPW complies with the rules of the Code of Best Practice for GPW Listed Companies 2016 recommendations of the Code of Best Practice for GPW Listed Companies 2016 applicable with the exception of Rule VI.Z.2, which requires that the period between the allocation of options or other instruments linked to the company's shares under the incentive scheme and their exercisability should be no less than two years. The non-compliance is due to the fact that the Company's incentive scheme, approved before the effective date of the Code of Best Practice for GPW Listed Companies 2016, included phantom shares, where the exercise period is 1 year. The new remuneration system for the Members of the GPW Management Board includes a basic part and a variable part – supplementary remuneration which is no longer linked to the Company's shares. However, as the payment of phantom shares is distributed over time, the last phantom shares awarded under the incentive scheme will be paid in July 2018, after which the Company will comply fully with Rule VI.Z.2. For more information about the phantom shares, see the Remuneration Policy section.

Furthermore, concerning Recommendation I.R.2, GPW announced that the Company's sponsorship and charity policy is not a formal document. The Company is working to draft a regulation based on the *Best Practice of Sponsorship for Companies with a Stake Held by the State Treasury* released by the Ministry of Treasury and the Ministry of Sport and Tourism, but the regulation is in the process of internal consultations and not yet binding. In its sponsorship and charity activity, GPW focuses on its core business areas. GPW donated PLN 3.6 million in 2017, including PLN 3 million to the Polish National Foundation. Other donations were made to the GPW Foundation (PLN 414 thousand in total: PLN 350 thousand for its statutory activity and PLN 64 thousand for the organisation of the Exchange School Online Game), the Wolność i Demokracja Foundation (PLN 25 thousand), and the Archdiocese of Warsaw (PLN 140 thousand).

Sponsorship expenses stood at PLN 284.2 thous. including mainly support for events dedicated to the capital market, including the conference "Capital Market: Building Polish Wealth" organised by the Chamber of Brokerage Houses (IDM), the Sixth CFO Congress of Listed Companies organised by the Association of Listed Companies (SEG), the WallStreet 2017 conference addressed to individual investors and organised by the Association of Individual Investors (SII), the Stegersbach conference organised by Erste Group Bank AG, and the Fifteenth Local Government Capital and Finance Forum organised by Międzykomunalna Spółka Akcyjna „MUNICIPIUM".

GPW worked with several partners in direct support for the sale of GPW's products and services by co-organising industry conferences: Polish Capital Markets Day in Prague, Frankfurt, Paris, London, Warsaw and Stockholm, and Trading CEE: Equities and Derivatives, an event dedicated to the cash and derivatives market.

GPW partnered with many foundations, chamber of commerce and institutions in events and conferences dedicated to the economy and the capital markets, including the Eastern Studies Institute Foundation in the organisation of the Economic Forum in Krynica under the motto *Europe in the Face of Challenges:*

United or Divided, the Lesław A. Paga Foundation (mainly training and educational projects devoted to the capital markets), the Regional Chamber of Commerce (Seventh SME Congress).

GPW also worked with foundations, associations and organisations in events and conferences dedicated to the economy and the capital markets, including the Polish Institute of Directors (organisation of corporate governance conferences) and the Impact Foundation (Impact fintech'17 Congress with presentations of the best CEE start-ups).

In addition, GPW is subject to the Corporate Governance Rules for Supervised Institutions issued by the Polish Financial Supervision Authority on 22 July 2014 as a set of rules governing internal and external relations of supervised institutions, including relations with shareholders and clients, their organisation, the operation of internal supervision and the key internal systems and functions, as well as the statutory authorities and the rules of their co-operation. The Corporate Governance Rules for Supervised Institutions are available on the website of the Polish Financial Supervision Authority (http://www.knf.gov.pl).

The Exchange complies with the rules laid down in the Corporate Governance Rules for Supervised Institutions with the exception of the rules defined in § 10.2, § 12.1 and § 28.4, and except the rules defined in § 53, § 54.1-3, § 55, § 56, § 57, which are inapplicable to GPW's business profile as GPW does not manage assets on clients' account. GPW does not comply with two additional rules defined in § 49.4 and § 52.2 which are inadequate in view of GPW's organisational structure. GPW's organisation includes the Internal Audit Department and the Compliance and Risk Department headed by the Compliance Officer.

Non-compliance with the rule defined in § 10.2, concerning the introduction of personal entitlements or other special entitlements for shareholders, and in § 12.1, which provides that shareholders shall be responsible for an immediate capital increase of the supervised institution, is due to the incomplete privatisation of the Company by the State Treasury. Non-compliance with the rule defined in § 28.4, which provides that the General Meeting shall assess whether the established remuneration policy contributes to the development and security of the operations of the supervised institution, is due to the excessively broad range of the remuneration policy to be assessed by the General Meeting. The remuneration policy for key managers other than the members of the supervisory board and the management board should be assessed by their employer, i.e., the Company represented by the Management Board and controlled by the Supervisory Board.

For more information on the Company's compliance with the Code of Best Practice for GPW Listed Companies 2016 and the Corporate Governance Rules for Supervised Institutions, see the Company's website under the GPW corporate governance tab.

III. 2. Internal Control System and Risk Management in the Preparation of Financial Statements

The preparation of financial statements is governed by:

- the International Financial Reporting Standards;
- the Accountancy Act of 29 September 1994;
- the Articles of Association of the Warsaw Stock Exchange;
- the Accounting Rules of the Warsaw Stock Exchange and the accounting rules of the subsidiaries;
- internal accounting procedures.

The preparation of financial statements is subject to the internal control system and the risk management system, which ensures fair and true financial reporting in compliance with laws and internal regulations.

The internal control system includes:

- controls exercised by all employees as part of their responsibilities;
- functional controls exercised as part of responsibilities of supervision of organisational units by all employees in managerial positions;
- checks of GPW's compliance with laws and internal regulations;
- internal controls exercised by the Compliance and Risk Department, responsible for assessment of organisational units' effectiveness and compliance with laws and internal regulations;
- internal audit exercised by the Internal Audit Department, responsible for independent and objective assessment of the risk management and internal control systems.

Risk management in the preparation of financial statements involves the identification and assessment of risks, as well as the development and implementation of measures which mitigate or eliminate risks. In particular, GPW on an on-going basis monitors amendments of laws and regulations applicable to the preparation of financial statements, updates the Company's internal regulations and harmonises its IT systems.

The Company's Financial Reporting Section is responsible for enforcing internal and external regulations. The Financial Reporting Section is responsible for preparing financial statements under substantive supervision of and in co-ordination with the Chief Accountant and the Director of the Financial Department. The Company keeps its books of account using computer technology. The Company uses a financial and accounting system implemented in August 2011, which includes embedded mechanisms protecting against destruction, modification or concealment of records. Controls are carried out at the stage of entering accounting records. In addition, financial and accounting processes are subject to audits conducted by the Internal Audit Department.

The auditor controls financial statements every quarter. Quarterly financial statements for Q1 and Q3 as well as financial statements for six months are reviewed by the auditor while the annual financial statements are audited.

The Company's Management Board and the members of the Exchange Supervisory Board are required to ensure that financial statements and activity reports comply with the requirements defined in the Accountancy Act of 29 September 1994. GPW's Audit Committee which is part of its Supervisory Board controls the financial reporting process. Within its powers, the Audit Committee monitors the financial reporting process, financial audit functions, and the independence of the auditor. GPW's auditor is appointed by the Exchange Supervisory Board by recommendation of the Audit Committee from among renowned audit companies. Auditors of subsidiaries are appointed by their Supervisory Boards. The Audit Committee also supervises the Internal Audit Department and the Compliance Officer, and monitors the effectiveness of the internal control, internal audit, and risk management systems. The responsibilities of the Supervisory Board include assessment of the GPW Management Board's reports on the activity of the Company and financial statements, and presentation of a written report on the results of the assessment to the General Meeting.

In the opinion of the Company, the division of tasks related to the preparation of financial statements in the Company, review of financial statements by the auditor, monitoring of the preparation and review of financial statements by the Audit Committee, and assessment of financial statements by the Exchange Supervisory Board ensure that information presented in financial statements is true and fair.

III. 3. Auditor

Appointment of the audit firm by Giełda Papierów Wartościowych w Warszawie S.A. is defined in its internal document: Audit Firm Selection Policy and Procedures, drafted in accordance with:

- Regulation 537/2014 on specific requirements regarding statutory audit of public-interest entities, and
- Act of 11 May 2017 on Auditors, Audit Firms, and Public Supervision.

The document defines the maximum period in which an audit firm or a member of its network may provide audits of financial statements. The period is five years. After the end of the period, the audit firm or a member of its network may not be selected to audit financial statements of GPW for a period of another 4 years.

The selection of an audit firm is a responsibility of the Exchange Supervisory Board. The selection of an auditor is opened with a resolution of the Exchange Supervisory Board concerning the selection of an auditor. Next, audit firms are invited to submit offers. The Exchange Supervisory Board selects the offer of an audit firm following a procedure which ensures independent and equitable selection of the best offer according to a number of criteria (including experience and position of the audit firm, knowledge of the financial market, audit services provided to public companies, price of the service). The Audit Committee is responsible for presenting a recommendation of an audit firm to audit financial statements to the Exchange Supervisory Board. As the body responsible for the selection of the auditor, the Exchange Supervisory Board passes a resolution appointing the auditor. The Exchange Management Board signs the contract with the audit firm.

The entity authorised to audit the separate financial statements of GPW and the consolidated financial statements of the GPW Group for the financial year ended 31 December 2017 is KPMG Audyt spółka z ograniczoną odpowiedzialnością spółka komandytowa ("KPMG Audyt"), entered in the list of entities authorised to audit financial statements, entry no. 3546.

The agreement between GPW and KPMG Audyt was concluded on 21 October 2015 and covers the audit of the annual consolidated financial statements for the financial years 2015, 2016 and 2017 and the review of the interim separate and consolidated financial statements for each quarter of 2016, 2017 and 2018. According to current arrangements KPMG fees will be increased for:

- audit of financial statements for 2017 by PLN 60 thousand to PLN 140 thousand,
- review of interim financial statements for 2018 by PLN 30 thousand to PLN 82 thousand.

The increase of the fees was due mainly to changes of legislation: implementation of new EU regulations applicable to public-interest entities, amendments of the Act on Auditors, Audit Firms, and Public Supervision which first apply to the audit of GPW's financial statements for 2017, and amendments to the accounting standards. The amendments resulted in:

- extended scope of auditor reporting with respect to audits of financial statements of public-interest entities;
- additional communication between the auditor and the Audit Committee;
- extended scope of audit and review due to additional disclosures in financial statements in areas related to key audit issues and additional disclosures in financial statements concerning the expected impact of the first application of new accounting standards (IFRS 15 Revenue from Contracts with Customers, IFRS 9 Financial Instruments, IFRS 16 Leases).

No new audit firm was selected in 2017. The GPW Group's new audit firm to audit the financial statements for 2018 and subsequent years and to review the quarterly financial statements for Q1 2019 and subsequent periods will be selected in 2018.

Table 15 Auditor's fees for services provided to GPW Group (net amounts, PLN)

Service	2017	2016	2015
Audit: ♦ annual separate and consolidated financial statements for the financial year ended 31 December ♦ verification of the calculation of GPW Management Board bonus indicators	140 000	80 000	80 000
Review of interim financial statements:			
♦ consolidated, for the period 01.01. – 31.03.	15 000	15 000	19 000
♦ consolidated, for the period 01.01 – 30.09.	15 000	15 000	19 000
♦ separate and consolidated, for the period 01.01. – 30.06.	22 000	22 000	28 500

No recommendations were presented in 2017 to ensure accuracy of the financial reporting process.

With respect to control and monitoring of the independence of the audit firm which audits the issuer's financial statements, KPMG submitted a written declaration concerning:

- all relations (including non-audit services) impacting the independence of audit;
- risks to continued independence caused by any relations; and
- security measures mitigating the risks.

In 2017, KPMG Advisory Spółka z ograniczoną odpowiedzialnością sp.k., a member of the network of GPW's auditor ("KPMG Advisory"), provided non-audit services to IRGiT in the review of the documentation of IRGiT's application for authorisation as a CCP under EMIR. The agreement was signed before the effective date of the new regulations applicable to audit firms. The services were provided by 31 December 2017. According to the declaration of KPMG Advisory, the work did not impact accounting estimates. In the opinion of KPMG Advisory, there is no impact on its independence that should be disclosed.

The GPW Group's auditor provided no prohibited services to GPW or its subsidiaries since 1 January 2016.

III. 4. Diversity Policy

The Company follows the principles of diversity, as defined in the Remuneration and Nominations Committee Rules, in the selection of Members of the GPW Management Board. In particular, it strives for a gender balance of the candidates, taking into account their qualifications, knowledge and experience necessary to serve as Exchange Management Board Members. In all processes including recruitment, performance appraisal, promotion and professional development, GPW's HR policy integrates diversity issues including gender, education, age and professional experience in recognition of the fact that diversity and equal opportunities are important competitive advantages necessary to recruit and retain qualified employees and use their full professional potential. The Company will work to codify the existing diversity rules in a diversity policy.

III. 5. GPW Share Capital, Shares and Bonds

The share capital of the Company amounts to PLN 41,972,000 and is divided into 41,972,000 shares with a nominal value of PLN 1 per share including:

- 14,779,470 series A preferred registered shares, and
- 27,192,530 series B ordinary bearer shares.

27,192,530 series B ordinary bearer shares are introduced to trading on GPW (64.79% of all shares representing 47.92% of the total vote).

The series A registered shares are preferred as follows:

- each series A share represents two votes, and
- shareholders who hold more than 25% of the total number of series A registered shares (i.e., more than 10,493,000 series A registered shares) are not subject to the limitation on voting rights laid down in § 9(4)(2) of the Articles of Association.

Holders of series A preferred registered shares may convert series A shares to series B ordinary bearer shares. Conversion of preferred registered shares to ordinary bearer shares results in a change of the number of votes conferred by each share from two votes to one vote per share.

GPW has no information as to agreements which could result in any changes in the future in respect of the proportions in shares held by the existing shareholders.

Table 16 GPW shareholders

Shareholder	Stake in the share capital		Votes at the General Meeting	
	Number of shares	Stake	Number of votes	Stake
State Treasury of the Republic of Poland - preferred shares (series A)	14 688 470	35.00%	29 376 940	51.76%
Other shareholders - preferred shares (series A)	91 000	0.22%	182 000	0.32%
Other shareholders - bearer shares (free float; series B)	27 192 530	64.79%	27 192 530	47.92%
Total	41 972 000	100%	56 751 470	100%

As at 31 December 2017, and as at the date of preparation of this report, the State Treasury of the Republic of Poland was the only shareholder holding directly or indirectly at least 5% of the overall number of votes at the GPW General Meeting.

Amongst all persons managing and supervising the Company, its shares bought in public offering (25 shares) were held as at the balance-sheet date by:

- Dariusz Kułakowski, Member of the GPW Management Board.

According to the Company's best knowledge, persons managing and supervising the Company do not hold shares in its related parties or GPW bonds.

The Company did not purchase its own shares in 2017. The Company has no employee share scheme; accordingly, it has no control system for an employee share scheme.

III. 6. Controlling Rights and Restrictions of Rights from Shares

CONTROLLING RIGHTS

As at the date of preparation of this report, the State Treasury of the Republic of Poland holds 14,688,470 series A registered shares preferred as to vote (one share gives two votes at the General Meeting); consequently, the State Treasury may exercise 51.76% of the total vote at the General Meeting. Thus, the State Treasury as a shareholder controls the Company and may exercise strategic control of the Company by exercising voting rights at the General Meeting.

Only acquisition of more than 10,493,000 preferred shares (i.e., more than 25% of all preferred shares of the Company) from the State Treasury would enable another shareholder to use the aforementioned exemption. The State Treasury may exercise most of the votes at the General Meeting and may elect most of the members of the Exchange Supervisory Board. Furthermore, according to the Articles of Association, the President of the Management Board is elected by the General Meeting and the other Members of the Management Board including the Vice-Presidents of the Management Board are elected by the Exchange Supervisory Board. As the State Treasury may exercise most of the votes at the General Meeting and may elect most of the members of the Exchange Supervisory Board, it may control the composition of the Management Board directly or indirectly. The Exchange Supervisory Board appoints Members of the Management Board following a competition procedure which verifies and evaluates the qualifications of candidates and selects the best candidate. The terms and conditions of the competition procedure are defined by the Exchange Supervisory Board.

RESTRICTIONS ON EXERCISE OF VOTING RIGHTS

According to the Articles of Association, the voting right of shareholders is limited to the extent that none of them may exercise at the General Meeting more than 10% of the overall number of votes in GPW on the day when the General Meeting is held, provided that, for the purpose of determining obligations of acquirers of significant blocks of shares stipulated in the Act on Public Offering, such limitation of the voting right will be considered as not existing. The above limitation of voting right does not apply to:

- shareholders who on the day when the General Meeting passed a resolution on introducing the restriction referred to above (i.e., 30 July 2010) were authorised due to holding shares representing more than 10% of the overall number of votes existing in the Company (the State Treasury of the Republic of Poland is the only such shareholder);
- shareholders who are authorised due to holding more than 25% of the total number of shares preferred as to voting right referred to in § 4(1)(1) of the Articles of Association, i.e., shareholders authorised due to holding more than 10,493,000 series A registered shares preferred as to voting right (the State Treasury of the Republic of Poland was the only such shareholder as at the date of preparation of this report).

In order to limit the voting right, the votes of shareholders between which a domination or dependency relationship exists are summed up in accordance with the rules laid down in the Company's Articles of Association. The Articles of Association define detailed limitations of the voting right of shareholders between which a domination or dependency relationship exists. Should any doubts arise, the provisions regulating the voting right restrictions should be construed in accordance with Article 65 § 2 of the Civil Code.

No limitations or restrictions have been imposed on the transfer of proprietary rights to the Company's securities.

III. 7. Obligations of Shareholders Related to Material Blocks of GPW Shares

Obligations of GPW shareholders concerning material blocks of shares are subject to the provisions applicable to public companies laid down in the Act on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organised Trading, and Public Companies (including Article 69 which defines the threshold at or above which the shareholder is required to notify the Polish Financial Supervision Authority and the issuer of shares).

GPW is also subject to the provisions of the Act on Trading in Financial Instruments, in particular Article 24 which requires a person or entity intending to acquire or take up, directly or indirectly, shares of the Warsaw Stock Exchange representing at least 5% of the total number of votes or shares or causing it to reach or exceed 5%, 10%, 15%, 20%, 25%, 33% or 50% of the total number of votes or shares to notify the Polish Financial Supervision Authority. The Polish Financial Supervision Authority may raise objections within three months of the notification. If the Polish Financial Supervision Authority raises no objections, the acquisition of shares on the terms laid down in the notification may take place after three months from the notification or at the date set by the Polish Financial Supervision Authority. If GPW shares are acquired in the absence of objections of the Polish Financial Supervision Authority earlier than after three months or earlier than the date set by the Polish Financial Supervision Authority or in breach of objections of the Polish Financial Supervision Authority, any exercise of rights attached to GPW shares is ineffective.

III. 8. Rules for Amending the Articles of Association

Any amendment to the Articles of Association must be passed in the form of a General Meeting resolution adopted by a qualified majority of three fourths of votes. Moreover, in accordance with § 9(1) of the Articles of Association, a resolution on amending the Articles of Association may be adopted only by such General Meeting at which at least 50% of total votes in the Company are represented.

Amendments to the Articles of Association are effective if approved by the Polish Financial Supervision Authority and registered by the competent court. The Exchange Supervisory Board is authorised, at each time after the court decision to register amendments to the Articles of Association has become final, to adopt the consolidated text of the Company's Articles of Association.

On 19 June 2017, the GPW Ordinary General Meeting approved amendments of the GPW Articles of Association including amendments to the powers of the authorities of the Company, appointment of Management Board Members, disposal of fixed assets in line with the Act of 16 December 2016 on Management of Public Assets and in line with new regulations applicable to the Company, including the Act of 9 June 2016 on Rules of Remuneration of Managers of Certain Companies and the Act of 11 May 2017 on Auditors, Audit Firms, and Public Supervision.

The relevant resolution of the GPW General Meeting was published in Current Report 36/2017 available on the Company's website in the Investor Relations tab. The amendments of the Articles of Association were approved by the Polish Financial Supervision Authority and registered by the Court, as announced by the Company in Current Reports 44/2017 and 44/2017/K available on the Company's website in the Investor Relations tab. The consolidated text of the Company's Articles of Association was approved by the Exchange Supervisory Board on 20 November 2017.

III. 9. General Meeting

MAIN POWERS OF THE GENERAL MEETING

The General Meeting makes decisions on the organisation and operation of the Company, appoints Members of the Exchange Supervisory Board and the President of the Exchange Management

The powers of the General Meeting include decisions on the organisation and operation of the Company subject to the Code of Commercial Companies and Partnerships and the Articles of Association. The powers of the General Meeting include defining the terms of remuneration of Members of the Exchange Supervisory Board and the Exchange Management Board, approval of any disposal of fixed assets or giving them for use to another person for a period longer than 180 days within a calendar year in an amount greater than 5% of the total assets, and acquisition of fixed assets or acquisition, taking up, or disposal of shares of another company in an amount greater than PLN 100 million or in an amount greater than 5% of total assets in the case of acquisition of fixed assets or 10% of total assets in the case of acquisition, taking up, or disposal of shares of another company.

PROCEDURES OF THE GENERAL MEETING

The General Meeting is the supreme authority of the Exchange. The General Meeting is summoned and operates under the Code of Commercial Companies and Partnerships, the Company's Articles of Association (in particular § 8 - § 12) and the General Meeting Rules. The Articles of Association and the General Meeting Rules are available on the GPW website under the Regulations tab.

The General Meeting may be held as:

- an ordinary general meeting summoned once per year within 6 months after the end of each financial year, i.e., no later than the end of June;
- an extraordinary general meeting summoned in the events laid down in the generally applicable regulations and in the Articles of Association.

A General Meeting is summoned by posting an announcement on the GPW website and in the procedure required for the publication of current reports by public companies. An announcement and the materials presented to the shareholders are available from the day that the General Meeting is summoned on the GPW website under the General Meeting tab.

The General Meeting resolutions are passed in an open ballot, subject to other regulations, by an absolute majority of votes, save for resolutions which require a qualified majority in accordance with the Code of Commercial Companies and Partnerships or the Articles of Association. Secret ballot is ordered for elections and motions for revoking members of the Company's authorities or the Company's liquidators, or for holding them liable, and for other personal issues. Additionally, a secret ballot must be ordered if requested by at least one shareholder present in person or by proxy at the General Meeting.

It is possible to participate in the General Meeting by means of electronic communications if the announcement about the General Meeting contains information that such type of participation in the Meeting is admissible. Such participation includes: real-time broadcast of the General Meeting, two-way communication in real time where shareholders may speak during the General Meeting from a location other than the General Meeting, and exercising the voting right during the General Meeting in person by the shareholder or through a proxy.

SHAREHOLDER RIGHTS

The rights of shareholders and the procedure of exercising the rights at the General Meeting are laid down in the Code of Commercial Companies and Partnerships, the Articles of Association and the General Meeting Rules.

A shareholder or shareholders representing at least 30% of the share capital or at least 30% of total votes of the Company may summon an Extraordinary General Meeting. In addition, a shareholder or shareholders representing at least 1/20 of the share capital may request that items be put on the agenda of the next General Meeting under generally applicable regulations.

Only persons who are shareholders of the Company sixteen days before the date of the General Meeting (record date) are eligible to participate in the General Meeting. Shareholders may participate and exercise their rights at the General Meeting in person or through a proxy. Each shareholder may speak on matters put on the agenda.

A detailed description of the procedures of participation in the General Meeting and exercising the voting rights is presented at each time in the announcement of the General Meeting.

GENERAL MEETINGS IN 2017

The Extraordinary General Meeting of GPW was summoned on 4 January 2017 with an agenda including changes in the composition of the Exchange Management Board and changes in the composition of the Exchange Supervisory Board. The resolutions of the Extraordinary General Meeting of 4 January 2017 were published in Current Report No. 5/2017 of 4 January 2017 and are available on the Company's website under the Investor Relations tab.

The Extraordinary General Meeting of GPW was summoned on 22 February 2017 with an agenda including changes in the composition of the Exchange Supervisory Board. The resolutions of the Extraordinary General Meeting of 22 February 2017 were published in Current Report No. 17/2017 of 22 February 2017 and are available on the Company's website under the Investor Relations tab.

The Ordinary General Meeting of GPW was summoned on 19 June 2017 with an agenda including review and approval of the Management Board's report on the activity of the Company and the GPW Group and the financial statements of the Company and the GPW Group for 2016, review of reports of the Exchange Supervisory Board on the assessment of those reports and financial statements, review of documents of the Exchange Supervisory Board, resolutions concerning distribution of the Company's profit for 2016, vote of discharge of duties to the Members of the Exchange Supervisory Board and the Exchange Management Board, changes in the composition of the Exchange Supervisory Board following the end of the term of office, appointment of the President of the Exchange Management Board, amendment of the Company's Articles of Association, and amendment of the resolution of the Extraordinary General Meeting of 30 November 2016 determining the rules of remuneration of Members of the Exchange Management Board. The resolutions of the Ordinary General Meeting of 19 June 2017 were published in Current Report 36/2017 of 19 June 2017 available on the Company's website in the Investor Relations tab.

III. 10. Supervisory Board and Committees

APPOINTMENT AND DISMISSAL OF SUPERVISORY BOARD MEMBERS

According to the Articles of Association, the Exchange Supervisory Board consists of five to seven members appointed for a joint three-year term. Members of the Exchange Supervisory Board are elected and dismissed by the General Meeting. In the event of voting in groups under Article 385(3) of the Commercial Companies Code, the Exchange's Supervisory Board is composed of seven members.

The Exchange Supervisory Board elects the Chairman and the Deputy Chairman of the Exchange Supervisory Board from amongst its members. The Exchange Supervisory Board may elect the Secretary to the Exchange Supervisory Board from amongst its members.

The Exchange Management Board is the Company's executive body comprised of three to five members. As at 31 December 2017 and as at the date of this report, the Exchange Management Board was comprised of four members.

According to the Articles of Association, the General Meeting appoints:

- at least one of the Exchange Supervisory Board members from among the candidates proposed by the shareholders being exchange members; and
- at least one of the Exchange Supervisory Board members from among the candidates proposed by the shareholder or shareholders who jointly represent at least 10% of the share capital not being exchange members.

Candidates nominated by both these groups need to meet the criteria for independence laid down below. A candidate must be nominated not later than 7 days before the scheduled date of the General Meeting. The nomination must be accompanied by the candidate's CV and specify the number of the shares and the number of votes the shareholder(s) nominating the given candidate represent(s). When voting on the candidates nominated by the shareholders who at the same time are exchange members, the first candidates put to vote are these nominated by the shareholders being exchange members representing the highest number of votes. If no candidates are nominated by the shareholders who at the same time are exchange members or by minority shareholders, the General Meeting elects all the Exchange Supervisory Board members on the general terms and conditions. If at least one candidate is nominated by the shareholders who at the same time are exchange members or by minority shareholders, the General Meeting elects the remaining Exchange Supervisory Board members on the general terms and conditions. If the General Meeting does not elect two Exchange Supervisory Board members following the procedure set out above in spite of candidates having been nominated by the shareholders, another General Meeting is convened, where the elections are held of such Exchange Supervisory Board members. If another General Meeting is convened, the shareholders must nominate other candidates than these originally nominated. The Exchange Supervisory Board member(s) elected following the procedure set out above may be dismissed only with the simultaneous election of an Exchange Supervisory Board member following the same procedure. In the event when due to the expiration of a mandate in the course of the term of office, except for dismissing an Exchange Supervisory Board member, the Exchange Supervisory Board does not include an Exchange Supervisory Board member elected following the procedure set out above, the elections are held not later than at the nearest Ordinary General Meeting.

At least two members of the Exchange Supervisory Board need to meet the criteria for independence laid down below. If an Exchange Supervisory Board member is elected in breach of the criteria for independence, such election will be ineffective in respect of the Company, and if the Exchange Supervisory Board member no longer meets the criteria for independence during the term of his/her office, his/her mandate shall expire.

The criteria for independence are met by a person who:

- is not a related person in respect of the Company (except for being the Exchange Supervisory Board member),
- is not a related person in respect of the Company's parent or subsidiary or a subsidiary of the Company's parent or a related person in respect of an entity in which the Company holds more than 10% of share capital;
- is not a relative by blood or marriage to the second degree of the person referred to above;
- is not a relative by blood or marriage to the second degree of the Company's shareholder holding more than 5% of all votes in the Company;
- is not a related person in respect of a Company's shareholder holding more than 5% of all votes in the Company as well as a related person in respect of such shareholder's parent or subsidiary or a subsidiary of such shareholder's parent;
- is not a relative by blood or marriage to the second degree of the person referred to in the item above.

According to the GPW Articles of Association, a "related person" means a person who:

- is a member of the governing body of a legal person and, in the case of a partnership, a partner or a general partner;
- is employed, mandated or otherwise legally engaged by the entity the relationship with whom is being determined. The above shall apply to the persons who during the least 3 years preceding their election as the Exchange Supervisory Board members have been employed, mandated or otherwise legally engaged by the Company.

POWERS AND COMPOSITION OF THE SUPERVISORY BOARD

The powers of the Exchange Supervisory Board are laid down in the Articles of Association as follows:

- exercising on-going supervision of the activity of the Company;
- appointing and dismissing members of the Management Board;
- assessing the financial statements for the preceding financial year and the Exchange Management Board's report on the Company's operations including information on expenses for representation, expenses for legal services, marketing services, public relations and social communication services, and management advisory services;
- assessing the Exchange Management Board's proposals on the distribution of profits or covering the losses;
- presenting to the General Meeting a written report on the findings of the above assessment;
- approving the Exchange Management Board Rules at the request of the Exchange Management Board;
- adopting the Exchange Supervisory Board Rules;

- adopting the Exchange Rules at the request of the Exchange Management Board and amendments to these Rules;
- determining the terms and conditions of contracts and remuneration of the Members of the Exchange Management Board according to a resolution of the General Meeting referred to in § 9(1a)(2) of the Articles of Association;
- representing the Company in contracts and disputes between the Company and the Exchange Management Board members;
- consenting to the Company entering into a contract which has a material impact on the financial or legal position of the Company with a shareholder who holds at least 5% of the total vote or with a related party;
- determining the rules on which the Exchange Management Board members buy and sell securities listed on the stock exchange operated by the Company;
- appointing the chartered auditor to audit the Company's financial statements;
- approving, at the request of the Exchange Management Board, the financial plan and the report on its implementation;
- presenting to the General Meeting an annual concise assessment of the Company's situation, including the internal control system and the system of managing the risks material for the Company;
- presenting to the General Meeting an annual report on the work of the Exchange Supervisory Board;
- considering and presenting opinions on the items to be placed on the General Meeting's agenda;
- approving the execution of a donation agreement or other similar agreement in an amount exceeding PLN 20,000 or 0.1% of the total assets or a debt cancellation agreement or other similar agreement in an amount exceeding PLN 50,000 or 0.1% of the total assets of the Company;
- approving the execution or amendment of an agreement concerning legal services, marketing services, public relations and social communication services or management advisory services where the total fee for the services exceeds PLN 500,000 net per year or where the fee is not capped;
- approving the acquisition by the Company, otherwise than in a tender, of fixed assets in an amount exceeding 0.1% of the total assets of the Company.

According to the Articles of Association, the Exchange Supervisory Board as a rule passes resolutions by an absolute majority of votes; however, resolutions of the Exchange Supervisory Board in the following matters are passed by a majority of 4/5 of votes:

- approving the execution of an agreement which establishes a strategic alliance with another exchange (an agreement concerning in particular long-term operational relations to the extent of the Company's core business);
- approving the multi-annual development strategy of the Company on the request of the Exchange Management Board;
- approving the execution, to the extent permissible under legal regulations, of an outsourcing agreement concerning operational support of trading on the regulated market or any of its segments or an outsourcing agreement concerning operational support of trading in the alternative trading system;
- acquisition of an IT system dedicated to exchange transactions;
- approving the acquisition or disposal of shares or other interest in commercial companies or partnerships where their amount at purchase or sale price is more than 1/10 of the share capital of the Company, subject to § 9(1a)(3)(c) and (d) and § 9(2)(2) of the Articles of Association.

Furthermore, at each time that a court decision to register amendments of the Company's Articles of Association becomes legally valid, the Exchange Supervisory Board is authorised to define the consolidated text of the Company's Articles of Association.

The composition of the Exchange Supervisory Board as at the end of 2017 is presented in the table below.

Table 17 Composition of the Exchange Supervisory Board as at 31 December 2017 and as at the date of this report

Name	Function	Independence
Wojciech Nagel	Chairman of the Exchange Supervisory Board	
Jakub Modrzejewski	Deputy Chairman of the Exchange Supervisory Board	
Krzysztof Kaczmarczyk	Secretary to the Exchange Supervisory Board	Independent Member of the Exchange Supervisory Board
Bogusław Bartczak	Member of the Exchange Supervisory Board	Independent Member of the Exchange Supervisory Board
Filip Paszke	Member of the Exchange Supervisory Board	Independent Member of the Exchange Supervisory Board
Piotr Prażmo	Member of the Exchange Supervisory Board	Independent Member of the Exchange Supervisory Board
Eugeniusz Szumiejko	Member of the Exchange Supervisory Board	

On 30 December 2016, Wojciech Sawicki and Łukasz Świerżewski resigned as Members of the Exchange Supervisory Board. Until 22 February 2017, the Exchange Supervisory Board consisted of five members: Marek Dietl, Jarosław Dominiak, Jarosław Grzywiński, Wojciech Nagel, and Marek Słomski.

On 22 February 2017, the GPW Extraordinary General Meeting appointed Grzegorz Kowalczyk and Eugeniusz Szumiejko to the Exchange Supervisory Board. On 6 March 2017, Jarosław Dominiak resigned as Member of the Exchange Supervisory Board for personal reasons.

On 19 June 2017, the Ordinary General Meeting dismissed the Members of the Exchange Supervisory Board: Marek Dietl, Jarosław Grzywiński, Wojciech Nagel, Grzegorz Kowalczyk, Marek Słomski and Eugeniusz Szumiejko. On the same day, the Ordinary General Meeting of GPW appointed Members of the Exchange Supervisory Board for the new three-year term of office starting on 19 June 2017: Bogusław Bartczak, Krzysztof Kaczmarczyk, Jakub Modrzejewski, Wojciech Nagel, Filip Paszke, Piotr Prażmo, and Eugeniusz Szumiejko.

The Members of the Exchange Supervisory Board nominated by shareholders who are Exchange Members are Filip Paszke and Piotr Prażmo. The Member of the Exchange Supervisory Board nominated by minority shareholders is Krzysztof Kaczmarczyk.

COMMITTEES OF THE EXCHANGE SUPERVISORY BOARD

According to the Exchange Supervisory Board Rules, the Exchange Supervisory Board appoints the following committees: the Audit Committee, the Remuneration and Nominations Committee, the Regulation and Corporate Governance Committee, and the Strategy Committee. The committees report to the Exchange Supervisory Board on an annual basis. The detailed powers and procedures of appointment and operation of the committees are defined in the Articles of Association and the Exchange Supervisory Board Rules available on the GPW website under the About the Company tab.

Table 18 Composition of Supervisory Board Committees as at 31 December 2016

Strategy Committee	
Marek Dietl	Chairman
Jarosław Dominiak	Member
Wojciech Nagel	Member
Regulation and Corporate Governance Committee	
Jarosław Grzywiński	Chairman
Jarosław Dominiak	Member
Remuneration and Nominations Committee	
Jarosław Grzywiński	Member
Marek Słomski	Member
Audit Committee[37]	
Marek Słomski	Chairman
Marek Dietl	Member
Jarosław Grzywiński	Member

The Strategy Committee was comprised of Marek Dietl as Chairman and Wojciech Nagel as Member from the beginning of 2017 to 15 March 2017. Grzegorz Kowalczyk joined the Strategy Committee as Member on 15 March 2017 and Eugeniusz Szumiejko joined the Strategy Committee as Member on 22 March 2017. The Strategy Committee was comprised of those members until 19 June 2017. As of 26 June 2017, the Strategy Committee is comprised of Bogusław Bartczak as Chairman and Wojciech Nagel and Filip Paszke as Members.

The Regulation and Corporate Governance Committee was comprised of Jarosław Grzywiński as Chairman and Jarosław Dominiak as Member from the beginning of 2017. Wojciech Nagel joined the Regulation and Corporate Governance Committee as Member on 24 January 2017. Jarosław Dominiak's membership in the Regulation and Corporate Governance Committee ended on 6 March 2017 due to his resignation from the Exchange Supervisory Board. The Regulation and Corporate Governance Committee was comprised of those members until 19 June 2017. From 26 June 2017 to the end of the year, the Regulation and Corporate Governance Committee was comprised of Krzysztof Kaczmarczyk as Chairman and Jakub Modrzejewski and Filip Paszke as Members.

The Remuneration and Nominations Committee was comprised of Marek Słomski and Jarosław Grzywiński as Members from 1 January 2017 to 24 January 2017. Wojciech Nagel joined the Remuneration and Nominations Committee on 24 January 2017. The Remuneration and Nominations Committee was comprised of those members until 19 June 2017. From 26 June 2017 to 31 December 2017, the Remuneration and Nominations Committee was comprised of Wojciech Nagel as Chairman and Jakub Modrzejewski and Piotr Prażmo as Members. Bogusław Bartczak joined the Remuneration and Nominations Committee on 19 February 2018.

[37] Two members of the Audit Committee met the criteria of independence and one member of the Audit Committee had qualifications in accounting or financial audits according to Article 86(4) of the Act on Auditors.

Table 19 Composition and powers of Supervisory Board Committees as at 31 December 2017

Strategy Committee		
Bogusław Bartczak* Wojciech Nagel Filip Paszke*	Chairman Member Member	♦ issues opinions on GPW's strategy and its updates, ♦ issues opinions on implementation of GPW's strategy, ♦ issues opinions on proposals of strategic alliances, ♦ issues opinions on proposals of acquisition of stakes in entities of strategic significance, ♦ issues opinions on materials related to exchange fees.
Regulation and Corporate Governance Committee		
Krzysztof Kaczmarczyk* Jakub Modrzejewski Filip Paszke*	Chairman Member Member	♦ initiates and issues opinions on proposed changes in regulations, ♦ prepares position statements of the Supervisory Board and the Management Board, ♦ initiates, issues opinions and monitors activities related to the implementation of the corporate governance rules by GPW, ♦ initiates, issues opinions and monitors activities supporting the implementation of the corporate governance rules in listed companies.
Remuneration and Nominations Committee		
Wojciech Nagel Jakub Modrzejewski Piotr Prażmo*	Chairman Member Member Member	♦ evaluates the remuneration policy and its implementation, ♦ issues opinions on employment contracts with the Exchange Management Board members, ♦ issues opinions on annual bonuses proposed for the Exchange Management Board members, ♦ issues opinions on the incentive system for the Exchange Management Board members.

* independent Member of the Exchange Supervisory Board, independence criteria of members of supervisory board are defined in Detailed Rule II.Z.4 of the Code of Best Practice for GPW Listed Companies.

The powers of the Supervisory Board Committees are presented above as per the Rules of the Exchange Supervisory Board as at the end of 2017. The Rules of the Exchange Supervisory Board were amended in 2018 and the powers of the Committees are defined in the Rules of the Committees.

AUDIT COMMITTEE

The responsibilities of the Audit Committee include financial reporting, the internal control system, in particular implementation of audit and inspection recommendations, internal audit, findings of external audits and inspections, risk management including compliance risk, and ICT security and IT.

The responsibilities of the Audit Committee include:

- monitoring of the financial reporting process;
- monitoring of financial audits;
- control and monitoring of the independence of the auditor and the audit firm;
- assessment of the independence of the auditor;
- development of the policy of selection of the audit firm and implementation of the audit firm selection procedure;
- development of the policy of allowed non-audit services provided by the audit firm, its associates and members of its network;
- presentation of recommendations to select an audit firm to the Exchange Supervisory Board;
- presentation of recommendations ensuring accurate financial reporting in the Company;
- issuing opinions on financial statements and motions of the Management Board concerning distribution of profits or coverage of losses;
- reporting the outcome of reviews to the Exchange Supervisory Board and defining how the reviews ensured accurate financial reporting;
- issuing opinions on annual financial plans of the GPW Group and GPW, presenting recommendations to the Exchange Supervisory Board;
- issuing opinions on reports of the Exchange Management Board on the implementation of the financial plans of the GPW Group and GPW;
- monitoring the efficiency of GPW's internal control system;
- supporting the independence and objectivism of the Internal Audit Department;
- monitoring the efficiency of internal audit;
- reviewing internal audit findings;
- reviewing the rules and the efficiency of the compliance system including findings of compliance audits;
- issuing opinions and approving the Risk Management Strategy;
- monitoring the efficiency of the risk management system;
- monitoring the efficiency of the business continuity system;
- monitoring the efficiency of the ICT security and IT management system based on regular reports.

Members of the Audit Committee are appointed by the Exchange Supervisory Board from among its members. The Chairman of the Audit Committee is elected by the Audit Committee. The Audit Committee is comprised of at least 3 members. At least one member of the Audit Committee should have the knowledge and skills in accounting or financial audits. The majority of members of the Audit Committee, including the Chairman of the Audit Committee, should fulfil the criteria of independence defined in Article 129(3) of the Act of 11 May 2017 on Auditors, Audit Firms, and Public Supervision. Members of the Audit Committee should have knowledge and skills in the area of business of the Company. The condition is met if at least one Member of the Audit Committee has knowledge and skills in the area of business of the Company or different Members to a different extent have knowledge and skills in the area of business of the Company.

The composition of the Audit Committee changed as follows in 2017. From 1 January 2017 to 22 February 2017, the Audit Committee was comprised of Marek Słomski as Chairman and Marek Dietl as Member. Eugeniusz Szumiejko joined the Audit Committee as Member on 22 February 2017 and the Audit Committee was comprised of those members until 19 June 2017. The composition of the Audit Committee from 26 June 2017 and as at the date of this report is presented in the table below.

Table 20 Composition of the Audit Committee as at 31 December 2017 and as at the date of this report

Name	Function	Independence
Krzysztof Kaczmarczyk	Chairman	Independent Member of the Exchange Supervisory Board
Bogusław Bartczak	Member	Independent Member of the Exchange Supervisory Board
Filip Paszke	Member	Independent Member of the Exchange Supervisory Board
Piotr Prażmo	Member	Independent Member of the Exchange Supervisory Board

The Members of the Audit Committee with the knowledge and skills in accounting or financial audits are: Piotr Prażmo, FCCA, Member of the Association of Chartered Accountants (ACCA), and Krzysztof Kaczmarczyk.

All Members of the Audit Committee have the knowledge and skills in the industry gained over many years of practice on the financial market.

The Audit Committee of the Exchange Supervisory Board met with the auditor in the presence of the Exchange Management Board on three occasions in connection with the audit of the financial statements for 2017. The key auditor participated in those meetings.

III. 11. Exchange Management Board

APPOINTMENT AND DISMISSAL OF MANAGEMENT BOARD MEMBERS

The Exchange Management Board consists of three to five members, including the President of the Management Board. The Exchange Management Board members are appointed for a joint four-year term. The President of the Management Board is appointed by the General Meeting. The other members of the Exchange Management Board are appointed and dismissed by the Exchange Supervisory Board according to the Articles of Association in a competition procedure conducted by the Exchange Supervisory Board to review and assess the qualifications of the candidates and to select the best candidate. The terms and conditions of the competition procedure are defined by the Exchange Supervisory Board.

Exchange Management Board members can serve as board members in other business entities only with the approval of the Exchange Supervisory Board.

Given that the Company operates a regulated market, additional rules regarding the composition of the Exchange Management Board apply under the Act on Trading in Financial Instruments of 29 July 2005. Accordingly, the Management Board should include persons with higher education, at least three years of experience in financial market institutions, and a spotless reputation as regards the functions they perform. If a company running an exchange organises an alternative trading system, the above conditions should also be satisfied by the persons directing those activities, unless members of the Exchange Management Board direct the organisation of the alternative trading system. Furthermore, eligible as Members of the Exchange Management Board are persons who have at least 5 years of employment, at least 3 years of experience in management positions or in self-employment. Not eligible as a Member of the Exchange Management Board is any person who meets any of the following criteria:

- is a social liaison or employee of the office of a Deputy, Senator or Member of the European Parliament under an employment agreement, work contract or similar agreement;
- is a member of a body of a political party which represents the political party and is authorised to assume obligations;
- is employed by a political party under an employment agreement, work contract or similar agreement;
- is elected to a trade union of the company or a trade union of a member of the group of companies;
- his or her social or professional activity creates a conflict of interests for the business of the Company.

Changes to the composition of the Exchange Management Board require the consent of the Polish Financial Supervision Authority, which is granted at the request of the Exchange Supervisory Board. The Polish Financial Supervision Authority may refuse to grant consent if the proposed changes do not ensure that operations will be conducted in a way which does not jeopardize the safety of securities trading and properly safeguards the interests of participants in that trading.

POWERS OF THE MANAGEMENT BOARD

The Exchange Management Board handles the Company's affairs and assets, and represents it in its dealings with third parties. The Exchange Management Board exercises all powers that are not vested in the General Meeting or the Exchange Supervisory Board. Resolutions of the Exchange Management Board are adopted by an absolute majority of votes. Two Exchange Management Board members acting jointly or an Exchange Management Board member acting together with a commercial proxy are authorised to represent the Company. On 21 June 2017, the Exchange Management Board granted a commercial proxy to Tomasz Walkiewicz. The power of proxy is a joint power and authorises the proxy to act only jointly with an Exchange Management Board member.

Pursuant to § 5(3) of the Articles of Association, the Exchange Management Board may, with the consent of the Exchange Supervisory Board, make interim dividend payments to the shareholders on the terms laid down in the Code of Commercial Companies and Partnerships. The Management Board has, however, no authority to issue or buy out shares.

The Exchange Management Board convenes a General Meeting in the cases defined in the Articles of Association, the Code of Commercial Companies and Partnerships and other applicable regulations.

COMPOSITION OF THE EXCHANGE MANAGEMENT BOARD

The tables below present the composition of the GPW Management Board as at the end of 2016 and 2017.

Table 21 Composition of the Exchange Management Board as at the end of 2016

Name	Function
Małgorzata Zaleska	President of the Management Board
Paweł Dziekoński	Vice-President of the Management Board
Michał Cieciórski	Vice-President of the Management Board
Dariusz Kułakowski	Member of the Management Board

Table 22 Composition of the Exchange Management Board as at the end of 2017 and as at the date of this report

Name	Function
Marek Dietl	President of the Management Board
Michał Cieciórski	Vice-President of the Management Board
Jacek Fotek	Vice-President of the Management Board
Dariusz Kułakowski	Member of the Management Board

On 4 January 2017, the Extraordinary General Meeting dismissed Małgorzata Zaleska from the Management Board. The decision took effect on the date of delivery to GPW of the decision of the Polish Financial Supervision Authority approving the dismissal of Małgorzata Zaleska, President of the Management Board, from the Exchange Management Board on 14 March 2017.

On 4 January 2017, the Extraordinary General Meeting appointed Rafał Antczak as President of the Exchange Management Board. The decision was to take effect on the date of delivery to GPW of the decision of the Polish Financial Supervision Authority approving the change on the Exchange Management Board. On 13 March 2017, Rafał Antczak resigned as President of the GPW Management Board for personal reasons.

On 14 March 2017, the Polish Financial Supervision Authority approved the change on the Exchange Management Board appointing Jacek Fotek as Vice-President of the Management Board. The decision of the Exchange Supervisory Board of 16 December 2016 appointing Jacek Fotek as Vice-President of the Management Board took effect on the date of delivery of the decision to GPW on 14 March 2017.

On 15 March 2017, the Exchange Supervisory Board delegated Jarosław Grzywiński, Member of the Exchange Supervisory Board, to temporarily perform the duties of President of the Exchange Management Board for a period up to 3 months.

On 22 March 2017, Paweł Dziekoński resigned as Vice-President of the Exchange Management Board as of 22 March 2017.

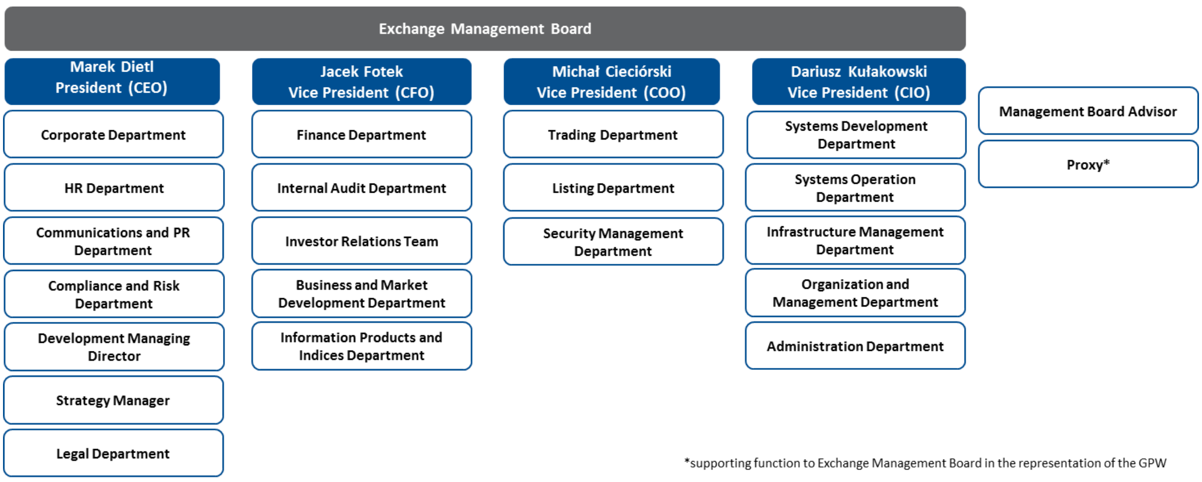
On 16 June 2017, the Exchange Supervisory Board passed a resolution appointing Jarosław Grzywiński as Vice-President of the Exchange Management Board subject to the approval of the Polish Financial Supervision Authority for the change on the Exchange Management Board. On 15 December 2017, Jarosław Grzywiński resigned as Vice-President of the Exchange Management Board before taking office due to new appointments in the development of the Polish capital market.

On 19 June 2017, the Ordinary General Meeting passed a resolution appointing Marek Dietl as President of the Exchange Management Board effective as of the date of delivery to GPW of the decision of the Polish Financial Supervision Authority approving the change on the Exchange Management Board. On 26 September 2017, the Polish Financial Supervision Authority approved the change on the Exchange Management Board and the appointment of Marek Dietl as President of the Exchange Management Board. The decision was delivered to GPW on 27 September 2017.

All this information was published in current reports and is available on the GPW website in the Investor Relations tab.

ORGANISATIONAL CHART OF GPW S.A.

Chart 9 Organisational chart of GPW as at 31 December 2017 and as at the date of publication of this report



III. 12. Remuneration Policy

GPW REMUNERATION POLICY

The incentive remuneration system for employees and managers consists of the following components: a fixed part (basic remuneration), a variable part (including the annual bonus and discretionary awards), as well as fringe benefits. Basic remuneration on GPW is linked to the employee's potential, competences and performance.

The bonus system covers all GPW employees other than the Exchange Management Board Members. It provides a simple and clear mechanism of calculating and distributing the bonus pool. The overall bonus pool available for bonuses for all eligible GPW employees in a bonus year depends on the profit on sales generated by GPW.

The system is designed to incentivise employees for superior performance by achieving individual targets and evaluating employee attitudes; it incentivises managers to motivate their employees. The bonus system includes an annual employee appraisal which covers the employee's overall performance in the bonus year, identifies the employee's strengths and areas for improvement. The annual appraisal includes an assessment of the employee's individual targets and attitudes throughout the bonus year as well as the employee's overall performance in the bonus year as the basis for determining the amount of the bonus.

GPW provides employees with a wide range of fringe benefits including health care, life insurance, reimbursement of commuting costs, the Employee Pension Scheme, a canteen system. GPW employees can use loans including housing and medical loans, as well as payments from the Company Social Benefits Fund. Managers are entitled to a flat-rate reimbursement of the cost of a vehicle.

For more information about the employee policy, including the GPW training policy, recruitment policy and employee volunteering, see section *IV.4 Responsible Human Relations Policy*.

REMUNERATION POLICY FOR EXCHANGE MANAGEMENT BOARD MEMBERS

Pursuant to the Articles of Association, the power to determine the rules of remuneration of the Members of the Exchange Management Board is vested in the General Meeting and the power to determine the terms of contracts and the remuneration of the Members of the Exchange Management Board is vested in the Exchange Supervisory Board.

The new system of defining the rules of remuneration of the Members of the Exchange Management Board was approved in Resolution 3 of the Extraordinary General Meeting of 30 November 2016. The amendments introduced in the Resolution derive from the provisions of Article 2(1) of the Act of 9 June 2016 on Rules of Remuneration of Managers of Certain Companies (Journal of Laws of 2016, item 1202). The Resolution was amended by Resolution 42 of the Ordinary General Meeting of 19 June 2017.

The remuneration system for Members of the Exchange Management Board includes a basic part (fixed remuneration) and a variable part which constitutes supplementary remuneration (variable remuneration). The existing remuneration system was implemented in the Company in March 2017.

The monthly fixed remuneration of each Member of the Exchange Management Board ranges from 4 times to 8 times the average monthly remuneration in the enterprise sector net of profit bonuses for the fourth quarter of the previous year, as announced by the President of the Central Statistical Office (GUS).

The variable remuneration depends on the performance of management targets and it cannot be more than 100% of the fixed remuneration in the previous financial year. The management targets include growth of the Company value and improvement of its financial indicators. The Exchange Supervisory Board defines specific management targets and their weights as well as objective and measurable criteria (indicators) of their performance. Other management targets on which variable remuneration depends include: (1) development and application of rules of remuneration of members of management and supervisory authorities in accordance with the provisions of the Act of 9 June 2016 on Rules of

Remuneration of Managers of Certain Companies, (2) performance of the obligations defined in Articles 17-20, Article 22 and Article 23 of the Act of 16 December 2016 on Management of Public Assets (Journal of Laws of 2016, item 2259) concerning the exercise of rights attached to shares and the requirements for candidates for members of supervisory authorities and management authorities in GPW's subsidiaries.

The previous bonus and remuneration system implemented in 2014 was in operation until 31 December 2016 and, in the case of Dariusz Kułakowski, until the end of March 2017.

The bonus system was implemented in 2014.

The remuneration system for the members of the Exchange Management Board was based on a long-term incentive system. It consisted of a fixed part (basic remuneration), a variable part (incentive system, i.e., discretionary annual bonus), as well as fringe benefits to the extent defined by the Exchange Supervisory Board.

The variable part of remuneration, i.e., the discretionary annual bonus, could be awarded provided that the following criteria were met:

- the Company reported a net profit for the financial year for which the discretionary bonus was to be awarded;
- the member of the Exchange Management Board was employed as at the 30th day after the publication of the consolidated financial statements of the GPW Group;
- the Members of the Exchange Management Board were granted a vote of discharge of their duties for the last bonus year.

The amount of the bonus for Members of the Management Board depended on semi-annual appraisal of performance and the Company's results performed by the Exchange Supervisory Board, as well as verification of results of work of the Exchange Management Board Members in previous bonus years.

The Exchange Supervisory Board performed an annual appraisal which could determine the grant and the amount of the discretionary bonus awarded to a Management Board Member. The maximum amount of the discretionary annual bonus was capped as a percentage of annual basic remuneration. Payments of the awarded discretionary bonus were made as follows:

- ✓ 30% of the awarded bonus paid on a one-off basis;
- ✓ 30% paid in phantom shares, which are paid out one year after the award;[38]
- ✓ 40% of the awarded bonus was added to the bonus bank and settled in equal parts in the next three years subject to positive reassessment by the Supervisory Board of the work taken in the period of the bonus.

The payment of phantom shares is distributed over time and the phantom shares for 2016 vested in July 2017 will be paid as determined in July 2018 at the closing price in the period from 1 January to 31 March 2018. Members of the Management Board who had employment agreements were entitled until 31 March 3017 to fringe benefits including health care, life insurance, a canteen system and the Employee Pension Scheme.

In addition to the foregoing, the Company has no incentive or bonus schemes based on the issuer's equity (including schemes based on bonds with pre-emptive rights, convertible bonds, subscription warrants, or stock options).

[38] Form of remuneration where a certain number of virtual (phantom) shares are allocated for a period of time. The block of such shares authorises the manager to draw phantom payments in an amount depending on the GPW share price on the exchange

Table 23 Remuneration and benefits of Members of the Exchange Management Board paid and due for 2017 (PLN thousand)[39]

Management Board Member	Basic salary	Holiday equivalent	Bonus – one-off payment	Bonus – bonus bank	Bonus – phantom shares	Other benefits	Benefits after termination	Total
Dariusz Kułakowski	452	74	25	19	0	14	0	584
Michał Cieciórski	450	0	25	0	0	2	0	477
Małgorzata Zaleska	276	53	0	0	0	10	0	339
Jacek Fotek	306	0	0	0	0	4	0	310
Paweł Dziekoński	187	50	0	0	0	4	0	241
Marek Dietl	110	0	0	0	0	0	0	110
Zawada Grzegorz	0	0	20	20	0	1	0	41
Tamborski Paweł	0	0	0	34	0	1	0	35
Półtorak Karol	0	0	10	19	0	1	0	30
Szczepański Mirosław	0	0	0	19	0	1	0	20
Total	**1781**	**177**	**80**	**111**	**0**	**38**	**0**	**2187**

Table 24 Remuneration and benefits of Members of the Exchange Management Board paid and due for 2016 (PLN thousand)[40]

Management Board Member	Basic salary	Holiday equivalent	Bonus – one-off payment	Bonus – bonus bank	Bonus – phantom shares	Other benefits	Benefits after termination	Total
Małgorzata Zaleska	736	0	0	0	0	22	0	758
Dariusz Kułakowski	660	0	0	0	0	28	0	688
Grzegorz Zawada	440	53	0	0	0	17	42	553
Paweł Dziekoński	457	0	0	0	0	11	0	467
Karol Półtorak	330	27	0	0	0	11	53	421
Paweł Tamborski	207	0	0	0	0	7	67	280
Michał Cieciórski	169	0	0	0	0	4	0	173
Mirosław Szczepański	0	0	0	0	0	0,4	55	55
Total	**2999**	**80**	**0**	**0**	**0**	**100,4**	**217**	**3 395**

The tables above do not include social security contributions paid by the employer. In addition, Members of the Exchange Management Board received no remuneration for their functions on the supervisory authorities of subsidiaries in 2016-2017.

TERMS OF EMPLOYMENT CONTRACTS WITH MEMBERS OF THE EXCHANGE MANAGEMENT BOARD

The current four-year term of office of the Management Board of the Warsaw Stock Exchange started on 25 July 2014.

Following the Resolution of the Extraordinary General Meeting of the Company of 30 November 2016 and the Resolution of the Ordinary General Meeting of the Company of 19 June 2017 concerning the rules of remuneration of Management Board Members, the terms of employment of the Management Board Members changed in 2017. Management Board Members may only be employed under management contracts for the term of their function. Consequently, Management Board Member Dariusz Kułakowski signed a management contract effective as of 1 April 2017 and his employment agreement was terminated. Vice-President of the Management Board Michał Cieciórski worked under appointment from 29 September 2016 and under a management contract for the term of his function from 1 April

[39] The amounts of bonus – one-off payment represent benefits paid in 2016 and due as at the end of 2017; the amounts of bonus – bonus bank and bonus – phantom shares for 2017 represent provisions.
[40] The amounts of bonus – one-off payment represent benefits paid in 2016 and due as at the end of 2016; the amounts of bonus – bonus bank and bonus – phantom shares for 2015 represent provisions.

2017. Vice-President of the Management Board Jacek Fotek signed a management contract for the term of his function effective as of 14 March 2017. President of the Management Board Marek Dietl signed a management contract for the term of his function effective as of 27 September 2017.

Management contracts for the term of the function may be terminated by agreement of the parties with a notice of two weeks or effective immediately in the case of a serious breach of the contract by the manager or by the Company. According to the contract, if the contract is terminated due to termination of the function for any reason other than the manager's breach of essential obligations under the contract, the Management Board Member is entitled to a severance pay equal to three times the fixed salary provided that the Management Board Member performed the function for at least 12 months before termination.

Table 25 Members of the Exchange Management Board, as at 31 December 2017

Member of the Management Board	In office from	In office to	Function
Marek Dietl	27 September 2017	for a determined period, i.e., until the end of the mandate	President of the Management Board
Jacek Fotek	14 March 2017	for a determined period, i.e., until the end of the mandate	Vice-President of the Management Board
Michał Cieciórski	29 September 2016	for a determined period, i.e., until the end of the mandate	Vice-President of the Management Board
Dariusz Kułakowski	25 July 2014	for a determined period, i.e., until the end of the mandate	Member of the Management Board

The Exchange Supervisory Board inserted non-competition clauses effective for the term of the contract and after termination into the management contracts. If a management contract of a Management Board Member who performed the function for at least 3 months is terminated, the Management Board Member is entitled to damages for a period of six months equal to 100% of the remuneration paid in equal monthly instalments. The non-competition clause may be terminated by the Company by agreement of the parties with a notice of one month or effective immediately in the case of a breach of the clause by the manager.

The agreements of two Members of the Management Board: Małgorzata Zaleska and Paweł Dziekoński, were terminated in 2017. On 14 March 2017, Małgorzata Zaleska was dismissed as President of the Management Board of the Warsaw Stock Exchange. Her agreement was terminated on 30 April 2017 with a one-month notice. On 22 March 2017, Paweł Dziekoński was dismissed as Vice-President of the Management Board. His agreement was terminated on 30 April 2017 with a one-month notice following his resignation.

The non-competition agreements effective after termination, signed with Małgorzata Zaleska and Paweł Dziekoński, were terminated on the terms of the non-competition agreements and no damages were paid.

REMUNERATION OF EXCHANGE SUPERVISORY BOARD MEMBERS

According to the Articles of Association, the Exchange Supervisory Board Members receive remuneration in the amount set by the Ordinary General Meeting.

According to the Resolution of the Extraordinary General Meeting of the Company of 30 November 2016, the monthly remuneration of the Exchange Supervisory Board Members was determined as equal to 1.5

times the average monthly remuneration in the enterprise sector net of profit bonuses for the fourth quarter of the previous year, as announced by the President of the Central Statistical Office (GUS).

The amount of remuneration is raised by a percentage of the monthly remuneration as follows:

- for the Chairman of the Exchange Supervisory Board – 10%,
- for the Deputy Chairman of the Exchange Supervisory Board – 9%,
- for the Secretary to the Exchange Supervisory Board – 8%,
- for Chairmen of Committees of the Exchange Supervisory Board – 9%.

The additional remuneration is not aggregated.

Table 26 Remuneration of the Supervisory Board members (PLN thousand)

Exchange Supervisory Board Member	Year ended 31 December 2017	Year ended 31 December 2016
Jarosław Grzywiński*	115	75
Wojciech Nagel	87	53
Eugeniusz Szumiejko	68	0
Krzysztof Kaczmarczyk	46	0
Jakub Modrzejewski	46	0
Bogusław Bartczak	46	0
Piotr Prażmo	42	0
Filip Paszke	42	0
Marek Słomski	41	78
Marek Dietl	41	41
Grzegorz Kowalczyk	27	0
Jarosław Dominiak	20	40
Łukasz Hardt	0	8
Wiesław Rozłucki	0	3
Marek Wierzbowski	0	2
Waldemar Maj	0	2
Bogdan Klimaszewski	0	2
Andrzej Ladko	0	2
Jacek Lewandowski	0	71
Ewa Sibrecht-Ośka	0	68
Adam Miłosz	0	79
Łukasz Świerżewski**	0	0
Wojciech Sawicki**	0	0

**Member of the Exchange Supervisory Board delegated to temporarily perform the function of President of the GPW Management Board from 15 March to 15 June 2017*
*** Resigned from remuneration.*

Wojciech Nagel was a Member of the TGE Supervisory Board in 2017. Other Exchange Supervisory Board Members have no supervisory or management functions in GPW subsidiaries.

EVALUATION OF THE REMUNERATION POLICY

The Company's remuneration policy based on an incentive system directly supports the implementation of GPW's business strategy. The Company's remuneration system is based on fixed remuneration and variable remuneration under the incentive system. The remuneration system also includes other factors such as recognition, career development and work conditions, which contributes to the Company's organisational culture and facilitates the implementation of the business strategy.

The remuneration policy differentiates between pay levels depending on the job position, performance and competences. The variable component provides flexibility and aligns the system with the implementation of GPW's strategy. The incentive system links the Company's management with the goals of the GPW strategy and cascades the goals to employees, thus supporting GPW's business.

The extensive system of employee benefits is competitive on the market while ensuring cost efficiency for the Company. As a part of the HR strategy, the remuneration policy consistently helps to recruit, retain and incentivise employees.

III. 13. Changes of Main Management Rules of GPW and the GPW Group

CHANGES IN THE GPW GROUP STRUCTURE

No changes were implemented in the GPW Group structure in 2017.

CHANGE OF PERSONS SITTING ON THE AUTHORITIES OF GPW GROUP COMPANIES

The change of GPW's managing persons as well as changes to GPW's organisational structure are described in section *III.10. Exchange Management Board*. The section below outlines changes in other companies participating in the GPW Group as at the end of 2017.

BondSpot S.A.

In 2017, the Management Board of BondSpot S.A. consisted of two persons:

- Agnieszka Gontarek – President of the Management Board,
- Piotr Woliński – Vice-President of the Management Board.

Towarowa Giełda Energii S.A.

As at 31 December 2017, the Management Board of TGE consisted of two persons:

- Piotr Zawistowski – President of the Management Board,
- Paweł Ostrowski – Vice-President of the Management Board.

At the beginning of 2017, the TGE Management Board was comprised of two persons: Paweł Ostrowski as President of the TGE Management Board and Michał Cieciórski as Member of the TGE Supervisory Board temporarily delegated to perform the function of Vice-President of the TGE Management Board by decision of the TGE Supervisory Board of 21 December 2016.

Michał Cieciórski performed the function of Vice-President of the TGE Management Board until 20 March 2017. On 21 March 2017, the TGE Supervisory Board delegated Marek Wodnicki, Member of the TGE Supervisory Board, to temporarily perform the function of Vice-President of the TGE Management Board. He performed the functions until 21 June 2017. From 22 June 2017 to 31 August 2017, Dagmara Gorzelana, Member of the TGE Supervisory Board, temporarily performed the function of Vice-President of the TGE Management Board. On 31 August 2017, Marek Wodnicki was once again delegated by the TGE Supervisory Board to temporarily perform the function of Vice-President of the TGE Management Board.

On 27 October 2017, the TGE Supervisory Board delegated Piotr Zawistowski, Member of the TGE Supervisory Board, to temporarily perform the function of President of the TGE Management Board from 30 October 2017 for a period not longer than three months. Paweł Ostrowski was appointed Vice-President of the TGE Management Board. Marek Moroz was appointed Vice-President of the TGE

Management Board subject to the approval of the Polish Financial Supervisory Authority for the change on the TGE Management Board. On 20 December 2017, Marek Moroz resigned as Vice-President of the TGE Management Board before taking office.

On 30 October 2017, the Extraordinary General Meeting of TGE appointed Piotr Zawistowski as President of the TGE Management Board subject to the approval of the Polish Financial Supervisory Authority for the change on the TGE Management Board and his appointment as President of the TGE Management Board. On 21 December 2017, upon the delivery of the approval of the Polish Financial Supervisory Authority, Piotr Zawistowski became President of the TGE Management Board.
On 21 February 2018 the TGE Supervisory Board appointed Piotr Listwoń Vice-President of the TGE Management Board, subject to the approval of the Polish Financial Supervisory Authority for the change on the TGE Management Board. The decision will enter in force upon delivery of the approval of the Polish Financial Supervisory Authority for the change.

IRGiT S.A.

As at 31 December 2017, the Management Board of IRGiT S.A. consisted of two persons:

- Andrzej Kalinowski – President of the Management Board,
- Seweryn Szwarocki – Vice-President of the Management Board.

At the beginning of 2017, the IRGiT Management Board was comprised of two persons: Marek Wodnicki as Deputy Chairman of the IRGiT Supervisory Board temporarily delegated to perform the function of President of the IRGiT Management Board and Andrzej Kalinowski as Member of the IRGiT Management Board. Marek Wodnicki performed the function of President of the IRGiT Management Board until 10 February 2017. On 11 February 2017, the IRGiT Supervisory Board appointed Paweł Ostrowski as President of the IRGiT Management Board. On 17 February 2017, Paweł Ostrowski resigned as President of the IRGiT Management Board. On 18 February 2017, the IRGiT Supervisory Board appointed Andrzej Kalinowski as President of the IRGiT Management Board. On 10 April 2017, the IRGiT Supervisory Board appointed Seweryn Szwarocki as Vice-President of the IRGiT Management Board.

InfoEngine S.A.

On 31 December 2016, Adam Simonowicz resigned as President of the InfoEngine Management Board. From 1 January 2017 to 31 March 2017, Krzysztof Ajdukiewicz was delegated by the InfoEngine Supervisory Board to perform the function of President of the InfoEngine Management Board for a period not longer than three months. On 1 April 2017, the InfoEngine Supervisory Board appointed Przemysław Zalewski as President of the InfoEngine Management Board of a new term of office.

GPW Benchmark S.A.

As at 31 December 2017, the GPW Benchmark Management Board was comprised of one person: Rafał Wyszkowski as President of the GPW Benchmark Management Board.

From 1 January 2017, the GPW Benchmark Management Board was comprised of two persons: Dariusz Kułakowski as President of the Management Board and Iwona Edris as Member of the Management Board. On 19 April 2017, Iwona Edris resigned as Member of the GPW Benchmark Management Board. On 25 October 2017, Dariusz Kułakowski resigned as President of the GPW Benchmark Management Board. On 25 October 2017, the GPW Benchmark Supervisory Board appointed the GPW Benchmark Management Board of a new term of office comprised of: Rafał Wyszkowski as President of the GPW Benchmark Management Board and Dariusz Kułakowski as Vice-President of the GPW Benchmark Management Board. On 20 December 2017, Dariusz Kułakowski resigned as Vice-President of the GPW Benchmark Management Board

Instytut Analiz i Ratingu S.A.

As at 31 December 2017, the Management Board of IAiR consisted of:

- Wojciech Lipka – President of the Management Board,
- Marcin Żołyński – Vice-President of the Management Board.

At the beginning of the year, Jan Koleśnik was the President of the IAiR Management Board. On 28 March 2017, following resignation of Jan Koleśnik as President of the Management Board, the IAiR Supervisory Board delegated Piotr Kajczuk, Member of the IAiR Supervisory Board, to perform the function of President of the IAiR Management Board. On 28 June 2017, the IAiR Supervisory Board delegated Jacek Fotek to perform the function of President of the IAiR Management Board. On 25 September 2017, the IAiR Supervisory Board appointed Wojciech Lipka and Marcin Żołyński to the IAiR Management Board and appointed Wojciech Lipka as President of the IAiR Management Board and Marcin Żołyński as Vice-President of the IAiR Management Board.

IV. CORPORATE SOCIAL RESPONSIBILITY

IV. 1. CSR Strategy of the GPW Group

The Warsaw Stock Exchange and the companies of the GPW Group pursue their business operations in compliance with the highest business standards and taking into account social, ethical and environmental factors.

The GPW Group not only focuses on its core business in a sustainable and responsible way but also fosters responsible behaviour of the participants of its markets.

Since 2013, GPW is a member of the Sustainable Stock Exchanges, a UN initiative of 68 global exchanges which pursue sustainable and responsible business and promote the highest ESG (Environment, Social, Governance) standards on their home markets through initiatives addressed to market participants.

The year 2017 was a time of further development of the RESPECT Index project. RESPECT Index is the corporate social responsibility index published by GPW since 2009. The project completed the eleventh ESG survey of listed companies. The results of the survey proved that public companies listed on GPW improve their CSR and sustainable development standards year after year, including the Warsaw Stock Exchange which has participated in the survey for four years as a public company.

The Exchange's CSR (Corporate Social Responsibility) strategy was revised in 2015 to cover a broader range of Governance and Social aspects. GPW's initial CSR strategy was developed and implemented in 2013. In 2015, GPW revisited its assumptions and implemented the strategy in all of the GPW Group companies. GPW continued to pursue its CSR strategy in 2017.

The mission of the GPW Group is to support economic growth and build an investment culture by ensuring highest standards and safety of trading in a professional and responsible process. The Group's CSR strategy provides for the implementation of the mission and for building of the Group's value while respecting the interests of the environment of the Group's companies based on dialogue and co-operation with all stakeholder groups.

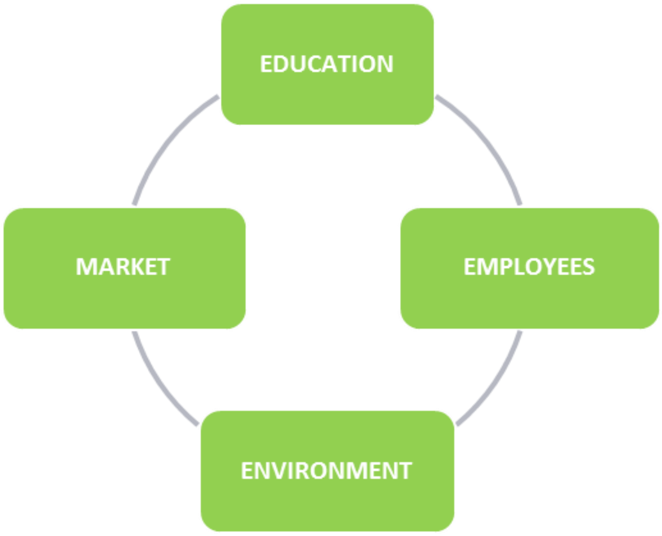
The business strategy of the Warsaw Stock Exchange Group published in October 2014 provides for the consolidation of initiatives of Group companies on many levels, also beyond their business operations. The Group is working steadily and consistently to harmonise the procedures, policies and standards across its companies in order to create a stronger and more coherent entity which successfully pursues its business on the financial and commodity markets. As a part of the process, the GPW Group has developed and implemented a corporate social responsibility (CSR) strategy.

The CSR strategy was developed in the work of a task force including representatives of BondSpot, Towarowa Giełda Energii, as well as GPW managers responsible for GPW's key business areas in terms of ESG factors. As a result, the GPW Group established a CSR Committee to monitor the implementation and further development of the CSR strategy.

Similar to GPW's CSR strategy implemented in 2013, the GPW Group's CSR strategy is based on four main pillars important to the activity of GPW and its subsidiaries as well as their role in the Polish financial and commodity markets:

- education,
- market relations and dialogue,
- responsible human resources policy,
- protection of the natural environment.

Chart 10 Main areas of the GPW Group's CSR strategy



IV. 2. Education

According to the GPW Group's CSR strategy, education is the foundation of the general public's trust in the capital and commodity markets and their institutions. Hence, a key objective of the GPW Group is to foster a culture of investing while raising awareness of the mechanisms of capital and commodity markets in order to encourage Poles to invest their savings and urge companies to raise growth capital on the capital market.

THE GPW FOUNDATION

The Warsaw Stock Exchange and its subsidiaries – Towarowa Giełda Energii and BondSpot – have for years pursued educational campaigns focused on the capital, commodity and debt markets addressed to school and university students, investors and professionals. To amplify the reach and efficiency of their educational initiatives and to leverage synergies, the GPW Group companies established the GPW Foundation in May 2015.

Knowledgeable investors and other participants of GPW Group markets equipped with the right tools and expertise build market value and credibility while enhancing trust of the general public.

The mission of the GPW Foundation is to develop and adapt the educational offer of the GPW Group including education in financial, commodity and debt markets and broadly understood economics.

The Foundation pursues its mission by organising and implementing school and educational projects for school and university students, investors and professionals active on the financial and commodity markets.

The educational projects and initiatives implemented by the GPW Foundation in 2017 included:

- **Go4Poland - Wybierz Polskę!** – a programme designed to seek talents among Polish students of foreign universities and to encourage them to work in Polish companies and institutions. In the Programme, the GPW Foundation works with businesses, institutions and student initiatives including student clubs and associations which promote returns of students to Poland to have a career in Polish companies and the public administration. The Programme is open to Polish students and graduates of universities around the world, including students participating in exchange programmes at foreign universities and Polish students from the Polish diaspora who are advanced speakers of Polish. Go4Poland-Wybierz Polskę! is a platform of communication for Polish students and graduates of foreign universities with companies and institutions which offer paid internships. The Foundation initiated the second round of the programme in 2016. The key part of the programme comprised of workshops and the final conference of the second edition took place in July 2017 while internships were offered from June to September 2017. 118 students were winners of the second edition of the programme and the conferences brought together 153 participants.

- **School visits to GPW** – an online reservation system available on the GPW website allows teachers to manage bookings and confirm dates of school visits at their convenience. Visits include a presentation by a Foundation representative as well as a multimedia demo class for school students. As part of the project, around 5,000 school students in 141 groups visited GPW in 2017. The Foundation's online database has registered nearly 300 teachers.

- **Product training** – training offered at the GPW premises by the Foundation in partnership with brokers who are Exchange Members, addressed to existing and prospective investors and other interested parties. The training themes include GPW-listed financial instruments. Seven product training sessions were offered in 2017. In addition, exchange experts presented the exchange and listed instruments at scientific conferences organised by universities across Poland and for groups of students visiting GPW. The product training sessions and initiatives addressed to students reached ca. 1,000 participants.

- **Turbo Challenge Game** – an educational competition organised in partnership with ING Securities, offering virtual investment of cash in exchange-listed ING Turbo certificates, equities and ETF units. The objective of the competition was to educate investors and to promote exchange-traded structured products. The competition had 1,451 enrolled contestants, of whom 1,308 closed at least one trade during the game.

- **Exchange School Online Game (SIGG)** – an educational project addressed to junior and senior high school students. The 16th edition of the project was offered by GPW in partnership with the GPW Foundation and the Lesław A. Paga Foundation. SIGG is an online investment game. Students supervised by a teacher appoint teams of 2 to 4 participants. Each participating team has one investment account and a pool of virtual cash. The participants first learn about financial instruments traded on the Warsaw Stock Exchange (shares, ETFs, futures) and then jointly make virtual transactions in the account. The participants use virtual cash but their orders are executed based on actual buy and sell orders from the market. The goal of each time is to earn investment gains.

The game consists of three steps:

- Step 1: trading in shares and ETFs (20 November 2017 – 5 January 2018);
- Step 2: trading in futures (26 February 2018 – 16 March 2018);
- Finals on the GPW Trading Floor (11 April 2018).

The 16th edition of the project had more than 18 thousand participating students grouped in over 6 thousand teams in 718 schools supervised by 900 teachers.

- **Modern Business Management Programme** – initiated by the Polish Bank Association, the programme now includes more than 120 universities in Poland. It has a national footprint and reaches thousands of university faculty and students. The programme aspires to raise awareness of the financial market. The GPW Foundation continued relations with the programme organisers and participated in the work of its Consultation Board in 2017. We arranged 27 lectures about long-term investing offered by educators of the Exchange School as well as exchange experts. The lectures reached 1,321 students.

- **Competition for MA and BA theses with awards from the President of the Warsaw Stock Exchange –** in 2017, GPW opened a new edition of the competition for MA and BA theses about the capital market with awards from the President of the Warsaw Stock

Exchange. The programme encourages students to improve their knowledge about the capital market, its infrastructure institutions and modern financial instruments. The competition is open to authors of theses submitted for a degree in Poland from January to December of the previous calendar year. Fifty theses (33 MA theses and 17 BA theses) were entered in the competition. The winners of the competition were announced on 18 December 2017 at a gala on the GPW Trading Floor.

- **Summer Exchange Online School** – The GPW Foundation in partnership with the Association of Exchange Investors (SIG) completed a series of online training sessions of the Summer Exchange Online School. Ten training sessions were offered from 5 July to 6 September 2017. The programme was addressed to fledgling investors across Poland. The training participants were 983 unique users. The project featured speakers from brokerage houses that are Exchange Members: Noble Securities, ING Securities, DM BOŚ, DM mBanku, DM BZ WBK as well as the financial blogger Albert Rokicki – longterm.pl. The training sessions had 245 participants on average.

- **Grab the Bull by the Horns – Exchange Conference for Secondary School Students** – The GPW Foundation and the Stefan Batory Secondary School Community Foundation offered the Exchange Conference for Secondary School Students "Grab the Bull by the Horns" held at the Stefan Batory Secondary School in Warsaw on Saturday, 2 December 2017. The conference introduced students of Warsaw secondary schools to capital markets, the stock exchange and career opportunities in these areas. The Warsaw Stock Exchange and the law firm Weil, Gotshal & Manges LLP were the event sponsors. The conference was attended by over 100 students and a dozen teachers of Warsaw secondary schools.

- **Financial Education Congress** – Initiated by four foundations: the Warsaw Institute for Banking (WIB), the GPW Foundation, the Lesław A. Paga Foundation and the Think! Knowledge Society Foundation, the first edition of the Financial Education Congress took place at the PGE National Stadium in Warsaw on 28 March 2017. The event brought together 350 representatives of 100 financial, educational and training institutions and organisations.

The first edition of the Congress featured presentations of experts on latest solutions in financial education, entrepreneurship, long-term savings and investments. The event opened with a debate on "21st Century Consumers – Challenges to Financial Education" with the participation of representatives of the Ministry of Economic Development, GPW, the Polish Bank Association (ZBP), Citi Handlowy and Deloitte Advisory. The Lesław A. Paga Foundation and the INDEX Science Club offered a debate entitled "First and Foremost: Don't Lose Money. How to Invest on the Capital Market." The Congress was accompanied by an exhibition of educational projects of Forum organisers and other institutions.

In 2017, GPW partnered with brokerage houses – Exchange Members to offer national training series:

- Training series **Bull Market After Hours** and **Pension from the Bull Market** offered in partnership with DM BOŚ, held in 18 cities across Poland;

- Training series **#InwestStory** offered in partnership with DM Noble Securities: 9 meetings across Poland;

- Training series **Tour de POK** offered in partnership with DM mBanku: 15 meetings in the series.

Experts of GPW's Market Development Department took part in all training series. The training sessions brought together 3,400 participants.

EXCHANGE SCHOOL

A flagship educational programme arranged by GPW for many years, the Exchange School has been co-ordinated since 2016 by the GPW Foundation under the auspices of the Warsaw Stock Exchange. As part of the Exchange School, the GPW Foundation offers courses at two levels: "101 of Investing on the Exchange" and "Exchange for Intermediate Users".

The "101 of Investing on the Exchange" programme covers key issues that are practical for beginners. The presentations describe the functioning of the exchange and the course of the trading session, as well as economic factors impacting the exchange, especially economic conditions in Poland and internationally. Key information about investing is offered in presentations focusing on the selection and evaluation of companies, access to financial information, and management of securities portfolios. The programme includes 14 hours of training in 5 modules.

The course "Exchange for Intermediate Users" targets more advanced and active investors. The programme structures and expands their knowledge of derivatives: options and futures available on the Warsaw Stock Exchange, as well as turbo certificates. The presentation of the impact of the economic environment on the exchange introduces participants to understanding and predicting macroeconomic conditions in order to define mid-term investment strategies. The fundamental analysis presentation describes valuation methodologies of companies in selected industries. The technical analysis module provides instruction on how to analyse market behaviour using charts in order to anticipate future market trends.

In 2017, the GPW Foundation started to offer **SmartLabs** – specialised training including presentations and hands-on sessions addressed to more experienced investors.

The University of Management and Information Science in Rzeszów joined the Exchange School programme in May 2017. The programme has 13 partners across Poland. The GPW Foundation is working to attract more partners.

We completed 13 courses (eight courses "101 of Investing on the Exchange", four courses "Exchange for Intermediate Users", and one course "SmartLab: Futures and Options") with a total of 540 participants in 2017.

RESPECT INDEX

Initiated in 2009 as CEE's first responsible company index, it was the first CSR index on the Polish market and remains a benchmark for listed companies that aspire to serve as a CSR model.

The RESPECT Index project is a flagship initiative of the Warsaw Stock Exchange and a part of its educational efforts in support of social responsibility of GPW listed companies and responsible investing in Poland.

The index portfolio includes companies listed on the GPW Main Market which follow the highest standards of corporate governance, disclosures and investor relations taking into account environmental, social and governance (ESG) factors in their business. The companies are audited and the index portfolio is revised once per year in the second half of the year. The index portfolio includes the biggest listed companies participating in the indices WIG20, mWIG40 and sWIG80. The companies are selected in three steps of verification carried out by GPW and the Association of Listed Companies in the areas listed above as well as an audit performed by the project partner since the first edition: Deloitte.

The index requirements take into account the industrial specificity of companies. The survey questionnaire includes questions dedicated to all companies as well as questions for companies which pursue a specific business according to the classification deployed by GPW: Industry, Finance, and Services. The participation of each company in the index is defined on the same terms as for the other GPW indices, taking into account free-float shares, where the weight of the biggest companies is capped at 25% where the number of index participants is under 20 or 10% otherwise.

The RESPECT Index portfolio included between 16 and 25 companies in the eleven editions of the survey, last held in the autumn of 2017. The current index portfolio of the eleventh edition, audited by Deloitte, is comprised of 28 companies, including three new participants: Agora, Inter Cars and mBank, as well as two returning companies: Bank Ochrony Środowiska and Jastrzębska Spółka Węglowa. This year's edition of the RESPECT Index has the biggest number of participants. The index has evolved since its inception. The requirements for companies have been steadily raised to increasingly accommodate trends typical of mature capital markets, meet stakeholders' requirements, and provide a full picture of the reported ESG factors.

The questionnaire now used to evaluate participants of the RESPECT Index covers the following areas:

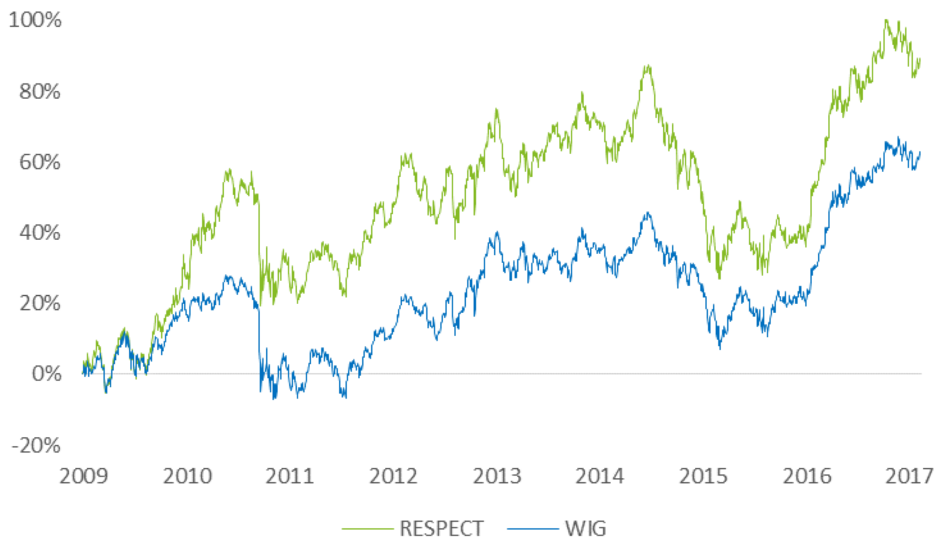
- **Social** – occupational health and safety, human resources management, relations with suppliers, dialogue with stakeholders, social reporting;
- **Environmental** – environmental management, reduction of the environmental impact, biodiversity, environmental aspects of products and services;
- **Governance** – strategic management, corporate governance, risk management, fraud management, internal audit and control system, relations with customers.

The eleven editions to date have had more than 40 participants. This year's edition features three new participants. Eight companies have participated in all of the index editions. They are the market leaders consistently improving on their corporate social responsibility commitments.

Importantly, manufacturing companies are the biggest group of RESPECT Index participants. This year, nearly two-thirds of all participants (17 out of 28 companies) are manufacturers. Eight companies have participated in all of the RESPECT Index editions, including 5 manufacturers. The average score of all participating companies was 62.42 out of 90 points. This was nearly 6 points less than a year earlier, mainly due to changes of the index portfolio with the addition of three new participants, the absence of several regular participants, and minor modifications to the survey questionnaire. The average score by industry was 62.50 points for manufacturers, 63.55 points for financial companies, and 58.04 points for service providers.

The RESPECT Index performance corroborates the fundamental notion of responsible investing whereby investment in companies managed in a sustainable way which respect the environment and the interests of all stakeholders involves lower risk and generates above-average returns. From the first publication of the index on 19 November 2009 to the end of 2017, the RESPECT Index return rate was 89%, compared to return on WIG20 at 62% over the same period.

Figure 51 Performance of the RESPECT Index and WIG [normalised]



EDUCATIONAL INITIATIVES ON THE COMMODITY MARKET

Towarowa Giełda Energii (TGE) also pursues educational initiatives addressed to market participants in order to develop and promote transparent trade in products offered by TGE and to raise the awareness of the benefits of trade on TGE. Such initiatives are addressed both to market participants and TGE members.

In 2017, TGE offered a series of training programmes and examinations for commodity exchange brokers. The programme prepares candidates for exchange brokers who represent exchange members in trading on TGE markets. Each training ends with an examination. Brokers who pass the exam and get certified are authorised to trade on behalf of exchange members. The series included 11 training sessions and examinations, including 9 on the Exchange Commodity Market and 3 on the Financial Instruments Market. TGE issued 79 certificates to brokers in 2017, including 25 brokers who passed the examination in English.

In 2017, TGE continued its partnership with universities and offered workshops, among others dedicated to the impact of MiFID2 on the commodity and financial markets in Poland.

TGE's flagship initiative is its partnership with the Lesław A. Paga Foundation in the Energy Academy Project designed to create a platform of exchange of expertise between practitioners with long-time experience in the energy industry and beginners who are starting a career in the industry. In 2017, as part of the Energy Week project organised by the Energy Science Student Club at the Warsaw School of Economics, TGE was a conference partner and hosted a workshop.

In June 2017, TGE in partnership with Izba Rozliczeniowa Giełd Towarowych (IRGiT) organised the tenth edition of the Trading Forum as a platform for the exchange of opinions and development of new solutions in collaboration with direct participants of the markets operated by TGE. The three-day event featured discussion panels, presentations and integration activities.

IV. 3. Market Relations and Dialogue

Pursuant to the CSR strategy, the key objectives of the GPW Group include the development of corporate culture and behaviours of capital and commodity market participants in Poland according to high standards of corporate governance and disclosure requirements. This goal is pursued through efforts made in partnership and dialogue with capital and commodity market stakeholders.

NEW DOCUMENTATION OF THE WIBID AND WIBOR REFERENCE RATES

Modification of WIBID and WIBOR reference rate regulations was an important project of the Warsaw Stock Exchange in the area of relations with market participants.

The publication of the new Reference Rate Documentation is an important step in the alignment of WIBID and WIBOR with European and global standards. We will continue these efforts by engaging the key stakeholders including NBP, PFSA, UOKiK and financial market institutions.

On 30 November 2017, the WIBID and WIBOR reference rate fixing organiser GPW Benchmark published the new Reference Rate Documentation effective as of 1 February 2018. The documents include the Code of Conduct of WIBID and WIBOR Fixing Participants and the WIBID and WIBOR Reference Rate Rules.

The Code of Conduct governs relations between GPW Benchmark and banks participating in reference rate fixings. It presents the policies, procedures and standards of conduct for banks recommended by GPW Benchmark in line with the requirements of the European benchmark reform.

The Reference Rate Rules define the rules for the calculation and publication of the reference rates, as well as the rules for users including credit institutions, issuers of securities and investment funds. The new Reference Rate Documentation replaced the legacy Rules of Fixing of WIBID and WIBOR Reference Rates. The modifications were required to bring WIBID and WIBOR with the requirements of Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds.

"GPW AMBASSADOR" PROGRAMME

The first edition of the "GPW Ambassador" Programme opened in March 2016 and closed on 24 May 2017. The "GPW Ambassador" Programme was developed following consultations with banks and brokers in 2015. The Programme was implemented in 2016 after a review of feedback from the consultations. The Programme continued in H1 2017.

The "GPW Ambassador" Programme promotes the capital market among bank advisers and supports them in sharing knowledge about investing on GPW with their retail clients and other bank officers.

The "GPW Ambassador" Programme was addressed to a select group of bank advisors nominated in a recruitment process together with banks. The Programme had 53 participants from 11 banks (Bank Citi Handlowy, PKO Bank Polski, Bank Pekao, Getin Noble Bank, Bank Millennium, Bank Zachodni WBK, Raiffeisen Polbank, Bank BGŻ BNP Paribas, Alior Bank, mBank, ING Bank Śląski). The participants were bank advisors while the speakers were market practitioners who shared both theoretical knowledge and hands-on expertise.

GPW meetings for the GPW Ambassadors were held regularly in order to monitor the development of the Programme and respond to participants' suggestions and comments. Thanks to frequent interactions with customers, the GPW Ambassadors provided regular feedback on the expectations of individual clients addressed to GPW. The meetings covered all issues concerning products traded on GPW as well as the issuance of shares and bonds.

The "GPW Ambassador" Programme was highly rated by the participants who appreciated the content of GPW's programme dedicated to bank advisors in order to improve their understanding of the capital market.

MIFID2 IMPLEMENTATION

In 2017, regular project meetings were held with a broad group of market participants, including both the cash market and the commodity market, in order to prepare and implement regulations governing exchange trading in view of the implementation of:

- Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (MiFID2);
- Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments (MiFIR); and
- their implementing regulations (MiFID2/MiFIR package).

Brokers' ISVs were also invited to the meetings.

Additional consultations with market makers discussed modifications of the terms of market making after the MiFID2 implementation and new incentive programmes designed to improve liquidity on the GPW markets. Working meetings with the Chamber of Brokerage Houses (IDM), brokers and banks focused on GPW's implementation of the distribution service of Key Information Documents for structured products and exchange-traded derivatives.

TGE conducted consultations with the market including a debate held in March 2017 on the MiFID2 requirements and their impact on the commodity and financial markets in Poland, as well as a number of meetings of the Gas Market Committee and the Energy Market Committee.

CONSULTATION COMMITTEES

In addition to irregular dialogue with the stakeholders concerning material business decisions, GPW is also engaged in on-going consultations with market participants within the Consultation Committees established in 2013. The Committees are advisory bodies active in the key areas of GPW's operation. The Committees bring together representatives of the capital market community: investors, issuers, brokers, funds, academics, lawyers, as well as representatives of the Polish Financial Supervision Authority. Consultations with the Committees on the Exchange's business decisions help to develop solutions optimal to all GPW stakeholder groups.

As at the end of 2017, GPW had the following Committees:

- Alternative Trading System Development Committee - Board of Authorised Advisers
- Strategy Committee
- Compliance Committee
- Corporate Governance Committee
- Derivatives Market Committee
- Debt Market Committee
- Equity Market Committee
- Exchange Indices Committee

Two other committees cover the commodity market:

- **Gas Market Committee** – an advisory body since 2014 assisting the development of solutions creating a friendly environment for the development of trade in natural gas on the exchange. TGE continued consultations within the Gas Market Committee in 2017. The Committee held two meetings, each bringing together 20 participants.
- **Energy Market Committee** – established in 2015, it brings together exchange members and representatives of TGE and IRGiT. Its responsibilities include giving opinions and tabling proposals for the development of exchange-traded commodities listed on TGE. The Committee held two consultation meetings in 2017, each bringing together 60 participants.

IV. 4. Responsible Human Resources Policy

With their unique skills and experience, GPW Group employees are an important group of the Group's stakeholders. The organisational culture of the Group is based on engagement, values and effective internal communication as well as investment in continuous employee development.

GPW is a responsible employer and appreciates the trust and engagement of employees, supported by development opportunities in a safe and inspiring work environment.

In 2017, the Company continued initiatives focused on efficient management of HR, payroll, social and bonus processes to address business needs and support the implementation of the Exchange's strategy. In 2017, GPW launched efforts to harmonise the human resources policy across all companies of the Group. Since 2017, GPW's HR Department is the competence centre for GPW Group companies.

Table 27 Headcount of GPW and the GPW Group as at 31 December

	2017	2016	2015	2014
Number of GPW employees	193	187	204	208
Number of GPW Group employees	341	340	369	373

GPW RECRUITMENT POLICY

The GPW Group pursues a transparent recruitment policy. GPW's recruitment policy focuses on recruiting top-class specialists for all areas of the Company's operation. The development of human resources and employee competences includes rotation in job positions within GPW and the Group. In recruitment for strategic positions, the Exchange works with professional personnel advisory institutions. The success and reputation of the GPW Group depend not only on the quality of provided services but also the way that we work. Our principles and values ensure compliance of the GPW Group with laws and regulations as well as fair and ethical conduct.

Table 28 GPW personnel structure by gender as at 31 December

	2017	2016	2015	2014
Number of GPW employees	193	187	205	208
- Women	95	89	97	99
- Men	98	98	108	109

In the recruitment process, the GPW Group follows the principles of diversity and combats all forms of discrimination, in particular on grounds of sex, age, disability, race, religion, nationality, political creed, union membership, ethnicity, denomination, sexual orientation, and employment for a determined or undetermined period, full-time or part-time.

GPW Group employees included 145 women and 196 men as at the end of 2017.

Table 29 GPW employee rotation as at 31 December[41]

	2017	2016	2015	2014
GPW employee rotation	16%	20%	15,0%	7,2%

GPW employed 35 new persons and terminated employment of 29 persons in 2017. By comparison, GPW employed 22 new persons and terminated employment of 37 persons in 2016. The rotation ratio of the GPW Group was 21% in 2017.

GPW TRAINING POLICY

The GPW Group invests in employee development and supports the improvement of employee competences and expertise. It inspires employees' development, creativity and potential of diversity and collaboration.

Training plays an important role in the process of employee professional development and improvement of qualifications. GPW intensified its training initiatives in 2017, including a programme which launched several training projects for GPW employees, key managers and other employees. As a result, 1,103 man-days of training were provided within 5 training modules to GPW employees in 2017. According to its HR policy, the Exchange co-financed post-graduate courses of employees. In order to improve their professional competences, GPW Group employees participated in market conferences, congresses and seminars. The average number of training days per GPW FTE was 5.26 in 2017.

[41] The turnover ratio is the number of employees whose employment agreements were terminated during the year to the average employment during the year.

Table 30 GPW personnel by education, as at 31 December

	2017	2016	2015	2014
Total	193	187	205	208
- Vocational education	0	0	1	1
- Secondary education	23	19	27	28
- University education	170	168	177	179

GPW had 193 employees at the end of 2017, including 170 employees with university education and 23 employees with secondary education. The Group had 341 employees at the end of 2017, including 289 employees with university education and 52 employees with secondary education.

GPW INCENTIVE SYSTEM

GPW's HR policy is largely based on employee engagement; hence, the Company attaches special importance to employee incentives. The basic salary offered by GPW is tied to the employee's potential, competences and performance.

According to the Bonus Rules, the incentive system covers all GPW employees other than the Management Board. The objective is to incentivise employees' superior performance based on individual targets.

The system includes appraisal of employee attitudes. The appraisal identifies the employee's strengths and areas for improvement.

Every Exchange employee has wide access to fringe benefits including: health care, reimbursement of commuting costs, the Employee Pension Scheme, a canteen system, loans including housing and medical loans, as well as payments from the Company Social Benefits Fund.

GPW CODE OF ETHICS

In addition to improvement of professional qualifications, GPW also takes steps to develop its value-based corporate culture which is unique in awarding and applying employee initiatives that improve the effectiveness of the organisation.

The GPW Employee Code of Ethics came into force in November 2013. It defines the core values applicable to all activities of the Company. The Code of Ethics was amended in 2014. It outlines the principles and values to be followed by all GPW employees; disseminates and promotes a culture of compliance with the law and decision-making based on ethical criteria in the following areas: mutual relations among employees, relations with customers and counterparties, relations with competitors, communication, promotion and advertising; and lays down sanctions for non-compliance. The document has been signed by all GPW employees.

In 2015, pursuant to the GPW Group's CSR strategy, the Company's Code of Ethics was implemented in the companies Towarowa Giełda Energii and BondSpot.

OCCUPATIONAL HEALTH AND SAFETY POLICY

GPW's priorities include a healthy, safe and friendly work environment which supports the development of the professional potential of all Exchange employees. Under its occupational health and safety policy approved in 2014, the Company works to prevent accidents at work, occupational diseases and potential incidents, to continuously improve occupational health and safety and fire protection, to improve employee qualifications, and to integrate their role and engagement in occupational health and safety initiatives. GPW's occupational health and safety policy was integrated into the subsidiaries TGE and BondSpot in 2015. There were no accidents at work at GPW in 2017.

EMPLOYEE VOLUNTEERING

Employee volunteering is one of the forms of GPW's corporate social responsibility activities. In their volunteering work, Group companies support the youth education and care centre in Franciszków and two family children's homes in Ruszków. Group employees prepare Christmas gifts every year. In the past years, GPW employees collected clothing and provided the centre with equipment including sports equipment.

TRAINEESHIPS AND INTERNSHIP

The Warsaw Stock Exchange puts a strong emphasis on capital market education and learning of young people.

For many years, the Exchange has offered traineeship opportunities to university students. The students major in different disciplines including Economics, Finance, and Marketing. Furthermore, GPW runs a programme addressed to the winners of the Capital Market Leaders Academy organised by the Lesław A. Paga Foundation in partnership with GPW and to Polish students of foreign universities in the GO4Poland programme.

CHARITY INITIATIVES

On 14 December 2017, GPW hosted a Capital Market Christmas Party with close to 300 participants: government officials, listed companies, banks, brokers and investors. The event featured a charity auction whose proceeds went towards the acquisition of a fire truck for the municipality of Trzebuń in Pomerania. Trzebuń was one of the towns in the region badly hit by a natural disaster in the summer of 2017. The initiative supported the local community and its fire fighters who continue to grapple with the impact of last year's bad weather. In 2017, GPW supported the Polish Humanitarian Action (PAH) by buying Christmas cards. P art of the proceeds went towards a food programme for children in schools and community clubs across Poland.

GPW Group supports employee's social responsibility and integrates employees around volunteer initiatives.

IV. 5. Environmental impact reduction

Since 2015, pursuant to the new CSR strategy, all GPW Group companies have in place a uniform environmental policy designed to reduce the companies' environmental impact and raise environmental awareness of Group employees. As the companies operate in the financial industry, the main areas of the environmental policy include: waste management and recycling; paper consumption; water consumption; energy consumption; fuel consumption and CO_2 emissions; as well as employee education through internal communications.

Furthermore, in view of its activity and role on the Polish capital and commodity market, the GPW Group may indirectly impact the environment by promoting good behaviour of issuers and investors, for instance through promotion of and education on responsible investing and through the products and services it offers. In 2017, the GPW Group relocated most of the Group companies (except GPW InfoEngine S.A.) to the head office of the parent entity. Consequently, all initiatives that reduce environmental impact at the building housing the principal offices of GPW were shared by the GPW Group subsidiaries.

WASTE MANAGEMENT AND RECYCLING

According to its Waste Management Procedure, GPW delivers solid waste for treatment by recycling or disposal. Since February 2014, the Company segregates waste. More than a third of waste produced by GPW in 2017 was segregated and recycled. Decommissioned computer hardware is sold to the

Company's employees at auctions. Two auctions were held in 2017 and 142 pieces of hardware and 206 pieces of other equipment were sold.

PAPER CONSUMPTION

In March 2017, the new electronic document system ELO replaced ESOD, a legacy system in operation from 2011. The modern upgraded system covered a broader scope of electronic documents including incoming and outgoing letters, internal communication, consultation and approval of contracts, in-house and third-party procurement, invoice approval, and holiday leave approval. The implementation of the system eliminated paper documents in all these areas and in communication across GPW units.

Internal communication continued in 2017 in order to promote environmental behaviour of employees.

WATER CONSUMPTION

In 2017, the Exchange continued communications targeting employees and visitors to promote environmental behaviour with regard to water consumption. The fees paid by the Company for water consumption increased by ca. 2.5 percent year on year in 2017.

ENERGY CONSUMPTION

Centrum Giełdowe has in place advanced environmental solutions which reduce energy consumption. Offices are equipped only with lamps whose energy consumption is lower than that of traditional light bulbs and halogen lamps. The operation of lifts is optimised and the underground car park is heated with air pumped out of offices. GPW's head office is equipped with a Building Management System (BMS) which controls installations within the building and consequently optimises the consumption of heat, power, water, air (ventilators) and ice water for air-conditioning. BMS supports programming of lighting in offices and corridors, which is automatically switched off at 8 p.m. throughout the building. The Company's energy consumption increased by only 3.6% at cost year on year in 2016.

FUEL CONSUMPTION AND CO_2 EMISSIONS

GPW's car fleet only includes vehicles which conform to applicable emission standards (EURO-4 or EURO-5). According to legal requirements, GPW pays environmental fees (for business cars). Fuel consumption in the Company was increased by ca. 10% year on year in 2016 (as measured by the volume of fuel consumption by company cars in the corporate fleet).

PRODUCTS AND SERVICES

GPW Group companies offer products and services which indirectly support environmental efforts and impact the attitudes of participants of the markets operated by the Group companies. The RESPECT Index is such a product on the financial market.

In its core business, Towarowa Giełda Energii maintains a Register of Certificates of Origin and operates trade in property rights which are an integral element of the system of support for producers of electricity from renewable energy sources and cogeneration.

Furthermore, since November 2014, TGE operates a Register of Guarantees of Origin. Guarantees of origin of energy are an element of the EU's environmental policy and disclose the type of source and fuel used to generate power. As power itself cannot be labelled, a system has been put in place where documents (guarantees) are generated together with power and expire when delivered to the end consumer. Guarantees of origin of energy from renewable energy sources (RES) are an additional important incentive for the growth of the sector. TGE's Register of Guarantees of Origin is addressed to producers of energy from renewable energy sources, brokers and all interested parties who need certification of the origin of electricity from renewable energy sources.

V. FINANCIAL POSITION AND ASSETS OF THE GPW GROUP

V. 1 Summary of results

The GPW Group generated revenue of PLN 352.0 million in 2017 compared to PLN 310.9 million in 2016, representing an increase of 13.2% or PLN 41.1 million. The revenue included revenue from the financial market of PLN 208.8 million and revenue from the commodity market of PLN 142.1 million. The Group's operating expenses stood at PLN 165.8 million in 2017 compared to PLN 150.2 million in 2016, representing an increase of 10.4% or PLN 15.6 million. The growth rate of revenue was greater than the growth rate of expenses. Consequently, the Group's operating profit increased year on year in 2017.

The GPW Group generated EBITDA[42] of PLN 212.2 million in 2017, an increase of PLN 28.5 million compared to PLN 183.7 million in 2016.

The GPW Group generated an operating profit of PLN 183.9 million in 2017 compared to PLN 157.9 million in 2016, representing an increase of 16.5% or PLN 26.0 million. The increase of the operating profit year on year in 2017 was mainly a result of higher revenue of the Group. The revenue increased both on the financial market and on the commodity market. The revenue on the financial market increased by 13.7% or PLN 25.2 million, and the highest increase was reported for revenue from trade in equities and equity-related instruments. The revenue on the commodity market increased by 13.4% or PLN 16.8 million, and the highest increase was reported for revenue from trade in property rights.

The net profit of the Group stood at PLN 156.1 million in 2017 compared to PLN 131.1 million in 2016, representing an increase of 19,0% or PLN 25,0 million. The increase of the net profit year on year in 2017 was driven by a higher operating profit as well as higher share of profit of associates which stood at PLN 10.1 million in 2017 compared to PLN 3.5 million in 2016.

GPW's EBITDA[43] stood at PLN 109.1 million in 2017, an increase of 19.8% compared to PLN 91.1 million in 2016.

GPW generated a separate operating profit of PLN 89.6 million in 2017 compared to PLN 71.7 million in 2016.

GPW's net profit was PLN 69.0 million in 2017 compared to PLN 116.1 million in 2016, a decrease of 40.5% or PLN 47.1 million. The decrease of the net profit year on year in 2017 was due to the non-payment of dividend by the subsidiary TGE. Towarowa Giełda Energii S.A. paid no dividend for 2016 in 2017 as it was required to repay a credit facility and a loan taken to pay outstanding VAT.

Towarowa Giełda Energii generated an operating profit of PLN 62.0 million in 2017 compared to PLN 55.2 million in 2016, representing an increase of 12.2% or PLN 6.8 million. The net profit of TGE stood at PLN 69.3 million and PLN 52.7 million, respectively, in the periods under review, representing an increase of 31.7% or PLN 16.7 million in 2017.

IRGiT generated an operating profit of PLN 30.2 million in 2017 compared to PLN 31.3 million in 2016, representing a decrease of 3.5% or PLN 1.1 million. IRGiT generated a net profit of PLN 24.9 million in 2017 compared to PLN 26.5 million in 2016, representing a decrease of 6.2% or PLN 1.7 million.

BondSpot generated an operating profit of PLN 3.2 million in 2017 compared to PLN 1.3 million in 2016, representing an increase of 138.3% or PLN 1.9 million. The net profit stood at PLN 2.8 million and PLN 1.3 million, respectively, in the periods under review, representing an increase of 109.9% or PLN 1.4 million.

Detailed information on changes in revenues and expenses is presented in the sections below.

[42] GPW Group's operating profit before depreciation and amortisation.
[43] GPW's operating profit before depreciation and amortisation.

Table 31 Consolidated profit and loss account of GPW Group by quarter in 2016 and 2017 and by year in 2015 – 2017

	2017				2016						
PLN'000	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	2017	2016	2015
Sales revenue	**92,169**	**81,119**	**87,635**	**91,034**	**81,712**	**73,658**	**74,461**	**81,031**	**351,956**	**310,862**	**327,890**
Financial market	**51,875**	**48,851**	**52,500**	**55,623**	**49,725**	**46,673**	**42,891**	**44,409**	**208,849**	**183,698**	**199,955**
Trading	34,621	31,903	35,966	38,846	33,247	30,941	26,561	28,330	141,336	119,079	136,948
Listing	6,278	6,278	6,065	6,347	6,140	5,790	6,129	5,871	24,968	23,930	24,497
Information services	10,976	10,670	10,469	10,430	10,338	9,942	10,201	10,208	42,545	40,689	38,510
Commodity market	**40,215**	**31,989**	**34,770**	**35,115**	**31,318**	**26,732**	**31,003**	**36,201**	**142,088**	**125,254**	**125,193**
Trading	20,170	16,699	17,643	15,580	16,494	13,607	14,119	16,637	70,092	60,857	62,552
Register of certificates of origin	7,963	5,768	7,783	9,114	3,664	5,492	7,797	7,954	30,628	24,907	24,166
Clearing	11,990	9,435	9,258	10,336	11,082	7,543	9,007	11,531	41,019	39,163	38,475
Information services *	92	87	86	85	78	90	80	79	349	327	-
Other revenue	**79**	**279**	**365**	**296**	**669**	**253**	**567**	**421**	**1,019**	**1,910**	**2,743**
Operating expenses	**48,978**	**32,505**	**37,765**	**46,515**	**37,736**	**28,271**	**38,026**	**46,122**	**165,763**	**150,155**	**174,391**
Depreciation and amortisation	7,566	7,342	7,024	6,393	6,085	6,797	6,541	6,370	28,325	25,793	26,837
Salaries	14,122	12,239	11,897	12,506	11,835	9,060	15,128	13,837	50,764	49,860	56,662
Other employee costs	3,070	2,867	3,002	3,142	2,770	2,574	2,764	3,192	12,081	11,300	11,426
Rent and maintenance fees	2,098	2,187	2,613	2,607	2,549	2,425	2,250	2,220	9,505	9,444	9,785
Fees and charges	233	(5,524)	229	11,615	(11)	(2,123)	501	11,642	6,553	10,009	23,627
incl. PFSA fees	*3*	*(5,781)*	*-*	*11,357*	*45*	*(2,140)*	*3*	*11,213*	*5,579*	*9,121*	*22,047*
External service charges	20,347	12,183	11,650	9,014	13,178	8,395	9,456	7,558	53,194	38,587	39,621
Other operating expenses	1,544	1,209	1,350	1,238	1,329	1,143	1,386	1,303	5,341	5,162	6,433
Other income	1,767	1,731	31	330	979	205	204	348	3,859	1,736	1,962
Other expenses	559	308	868	4,414	3,583	360	46	564	6,149	4,553	2,151
Operating profit	**44,398**	**50,037**	**49,033**	**40,435**	**41,372**	**45,232**	**36,593**	**34,693**	**183,903**	**157,890**	**153,310**
Financial income	1,284	1,334	1,538	1,394	2,311	3,430	5,246	1,963	5,550	12,950	9,941
Financial expenses	2,438	(1,339)	2,497	7,551	3,199	2,971	2,928	2,981	11,147	12,079	12,117
Share of profit of associates	1,910	3,609	3,045	1,495	1,236	2,296	1,354	(1,368)	10,059	3,518	(1,530)
Profit before income tax	**45,154**	**56,319**	**51,119**	**35,773**	**41,720**	**47,987**	**40,265**	**32,307**	**188,365**	**162,279**	**149,604**
Income tax expense	5,754	9,320	9,173	8,027	8,750	8,457	7,147	6,791	32,274	31,145	28,062
Profit for the period	**39,400**	**46,999**	**41,946**	**27,746**	**32,970**	**39,530**	**33,118**	**25,516**	**156,091**	**131,134**	**121,542**

** a new segment was extracted on the commodity market, therefor the Information services data on the financial market were adjusted in previous quarters*

Source: Consolidated Financial Statements, Company

Comment: The quarterly and annual financial data presented in this Report for the years 2016 and 2015 include adjustments following a change of the taxation of certain services provided by the subsidiary TGE with VAT and the required adjustment of the resulting VAT payments for previous years.

Note: For some items, the sum of the amounts in the columns or lines of the tables presented in this Report may not be exactly equal to the sum presented for such columns or lines. Some percentages presented in the tables in this Report have also been rounded off and the sums in such tables may not be exactly equal to 100%. Percentage changes between comparable periods were calculated on the basis of the original amounts (not rounded off).

Table 32 Consolidated statement of financial position of GPW Group by quarter in 2015 – 2017

	2017				2016				2015
PLN'000	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Non-current assets	**596,354**	**594,774**	**597,220**	**597,334**	**597,287**	**584,694**	**579,574**	**577,028**	**580,645**
Property, plant and equipment	110,784	112,036	113,777	116,716	119,130	119,554	121,539	122,252	125,229
Intangible assets	267,991	268,916	271,380	272,490	273,815	262,401	258,057	259,870	261,728
Investment in associates	207,389	205,221	201,590	198,577	197,231	196,025	191,412	187,221	188,570
Deferred tax assets	3,803	1,796	3,349	3,261	1,809	1,749	3,041	2,947	-
Available-for-sale financial assets	271	280	278	278	288	288	290	285	282
Non-current prepayments	6,116	6,525	6,846	6,012	5,014	4,677	5,235	4,453	4,836
Current assets	**550,699**	**513,493**	**615,476**	**592,548**	**560,561**	**524,879**	**602,030**	**583,701**	**492,454**
Inventories	56	54	53	60	57	67	73	71	135
Corporate income tax receivable	71	95	71	559	428	300	234	490	369
Trade and other receivables	64,096	63,768	89,069	165,243	113,262	100,579	99,965	99,202	131,557
Other current assets	-	-	-	-	-	-	-	3	-
Cash and cash equivalents	486,476	449,576	526,283	426,686	446,814	423,933	501,758	483,935	360,393
Total assets	**1,147,053**	**1,108,267**	**1,212,696**	**1,189,882**	**1,157,848**	**1,109,573**	**1,181,604**	**1,160,729**	**1,073,099**
Equity	**811,481**	**771,612**	**724,591**	**772,849**	**745,252**	**712,325**	**672,818**	**738,734**	**713,192**
Share capital	63,865	63,865	63,865	63,865	63,865	63,865	63,865	63,865	63,865
Other reserves	1,347	1,128	1,106	1,035	1,184	1,537	1,560	1,481	1,455
Retained earnings	745,696	706,058	659,085	707,399	679,678	646,411	606,896	672,835	647,326
Non-controlling interests	573	561	535	550	525	512	497	553	546
Non-current liabilities	**259,951**	**260,449**	**258,780**	**258,516**	**143,422**	**137,504**	**137,632**	**134,571**	**258,930**
Liabilities under bond issue	243,573	243,475	243,378	243,281	123,459	123,733	123,669	123,606	243,800
Employee benefits payable	1,454	1,468	1,838	2,274	1,832	2,254	4,686	4,400	4,046
Finance lease liabilities	-	-	-	17	32	48	58	72	84
Accruals and deferred income	5,592	5,996	6,064	6,132	6,200	-	-	-	-
Deferred income tax liability	7,108	7,286	5,276	4,588	9,675	9,245	6,995	6,493	11,000
Other liabilities	2,224	2,224	2,224	2,224	2,224	2,224	2,224	-	-
Current liabilities	**75,621**	**76,206**	**229,325**	**158,517**	**269,174**	**259,744**	**371,154**	**287,424**	**100,977**
Liabilities under bond issue	1,938	2,100	1,896	2,069	122,882	123,002	121,047	122,881	682
Trade payables *	21,303	6,169	3,496	6,199	6,387	2,841	6,288	6,182	8,597
Employee benefits payable	12,958	10,515	8,060	5,812	8,114	8,872	10,379	7,246	9,457
Finance lease liabilities	31	48	64	62	62	61	55	55	55
Corporate income tax payable	6,012	4,587	7,597	13,188	16,154	11,911	10,920	9,058	2,833
Credits and loans	-	20,021	59,958	59,798	-	-	-	-	-
Accruals and deferred income *	7,386	15,641	37,194	41,722	7,144	11,630	31,021	38,966	7,263
Provisions for other liabilities and charges	210	191	318	317	333	179	649	649	621
Other current liabilities	25,783	16,934	110,742	29,350	108,098	101,248	190,795	102,387	71,469
Total equity and liabilities	**1,147,053**	**1,108,267**	**1,212,696**	**1,189,882**	**1,157,848**	**1,109,573**	**1,181,604**	**1,160,729**	**1,073,099**

** As at 31 December 2017 accruals are presented under trade payables*

Source: Consolidated Financial Statements, Company

V. 2 Presentation of the financials

REVENUE

The Group has three revenue-generating segments:

- financial market,
- commodity market,
- other revenues.

Revenues from the financial market include revenues from:

- trading;

- listing;

- information services and calculation of reference rates.

Trading revenue includes fees paid by market participants in respect of:

- transactions on markets of equities and equity-related instruments;
- transactions in derivative financial instruments;
- transactions in debt instruments;
- transactions in other cash market instruments;
- other fees paid by market participants.

Revenues from transactions in equities and equity-related securities are the Group's main source of trading revenues and its main source of sales revenues in general.

Revenues from transactions in derivative financial instruments are the third biggest source of trading revenues on the financial market. Transactions in WIG20 index futures account for the majority of revenues from transactions in derivatives.

Revenues from transactions in debt instruments were the second largest source of trading revenues on the financial market in 2017. Revenues from transactions in debt instruments are generated by the Catalyst market as well as the Treasury BondSpot Poland market operated by BondSpot S.A., a subsidiary of GPW.

Revenues from transactions in other cash market instruments include fees for trading in structured products, investment certificates, warrants and ETF (Exchange Traded Fund) units.

Listing revenues include two elements:

- one-off fees paid for introduction of shares and other instruments to trading on the exchange;
- periodic listing fees.

Revenues from other fees paid by market participants include mainly fees for services providing access to and use of the trading system.

Revenues from information services mainly include fees paid by data vendors for real-time market data as well as historical and statistical data. Real-time data fees include fixed annual fees and monthly fees based on the data vendor's number of subscribers and the scope of data feeds used by a subscriber. Revenues from real-time information services include revenue from WIBOR and WIBID reference rates.

Revenues of the Group in the commodity market segment include revenues of TGE and IRGiT as well as revenues of InfoEngine from its activity as a trade operator and the entity responsible for balancing.

Revenue on the commodity market includes the following:

- trading,
- operation of the Register of Certificates of Origin,
- clearing,
- information services.

Trading revenue on the commodity market includes:

- revenue from trading in electricity (spot and forward),
- revenue from trading in natural gas (spot and forward),
- revenue from trading in property rights (spot and forward),
- other fees paid by market participants (members).

Other fees paid by market participants include TGE fees, including revenues from the operation of RRM, as well as revenues of InfoEngine as a trade operator and the entity responsible for balancing.

Revenues of the sub-segment "clearing" include revenues of the company IRGiT, which clears and settles exchange transactions concluded on TGE, manages the resources of the clearing guarantee system and determines the amount of credits and debits of IRGiT members resulting from their transactions.

The Group's other revenues include revenues of GPW and the TGE Group, among others, from educational services, office space lease, and sponsorship.

The Group's sales revenues amounted to PLN 352.0 million in 2017, an increase of 13.2% (PLN 41.1 million) year on year.

The increase in sales revenues year on year in 2017 was driven by a strong increase in revenues from the financial market segment by 13.7% (PLN 25.2 million). The increase was mainly driven by an increase in revenue from trading in equities owing to a high increase of the value of trade on the equity market. The revenue on the commodity market increased by PLN 16.8 million or 13.4% year on year in 2017. The increase of revenue on the commodity market was mainly driven by revenue from trade in property rights as well as the operation of the register of certificates of origin.

The revenue of TGE stood at PLN 97.1 million in 2017 compared to PLN 83.3 million in 2016. The revenue of IRGiT was PLN 44.3 million in 2017 compared to PLN 42.4 million in 2016. The revenue of BondSpot S.A. stood at PLN 13.0 million and PLN 11.0 million, respectively, in 2017 and 2016.

The revenue of the GPW Group by segment is presented below.

Table 33 Consolidated revenues of GPW Group and revenue structure in 2015 - 2017

	Year ended 31 December						Change (2017 vs 2016)	Change (%) (2017 vs 2016)
PLN'000, %	2017	%	2016	%	2015	%		
Financial market	**208,849**	**59%**	**183,698**	**59%**	**199,955**	**61%**	**25,151**	**13.7%**
Trading revenue	141,336	40%	119,079	38%	136,948	42%	22,257	18.7%
Equities and equity-related instruments	109,564	31%	89,520	29%	107,941	33%	20,044	22.4%
Derivative instruments	11,888	3%	12,202	4%	11,578	4%	(314)	-2.6%
Other fees paid by market participants	7,498	2%	6,836	2%	6,383	2%	662	9.7%
Debt instruments	11,958	3%	10,111	3%	10,669	3%	1,847	18.3%
Other cash instruments	428	0%	410	0%	376	0%	18	4.4%
Listing revenue	24,968	7%	23,930	8%	24,497	7%	1,038	4.3%
Listing fees	20,013	6%	19,918	6%	19,229	6%	95	0.5%
Introduction fees, other fees	4,955	1%	4,012	1%	5,268	2%	943	23.5%
Information services	42,545	12%	40,689	13%	38,510	12%	1,856	4.6%
Real-time information	39,529	11%	37,933	12%	36,069	11%	1,596	4.2%
Indices and historical and statistical information	3,016	1%	2,756	1%	2,441	1%	260	9.4%
Commodity market	**142,088**	**40%**	**125,254**	**40%**	**125,193**	**38%**	**16,834**	**13.4%**
Trading revenue	70,092	20%	60,857	20%	62,552	19%	9,235	15.2%
Electricity	8,815	3%	10,191	3%	14,390	4%	(1,376)	-13.5%
Spot	2,680	1%	2,976	1%	2,760	1%	(296)	-9.9%
Forward	6,135	2%	7,215	2%	11,630	4%	(1,080)	-15.0%
Gas	10,846	3%	9,235	3%	8,311	3%	1,611	17.4%
Spot	2,441	1%	2,655	1%	1,601	0%	(214)	-8.1%
Forward	8,405	2%	6,580	2%	6,710	2%	1,825	27.7%
Property rights in certificates of origin	39,614	11%	32,003	10%	32,369	10%	7,611	23.8%
Other fees paid by market participants	10,817	3%	9,428	3%	7,481	2%	1,389	14.7%
Register of certificates of origin	30,628	9%	24,907	8%	24,166	7%	5,721	23.0%
Clearing	41,019	12%	39,163	13%	38,475	12%	1,856	4.7%
Information services	349	0%	327	0%	-	0%	22	6.8%
Other revenue	**1,019**	**0%**	**1,910**	**1%**	**2,743**	**1%**	**(891)**	**-46.6%**
Total	**351,956**	**100%**	**310,862**	**100%**	**327,890**	**100%**	**41,094**	**13.2%**

Source: Consolidated Financial Statements, Company

The Group earns revenue both from domestic and foreign clients. The table below presents revenue by geographic segment.

Table 34 Consolidated revenues of GPW Group by geographical segment in 2015 - 2017

	Year ended 31 December						Change (2017 vs 2016)	Change (%) (2017 vs 2016)
PLN'000, %	2017	%	2016	%	2015	%		
Revenue from foreign customers	83,535	24%	71,917	23%	73,308	22%	11,618	16.2%
Revenue from local customers	268,421	76%	238,945	77%	254,582	78%	29,476	12.3%
Total	**351,956**	**100%**	**310,862**	**100%**	**327,890**	**100%**	**41,094**	**13.2%**

Source: Consolidated Financial Statements, Company

The average EUR/PLN exchange rate was 4.26 EUR/PLN in 2017, 4.36 EUR/PLN in 2016, and 4.18 EUR/PLN in 2015.

The Group is not dependent on any single client as no client has a share exceeding 10% of the total sales revenue.

FINANCIAL MARKET

TRADING

The revenues of the Group from trading on the financial market stood at PLN 141.3 million in the year ended on 31 December 2017 compared to PLN 119.1 million in 2016.

The share of trading revenue in the total revenue on the financial market was 67.7% in 2017 compared to 64.8% in 2016. The biggest share in trading revenue (85.6%) is that of the revenue on the Main Market, which stood at PLN 121.0 million in 2017 (an increase of 19.7 million year on year). The remaining share in revenue is that of Treasury BondSpot Poland, NewConnect and Catalyst.

Equities and equity-related instruments

Revenues of the Group from trading in **equities and equity-related instruments** amounted to PLN 109.6 million in 2017 compared to PLN 89.5 million in 2016.

The value of trading in equities on the Main Market increased by 29%, including an increase of trading on the electronic order book by 24.8% and an increase of the value of block trades by 91.1%; as a result, the trading revenue from equities increased by 22.4% year on year in 2017. The increase in revenue from trading in equities and equity-related instruments was lower that the increase in the value of trading due to the reductions of fees introduced in November 2016. In addition, the share of HVP/HVF programme participants, who pay lower fees, in the total value of trading in equities increased (from 10.2% to ca. 11.5%) in 2017.

In November 2016, GPW reduced fixed fees on an order from PLN 0.20 to PLN 0.15. The reduction affected revenue in all months of 2017 and only two months of 2016. The fee reductions were offered in 2016 in order to offset the impact of changes to market supervision fees paid to the Polish Financial Supervision Authority by a broader range of entities as of the beginning of 2016.

Table 35 Data for the markets in equities and equity-related instruments

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	**2016**	**2015**		
Financial market, trading revenue: equities and equity-related instruments *(PLN million)*	**109.6**	**89.5**	**107.9**	**20.0**	**22.4%**
Main Market:					
Value of trading (PLN billion)	261.0	202.3	225.3	58.7	29.0%
Volume of trading (billions of shares)	15.4	14.0	16.5	1.4	9.7%
NewConnect:					
Value of trading (PLN billion)	1.5	1.4	1.9	0.1	7.9%
Volume of trading (billions of shares)	2.8	3.5	3.8	(0.7)	-19.8%

Source: Company

Derivatives

Revenues of the Group from transactions in derivatives on the financial market amounted to PLN 11.9 million in 2017 compared to PLN 12.2 million in 2016.

The decrease in revenues from transactions in derivatives year on year in 2017 was driven by a decrease in the volume of trading in WIG20 futures (by 3.7%) and a decrease of the volume of trading in other futures except single-stock futures. The volume of trade in single-stock futures increased by 7.4% year on year in 2017. The total volume of trade in futures decreased by 4.4% in 2017.

Table 36 Data for the derivatives market

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
Financial market, trading revenue: derivatives *(PLN million)*	**11.9**	**12.2**	**11.6**	**(0.3)**	**-2.6%**
Volume of trading in derivatives (millions of contracts):	7.6	8.0	8.2	(0.4)	-4.4%
incl.: Volume of trading in WIG20 futures (millions of contracts)	4.5	4.7	4.4	(0.2)	-3.7%

Source: Company

Other fees paid by market participants

Revenues of the Group from other fees paid by market participants stood at PLN 7.5 million in 2017 compared to PLN 6.8 million in 2016, representing an increase of 9.7% or PLN 0.7 million. The fees mainly include fees for access to the trading system (among others, licence fees, connection fees and maintenance fees) as well as fees for use of the system.

Debt instruments

Revenues of the Group from transactions in **debt instruments** stood at PLN 12.0 million in 2017 compared to PLN 10.1 million in 2016, representing an increase of 18.3% or PLN 1.8 million. As a result, revenues from transactions in debt instruments were the second largest source of trading revenue. The majority of the Group's revenues (PLN 11.2 million in 2017) from the debt instruments segment is generated by Treasury BondSpot Poland (TBSP).

The increase of revenues from transactions in debt instruments year on year in 2017 was driven by higher revenue on TBSP.

The increase of revenue on TBSP year on year in 2017 was driven mainly by changes to TBSP's price list as of 1 January 2017.

The total value of transactions in Polish Treasury securities on TBSP was PLN 534.7 billion in 2017, representing an increase of 29.5% year on year. The increase was driven mainly by conditional transactions. The value of conditional transactions was PLN 338.5 billion in 2017, representing an increase of 113.8% year on year. The value of cash transactions was PLN 196.2 billion in 2017, representing a decrease of 22.9% year on year. The sharp increase in the value of conditional transactions (sell/buy back, repo) was driven by high liquidity in the Polish banking sector and stabilisation of bank activity in this market segment following a strong decrease in the value of transactions caused by deleveraging after the bank tax was imposed in February 2016.

In 2017, the Polish bond market was impacted by strong capital flows resulting from the activity of the main central banks. On the one hand, FED's monetary policy included three interest rate hikes in 2017; on the other hand, ECB continued its quantitative easing in pursuit of economic growth and to fend off deflation. These activities impacted the market interest rates and bond prices on the core markets, which in turn impacted prices and yields on the local market. The prices of Polish bonds were also driven by local factors including Poland's strong economy, faster growth, improved fiscal position, return to inflation and the resulting increase of expectations of a turn in the policy of the Monetary Policy Council (RPP).

The value of trading on Catalyst decreased by 11.1% year on year in 2017. However, revenues from Catalyst have a small share in the Group's total revenues from transactions in debt instruments.

Table 37 Data for the debt instruments market

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
Financial market, trading revenue: debt instruments *(PLN million)*	**12.0**	**10.1**	**10.7**	**1.8**	**18.3%**
Catalyst:					
Value of trading (PLN billion)	2.8	3.1	2.5	(0.3)	-11.1%
incl.: Value of trading in non-Treasury instruments (PLN billion)	1.9	2.1	1.9	(0.2)	-11.5%
Treasury BondSpot Poland, value of trading:					
Conditional transactions (PLN billion)	338.5	158.3	338.7	180.1	113.8%
Cash transactions (PLN billion)	196.2	254.5	260.7	(58.3)	-22.9%

Source: Company

Other cash market instruments

Revenues from transactions in other cash market instruments amounted to PLN 428 thousand in 2017 compared to PLN 410 thousand in 2016. The revenues include fees for trading in structured products, investment certificates, ETF units and warrants.

LISTING

Listing revenues of the Group on the financial market amounted to PLN 25.0 million in 2017 compared to PLN 23.9 million in 2016.

Revenues from **listing fees** amounted to PLN 20.0 million in 2017 compared to PLN 19.9 million in 2016. The main driver of revenues from listing fees is the number of issuers listed on the GPW markets and their capitalisation at the year's end.

Revenues from **fees for introduction and other fees** amounted to PLN 5.0 million in 2017 compared to PLN 4.0 million in 2016. The revenues are driven mainly by the number and value of new listings of shares and bonds on the GPW markets.

Listing revenues on the GPW Main Market increased by 2.8% year on year in 2017 to PLN 20.1 million. The table below presents the key financial and operating figures for the Main Market.

Table 38 Data for the GPW Main Market

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
Main Market					
Listing revenue (PLN million)	**20.1**	**19.6**	**20.2**	**0.5**	**2.8%**
Total capitalisation of listed companies *(PLN billion)*	1,379.9	1,115.7	1,082.9	264.1	23.7%
including: Capitalisation of listed domestic companies	671.0	557.1	516.8	113.9	20.4%
including: Capitalisation of listed foreign companies	708.9	558.6	566.1	150.3	26.9%
Total number of listed companies	482	487	487	(5.0)	-1.0%
including: Number of listed domestic companies	432	434	433	(2.0)	-0.5%
including: Number of listed foreign companies	50	53	54	(3.0)	-5.7%
Value of offerings *(IPO and SPO) (PLN billion)* *	98.2	4.9	44.8	93.3	1901.8%
Number of new listings *(in the period)*	15	19	30	(4.0)	-21.1%
Capitalisation of new listings *(PLN billion)*	16.7	5.6	5.2	11.1	197.2%
Number of delistings	20	19	14	1.0	5.3%
Capitalisation of delistings** (PLN billion)	8.1	7.3	11.1	0.8	11.4%

** including SPO of UniCredit S.p.A. at PLN 55.9 billion in Q1 2017 and SPO of Banco Santander S.A. at PLN 30.1 billion in Q3 2017*

*** based on market capitalisation at the time of delisting*

Source: Company

Listing revenues from NewConnect were PLN 2.2 million in 2017 compared to PLN 2.3 million in 2016. The table below presents the key financial and operating figures.

Table 39 Data for NewConnect

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
NewConnect					
Listing revenue *(PLN million)*	**2.2**	**2.3**	**2.4**	**(0.04)**	**-1.7%**
Total capitalisation of listed companies *(PLN billion)*	9.6	9.8	8.7	(0.2)	-1.9%
including: Capitalisation of listed domestic companies	9.4	9.5	8.4	(0.1)	-0.7%
including: Capitalisation of listed foreign companies	0.2	0.3	0.2	(0.1)	-35.7%
Total number of listed companies	408	406	418	2.0	0.5%
including: Number of listed domestic companies	401	398	408	3.0	0.8%
including: Number of listed foreign companies	7	8	10	(1.0)	-12.5%
Value of offerings *(IPO and SPO) (PLN billion)*	0.3	0.2	0.4	0.1	57.6%
Number of new listings *(in the period)*	19	16	19	3.0	18.8%
Capitalisation of new listings *(PLN billion)*	1.0	0.5	0.6	0.5	86.1%
Number of delistings*	17	30	32	(13.0)	-43.3%
Capitalisation of delistings** (PLN billion)	1.1	1.3	1.5	(0.2)	-18.0%

** includes companies which transferred to the Main Market*

*** based on market capitalisation at the time of delisting*

Source: Company

Listing revenues from Catalyst increased year on year in 2017. The increase resulted from an increase in the number of listed instruments: 608 at the end of 2017 compared to 566 at the end of 2016. The table below presents the key financial and operating figures.

Table 40 Data for Catalyst

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
Catalyst					
Listing revenue *(PLN million)*	**2.6**	**2.1**	**2.0**	**0.5**	**25.8%**
Number of issuers	161	176	192	(15)	-8.5%
Number of issued instruments	608	566	532	42	7.4%
including: non-Treasury instruments	566	525	496	41	7.8%
Value of issued instruments *(PLN billion)*	751.7	707.4	613.1	44.3	6.3%
including: non-Treasury instruments	95.8	81.8	69.6	14.0	17.1%

Source: Company

INFORMATION SERVICES

Revenues from information services amounted to PLN 42.9 million in 2017 compared to PLN 41.0 million in 2016. The increase in revenue was driven by a large increase of the number of subscribers and by the launch of WIBID and WIBOR reference rate services.

Table 41 Data for information services

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
Revenues from information services and WIBID and WIBOR reference rate services * *(PLN million)*	**42.9**	**41.0**	**38.5**	**1.9**	**4.6%**
Number of data vendors	52	51	54	1	2.0%
Number of subscribers ('000 subscribers)	244.8	224.6	221.1	20.2	9.0%

** revenues from information services contein financial market data and commodity market data*

Source: Company

COMMODITY MARKET

Revenues on the commodity market include mainly the revenues of the TGE Group.

Revenues of the TGE Group are driven mainly by the volume of transactions in electricity, natural gas and property rights, the volume of certificates of origin issued and cancelled by members of the Register of Certificates of Origin, as well as revenues from clearing and settlement of transactions in exchange-traded commodities in the clearing sub-segment operated by IRGiT.

Revenues of the GPW Group on the commodity market stood at PLN 142.1 million in 2017 compared to PLN 125.2 million in 2016.

The increase of revenues on the commodity market year on year in 2017 was mainly driven by an increase in revenues from trade in property rights to certificates of origin and from the operation of the register of certificates of origin.

TRADING

Revenues from trading on the commodity market stood at PLN 70.1 million in 2017, an increase of PLN 9.2 million compared to PLN 60.9 million in 2016.

The Group's revenues from trade in electricity amounted to PLN 8.8 million in 2017 compared to PLN 10.2 million in 2016. Revenues from trading in electricity included PLN 2.7 million of revenues from spot transactions and PLN 6.1 million of revenues from forward transactions. The total volume of trading on the energy markets operated by TGE amounted to 111.7 TWh in 2017 compared to 126.7 TWh in 2016. The volume of trade in electricity decreased mainly for forward transactions in view of the reduction of the obligation to trade in electricity on the regulated market due to the gradual phasing out of support for long-term contracts.

The Group's revenues from trade in gas amounted to PLN 10.8 million in 2017 compared to PLN 9.2 million in 2016. The revenue from spot transactions stood at PLN 2.4 million and the revenue from forward transactions at PLN 8.4 million in 2017. The volume of trade in natural gas on TGE was 138.7 TWh in 2017 compared to 114.5 TWh in 2016. The volume of trade in gas increased for forward transactions while the volume of spot trade decreased.

The Group's revenue from the operation of trading in property rights stood at PLN 39.6 million in 2017 compared to PLN 32.0 million in 2016, an increase of PLN 7.6 million. The volume of trading in property rights stood at 58.4 TWh in 2017 compared to 50.5 TWh in 2016. The change of revenue from trading in property rights does not correspond directly to the change of trading volumes due to different fees for different types of property rights.

The volume of trade in property rights in green certificates of origin of electricity was 29.8 TWh in 2017 compared to 24.0 TWh in 2016. The revenue from trade in property rights in green certificates of origin of electricity (PMOZE) represented 65.1% and 67.5%, respectively, of the Group's total revenue from trade in property rights in the periods under review. The share of revenue from cogeneration decreased from 15.6% in 2016 to 14.8% in 2017. The revenue from trade in property rights of energy efficiency (white certificates) increased sharply in 2017. The revenue stood at PLN 7.0 million in 2017 compared to PLN 5.1 million in 2016. The share of revenue from white certificates in total revenue from trade in property rights was 17.7% in 2017.

Revenues of the Group from other fees paid by commodity market participants amounted to PLN 10.8 million in 2017 compared to PLN 9.4 million in 2016, an increase of 14.7% (PLN 1.4 million). Other fees paid by commodity market participants included fees paid by TGE market participants and revenues of InfoEngine from the activity of trade operator.

Other fees paid by market participants are driven mainly by revenues from fixed market participation fees, fees for cancellation of transactions, fees for position transfers, fees for trade reporting in the RRM (Registered Reporting Mechanism), fees for access to the system, and fees for management of the resources of the guarantee fund. Other fees paid by market participants depend mainly on the activity of

IRGiT Members, in particular the number of transactions, the number of new clients of brokerage houses, and the number of new users accessing the clearing system.

The increase of the revenue from other fees paid by market participants in 2017 was driven mainly by an increase of the revenue from REMIT reporting and by an increase of the revenue of InfoEngine from its activity as a trade operator.

Table 42 Data for the commodity market

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
Commodity market - trading revenue (PLN million)	**70.1**	**60.9**	**62.6**	**9.2**	**15.2%**
Volume of trading in electricity					
Spot transactions *(TWh)*	25.2	27.6	25.1	(2.4)	-8.6%
Forward transactions *(TWh)*	86.4	99.0	161.6	(12.6)	-12.7%
Volume of trading in gas					
Spot transactions *(TWh)*	24.0	24.6	13.9	(0.6)	-2.5%
Forward transactions *(TWh)*	114.7	89.9	92.9	24.8	27.6%
Volume of trading in property rights (TGE) (TWh)	58.4	50.5	59.0	7.9	15.7%

Source: Company

REGISTER OF CERTIFICATES OF ORIGIN

Revenues from the operation of the **Register of Certificates of Origin** amounted to PLN 30.6 million in 2017 compared to PLN 24.9 million in 2016, representing an increase of 23.0%. The strong increase of revenues from the operation of the Register of Certificates of Origin was driven by an increase of cancelled property rights (by 21.6%) and issued property rights (by 2.7%). The increase in the volume of issued property rights has the biggest impact on revenue due to a higher fee.

Table 43 Data for the Register of Certificates of Origin

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
Commodity market - revenue from operation of the Register of Certificates of Origin of electricity (PLN million)	**30.6**	**24.9**	**24.2**	**5.7**	**23.0%**
Issued property rights *(TWh)*	49.0	47.7	50.9	1.3	2.7%
Cancelled property rights *(TWh)*	52.3	43.0	22.3	9.3	21.6%

Source: Company

CLEARING

The Group earns revenue from the **clearing activities** of IRGiT, which is a subsidiary of TGE. The revenue stood at PLN 41.0 million in 2017 compared to PLN 39.2 million in 20167. The increase in the revenue was driven by increased volumes of trade on the markets operated by TGE. Revenue from clearing stood at PLN 6.2 million on the electricity market, PLN 18.4 million on the gas market, and PLN 16.4 million on the market in property rights.

OTHER REVENUES

The Group's other revenues amounted to PLN 1.0 million in 2017 compared to PLN 1.9 million in 2016. The Group's other revenues include revenues from educational and PR services, office space lease, and sponsorship.

OPERATING EXPENSES

Total operating expenses of the **GPW Group** amounted to PLN 165.8 million in 2017, representing an increase of 10.4% (PLN 15.6 million) year on year. Despite the increase of expenses, the cost/income ratio decreased to 47.1% in 2017 from 48.3% in 2016 owing to the growth rate of revenue exceeding the growth rate of expenses. The increase of operating expenses was mainly driven by an increase in external service charges (by PLN 14.6 million), depreciation and amortisation (by PLN 2.5 million), salaries and other employee costs (by PLN 1.7 million). The sharp increase in external service charges was driven by the alignment of GPW Group companies with MiFID2/MiFIR requirements.

Separate operating expenses of **GPW** stood at PLN 109.9 million in 2017, representing an increase of 9.8% (PLN 9.8 million) year on year.

Operating expenses of **TGE** stood at PLN 37.5 million in 2017 compared to PLN 28.7 million in 2016, representing an increase of 30.5% (PLN 8.8 million). Operating expenses of IRGiT stood at PLN 14.0 million in 2017 compared to PLN 11.4 million in 2016. Operating expenses of **BondSpot** in the periods under review stood at PLN 9.9 million and PLN 9.7 million, respectively, representing an increase of 1.8% (PLN 0.2 million).

Table 44 Consolidated operating expenses of GPW Group and structure of operating expenses in 2015 - 2017

	Year ended 31 December						Change (2017 vs 2016)	Change (%) (2017 vs 2016)
PLN'000, %	2017	%	2016	%	2015	%		
Depreciation and amortisation	28,325	17%	25,793	17%	26,837	15%	2,532	9.8%
Salaries	50,764	31%	49,860	33%	56,662	32%	904	1.8%
Other employee costs	12,081	7%	11,300	8%	11,426	7%	781	6.9%
Rent and other maintenance fees	9,505	6%	9,444	6%	9,785	6%	61	0.6%
Fees and charges	6,553	4%	10,009	7%	23,627	14%	(3,456)	-34.5%
including: PFSA fees	*5,579*	*3%*	*9,121*	*6%*	*22,047*	*13%*	*(3,542)*	*-38.8%*
External service charges	53,194	32%	38,587	26%	39,621	23%	14,607	37.9%
Other operating expenses	5,341	3%	5,162	3%	6,433	4%	179	3.5%
Total	**165,763**	**100%**	**150,155**	**100%**	**174,391**	**100%**	**15,608**	**10.4%**

Source: Consolidated Financial Statements, Company

The Group is not dependent on any single supplier or provider as no contractor has a share exceeding 10% of the total expenses of the Group.

Depreciation and amortisation

Depreciation and amortisation charges stood at PLN 28.3 million in 2017, representing an increase of 9.8% (PLN 2.5 million) compared to PLN 25.8 million in 2016. The increase in depreciation and amortisation charges year on year in 2017 was driven by an increase of depreciation and amortisation charges in TGE by PLN 1.7 million and an increase of depreciation and amortisation charges in IRGiT by PLN 0.9 million. The increase of depreciation and amortisation charges of the TGE Group resulted from the settlement of several investments in December 2016 in the amount of PLN 24.5 million, including mainly XStream system servers of PLN 7.0 million, servers of PLN 4.5 million, expenditure on the international PCR project of PLN 7.0 million, Sapri system servers of PLN 2.5 million. As those assets were commissioned at the end of 2016, the depreciation and amortisation charges increased in 2017. Furthermore, the XStream system worth PLN 8.8 million was rolled out in mid-2017, which also added to the depreciation and amortisation charges of the TGE Group. The increase of depreciation and amortisation charges in IRGiT was mainly driven by the implementation of the XStream clearing system in mid-2016. The system was depreciated throughout the full financial year in 2017.

Salaries and other employee costs

Salaries and other employee costs of the Group amounted to PLN 62.8 million in 2017, representing an increase of 2.8% (PLN 1.7 million) compared to PLN 61.2 million in 2016.

The increase of salaries in the GPW Group year on year in 2017 was driven by an increase of costs by PLN 1.0 million in GPW, by PLN 0.4 million in IRGiT, by PLN 0.4 million in BondSpot, by PLN 0.6 million in GPW Benchmark, and a decrease of costs by PLN 0.2 million in the TGE, by PLN 0.2 million in InfoEngine, and by PLN 0.2 million in IAiR.

The increase of salaries in GPW in 2017 was driven by higher costs of annual bonuses for 2017, mainly due to the effect of a lower base of 2016. The lower base of costs of annual bonuses in 2016 was due to the release of provisions for bonuses of the Management Board for 2015 at PLN 2.6 million, which reduced the cost in 2016. Furthermore, the effect of a lower base of salaries in the GPW Group in 2016 was due to the release of provisions for bonuses of the Management Board for 2015 in the TGE Group and an adjustment of provisions for 2016 totalling PLN 2.8 million.

The increase of salaries in IRGiT and BondSpot was driven by higher provisions for bonuses for 2017. BondSpot set up no provisions for bonuses of the Management Board for 2016 by decision of its Supervisory Board. The increase of salaries in GPW Benchmark was driven by higher base salaries and provisions for bonuses for 2017 as the company launched its operations in 2017.

The headcount of the Group was 328 FTEs as at 31 December 2017. The decrease of the headcount of the Group year on year in 2017 resulted from workforce additions in GPW SA, IRGiT, GPW Benchmark, IAiR and workforce reductions in TGE, BondSpot, InfoEngine. The increase of the headcount of GPW in 2017 was a result of the recovery of some human resources reduced in the workforce restructuring in 2016.

Table 45 Employment in GPW Group

	As at 31 December		
# FTEs	**2017**	**2016**	**2015**
GPW	189	185	201
Subsidiaries	139	146	150
Total	**328**	**331**	**351**

Source: Company

Rent and other maintenance fees

Rent and other maintenance fees of the GPW Group amounted to PLN 9.5 million in 2017 compared to PLN 9.4 million in 2016. The increase of rent was mainly driven by the temporary payment of rent at two locations by subsidiaries in the process of relocation. The physical integration of the GPW Group was completed in 2017.

Fees and charges

Fees and charges stood at PLN 6.6 million in 2017, a decrease of 34.5% (PLN 3.5 million) year on year. The main component of fees and charges of the Group are fees paid to the Polish Financial Supervision Authority, which were reduced and stood at PLN 5.6 million for the Group in 2017 as compared to PLN 9.1 million paid for supervision in 2016. According to internal analyses, the much lower fee paid to PFSA in 2017 was probably due to an excessive fee paid in 2016 when the PFSA cost was lower than initially expected by PFSA.

External service charges

External service charges amounted to PLN 53.2 million in 2017 compared to PLN 38.6 million in 2016.

Table 46 Consolidated external service charges of GPW Group and structure of external service charges in 2015 - 2017

PLN'000, %	Year ended 31 December 2017	%	2016	%	2015	%	Change (2017 vs 2016)	Change (%) (2017 vs 2016)
IT cost:	32,467	61%	22,161	57%	20,209	51%	10,306	46.5%
IT infrastructure maintenance	*15,752*	*30%*	*12,395*	*32%*	*12,524*	*32%*	*3,357*	*27.1%*
TBSP maintenance service	*1,091*	*2%*	*1,453*	*4%*	*1,185*	*3%*	*(362)*	*-24.9%*
Data transmission lines	*5,242*	*10%*	*5,924*	*15%*	*5,704*	*14%*	*(682)*	*-11.5%*
Software modification	*10,382*	*20%*	*2,389*	*6%*	*796*	*2%*	*7,993*	*334.6%*
Office and office equipment maintenance:	3,325	6%	2,860	7%	2,749	7%	465	16.3%
Repair and maintenance of installations	*1,012*	*2%*	*1,038*	*3%*	*938*	*2%*	*(26)*	*-2.5%*
Security	*1,396*	*3%*	*904*	*2%*	*820*	*2%*	*492*	*54.5%*
Cleaning	*528*	*1%*	*495*	*1%*	*483*	*1%*	*33*	*6.7%*
Phone and mobile phone services	*389*	*1%*	*423*	*1%*	*508*	*1%*	*(34)*	*-8.1%*
International (energy) market services	*2,003*	*4%*	*399*	*1%*	-	-	*1,604*	*402.0%*
Leasing, rental and maintenance of vehicles	659	1%	527	1%	437	1%	132	25.1%
Transportation services	139	0%	125	0%	195	0%	14	11.4%
Promotion, education, market development	4,618	9%	5,392	14%	6,155	16%	(774)	-14.4%
Market liquidity support	522	1%	583	2%	930	2%	(61)	-10.5%
Advisory (including: audit, legal services, business consulting)	6,213	12%	3,716	10%	5,474	14%	2,497	67.2%
Information services	956	2%	892	2%	823	2%	64	7.2%
Training	813	2%	700	2%	1,147	3%	113	16.2%
Mail fees	95	0%	78	0%	86	0%	17	21.7%
Bank fees	123	0%	135	0%	115	0%	(12)	-8.9%
Translation	364	1%	224	1%	260	1%	140	62.5%
Other	897	2%	795	2%	1,041	3%	102	12.8%
Total	**53,194**	**100%**	**38,587**	**100%**	**39,621**	**100%**	**14,607**	**37.9%**

Source: Consolidated Financial Statements, Company

The increase of external service charges year on year was mainly driven by an increase of IT costs including an increase of the cost of software modifications by PLN 8.0 million and the cost of IT infrastructure maintenance by PLN 3.4 million. In addition, costs of advisory increased by PLN 2.5 million, costs of international market services by PLN 1.6 million, and cost of security services by PLN 0.5 million.

Other external service charges increased modestly or decreased year on year as presented in the table above.

The increase of the cost of software modifications was mainly driven by an increase of the cost of GPW by PLN 7.7 million, mainly due to the modifications of the trading system UTP in line with the MiFID2 requirements. The cost of modification of GPW's software was PLN 9.5 million in 2017, including PLN 9.3 million of the cost of modifications of the trading system UTP in line with the MiFID2 requirements. The cost of software modifications in TGE was PLN 0.7 million. The cost mainly included the implementation of MiFID2 modifications in TGE's systems.

The increase of the cost of IT infrastructure maintenance was mainly driven by an increase of the cost of IT infrastructure in TGE by PLN 1.5 million, in GPW by PLN 0.7 million, and in IRGiT and BondSpot by PLN 0.2 million each. The increase of the cost of IT infrastructure in TGE was due to the implementation of XStream system in May 2017 and the cost of licences and support. The increase of the cost of IT infrastructure in GPW was mainly driven by a higher cost of licences and maintenance fees.

The increase of the cost of advisory was driven by an increase of the cost of advisory in GPW by PLN 0.6 million, in TGE by PLN 1.4 million, in IRGiT by PLN 0.3 million, and in BondSpot by PLN 0.1 million. The cost of advisory in GPW was PLN 2.9 million in 2017 compared to PLN 2.3 million in 2016. The increase of the cost was driven by an increase of the cost of legal advisory and the cost of accounting and tax audits. The increase of the cost of advisory in TGE was mainly driven by the cost of legal advisory concerning VAT. The increase of the cost of advisory in IRGiT in 2017 was due to advisory in actions taken in the CCP process.

Other operating expenses

Other operating expenses amounted to PLN 5.3 million in 2017, including the cost of material and energy consumption at PLN 3.2 million, industry organisation membership fees at PLN 0.6 million, non-life insurance at PLN 0.3 million, perpetual usufruct write-downs at PLN 0.1 million, business travel at PLN 0.8 million, conference participation at PLN 0.2 million, and other costs at PLN 0.02 million.

Other operating expenses amounted to PLN 5.2 million in 2016, including the cost of material and energy consumption at PLN 3.1 million, industry organisation membership fees at PLN 0.6 million, non-life insurance at PLN 0.3 million, business travel at PLN 0.8 million, conference participation at PLN 0.1 million, and other costs at PLN 0.1 million.

OTHER INCOME AND EXPENSES

Other income of the Group stood at PLN 3.9 million in 2017 compared to PLN 1.7 million in 2016. Other income includes the annual correction of VAT at PLN 0.2 million, medical services reinvoiced for employees at PLN 0.3 million, the reversal of debt write-downs at PLN 2.9 million, gains on the sale of property, plant and equipment at PLN 0.03 million, and other income at PLN 0.3 million. The biggest item in 2016 was other income at PLN 1.3 million. Other income mainly includes TGE's income from PSE in the Price Coupling of Regions (PCR) project. Other income from the PCR project was recognised at PLN 0.3 million in 2017 and PLN 0.5 million in 2016.

Price Coupling of Regions ensures common ownership of day-ahead market software by seven European energy exchanges. The project aims to harmonise the European market based on a common calculation algorithm. TGE participates in the project. In 2016, TGE received a refund of part of the PCR cost from Polskie Sieci Energetyczne S.A. in the implementation of international projects aiming among others to implement European regulations applicable to cross-border energy exchange. The refund took place under agreements signed with the operator and letters of guarantee issued by the Polish energy regulator as a partial refund of capital expenditure and operating expenses paid by the company in the project.

The total refund was PLN 7.0 million, including PLN 6.5 million recognised in deferred income and PLN 0.5 million recognised in other income in 2016.

Other expenses of the Group stood at PLN 6.1 million in 2017 compared to PLN 4.6 million in 2016. The increase of other expenses was due to higher donations paid by GPW: PLN 3.6 million in 2017 compared to PLN 3.1 million in 2016.

In 2017, the GPW Group paid donations of PLN 3.0 million to the Polish National Foundation, PLN 140 thousand to the Archdiocese of Warsaw, PLN 414 thousand to the GPW Foundation, PLN 25 thousand to the Wolność i Demokracja Foundation, and PLN 2 thousand to the Foundation "Dziecięca Fantazja".

In 2016, the GPW Group paid donations of PLN 3.0 million to the Polish National Foundation, PLN 34.4 thousand to the Lesław A. Paga Foundation, PLN 28.5 thousand to the Polish-Chinese Cooperation Forum Association, PLN 27.5 thousand to the GPW Foundation, and PLN 10 thousand to the Youth Entrepreneurship Foundation and Caritas Diecezji Łowickiej each.

FINANCIAL INCOME AND EXPENSES

Financial income of the Group stood at PLN 5.5 million in 2017 compared to PLN 12.9 million in 2016.

Financial income includes mainly interest on bank deposits, financial income on investment in Treasury bonds, as well as positive FX differences. Income from interest on bank deposits was PLN 5.3 million in 2017 and PLN 6.4 million in 2016. FX differences were negative in 2017, shown under financial expenses. FX differences were negative in 2016, as well.

GPW's associate Aquis Exchange Limited issued no additional capital in 2017. Aquis completed several new issue shares in 2016 without the participation of GPW. As a result of the transactions, GPW's share in economic and voting rights decreased from 26.33% to 20.31%. GPW's stake remained unchanged in 2017. As a result of the issue, the net asset value of Aquis increased and GPW recognised gains at PLN

5.8 million shown under financial income in 2016. GPW recognised no such gains in 2017, hence the lower level of financial income.

Financial expenses of the Group stood at PLN 11.1 million in 2017 compared to PLN 12.1 million in 2016. The lower level of financial expenses in 2017 year on year was mainly driven by lower interest cost of TGE's overdue tax liabilities. The overdue tax liabilities were due to changes in the taxation of certain services as of 1 January 2017 and a resulting adjustment of VAT for the period from December 2011 to December 2016.

The largest item of financial expenses is the interest cost under GPW's outstanding bonds (including the cost of the issue spread over time) at PLN 7.6 million in 2017 compared to PLN 8.0 million in 2016.

The cost in 2017 resulted from interest on series D and E bonds at 2.76%, which remained unchanged throughout the year despite the floating interest rate on the bonds, and interest on series C bonds at 3.19%. The interest cost in 2016 resulted from interest on series A and B bonds at 2.94% in H1 2016 and 2.96% in H2 2016 and interest on series C bonds at 3.19%.

The series A and B bonds issued in December 2011 and February 2012 with a total nominal value of PLN 245.0 million were redeemed in full in Q1 2017. The bonds were due for redemption on 2 January 2017. The bonds bore interest at a floating rate equal to WIBOR 6M + 1.17%, interest was paid semi-annually. The series A and B bonds were redeemed in part before maturity in 2015. On 6-12 October 2015, GPW bought back 1,245,163 bonds for a total price of PLN 126,010,495.60. The early redemption of the series A and B bonds was paid for with cash raised by GPW through the issue of series C bonds.

The series C bonds bear interest at a fixed rate of 3.19% p.a.

In view of the approaching maturity of the series A and B bonds, the GPW Management Board passed a resolution on 13 October 2016 to issue 1,200,000 bearer bonds with a nominal value of PLN 100 per bond and a total nominal value of PLN 120.0 million. The decision provided for the issue of two series of bonds: series D bonds with a total nominal value up to PLN 60 million and series E bonds with a total nominal value up to PLN 60 million. The bonds bear interest at a floating rate equal to WIBOR 6M plus a margin. The margin on series D and E bonds is 0.95%. The interest on the bonds is paid semi-annually. The series D and E bonds are due for redemption on 31 January 2022.

The issue of series D and E bonds started in 2016 but the bonds were registered in January 2017. Therefore, liabilities under the series D and E bonds were recognised on the books in January 2017.

The series D and E bonds were introduced to trading on the regulated market Catalyst operated by GPW and in the alternative trading system Catalyst operated by BondSpot.

The financial expenses of 2017 included the cost of interest on credit facilities and loans at PLN 1.3 million. The cost included mainly interest on a loan of PLN 60 million taken by TGE from DNB Polska to pay outstanding VAT liabilities for 2011-2016. The interest rate on the loan was WIBOR 1M plus a margin of 1.4%. The loan was fully repaid in November 2017.

SHARE OF PROFIT OF ASSOCIATES

The Group's share of profit of associates stood at PLN 10.1 million in 2017 compared to PLN 3.5 million in 2016. The increase was mainly driven by a higher profit of the KDPW Group (PLN 37.7 million) and a much lower net loss of Aquis Exchange Limited at PLN 15.9 million in 2017 compared to PLN 19.0 million in 2016.

Aquis Exchange Limited became an associate upon GPW's acquisition of the second tranche of shares in February 2014. The Group's share of the loss of Aquis Exchange Ltd was PLN 3.2 million in 2017 compared to PLN 4.5 million in 2016.

In 2017, Aquis Exchange Limited issued no shares so GPW's share in economic and voting rights remained unchanged at 20.31%. In 2016, Aquis Exchange Limited completed several new issue shares without the participation of GPW. As a result of the issues, GPW's share in Aquis measured by the number of shares decreased to 22.99% and GPW's share in economic and voting rights decreased to 20.31%.

The Group's share of the **KDPW Group** profit was PLN 12.6 million in 2017 compared to PLN 7.7 million in 2016.

The share in the net profit of **Centrum Giełdowe** was PLN 0.7 million in 2017 compared to PLN 0.3 million in 2016.

Table 47 Profit / (Loss) of associates

PLN'000	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
KDPW S.A. Group	37,693	23,829	13,750	13,864	58.2%
Centrum Giełdowe S.A.	2,896	1,100	1,422	1,796	163.3%
Aquis Exchange Ltd	(15,874)	(18,996)	(23,093)	3,122	-16.4%
Total	**24,714**	**5,933**	**(7,920)**	**18,781**	**316.6%**

Source: Consolidated Financial Statements, Company

Table 48 GPW's share of profit / (loss) of associates

PLN'000	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
KDPW S.A. Group	12,565	7,698	4,584	4,867	63.2%
Centrum Giełdowe S.A.	718	273	353	445	163.0%
Aquis Exchange Ltd	(3,224)	(4,453)	(6,467)	1,229	-27.6%
Total	**10,059**	**3,518**	**(1,530)**	**6,541**	**185.9%**

Source: Consolidated Financial Statements, Company

INCOME TAX

Income tax of the Group was PLN 32.3 million in 2017 and PLN 31.1 million in 2016. The **effective income tax rate** in the periods under review was 17.1% and 19.2%, respectively, as compared to the standard Polish corporate income tax rate of 19%. The income tax **paid** by the Group was PLN 46.5 million in 2017 compared to PLN 21.1 million in 2016.

The method of payment of taxes by the Group changed in 2017 following the formation of a Tax Group by GPW and its subsidiaries. Taxes were paid on a quarterly basis in the amount of current tax liabilities. In 2016, GPW used the simplified method of monthly income tax advances equal to 1/12 of the tax due for 2014.

On 28 September 2016, the following companies: Giełda Papierów Wartościowych w Warszawie S.A., Towarowa Giełda Energii S.A., BondSpot S.A. and GPW Benchmark S.A., entered into a notarised agreement creating the GPW Tax Group ("GPW TG" or "TG") for a period of three tax years from 1 January 2017 to 31 December 2019.

The companies participating in TG are not treated individually but collectively as one corporate income taxpayer under the Corporate Income Tax Act. Such taxpayer's income is determined as the surplus of the sum of incomes of the companies participating in TG over the sum of their losses.

As the Company Representing the Tax Group, Giełda Papierów Wartościowych w Warszawie S.A. is responsible for the calculation and payment of quarterly corporate income tax advances of the Tax Group pursuant to the Corporate Income Tax Act.

While income taxes of the companies participating in TG are no longer paid individually, the companies are still required to individually pay other taxes including VAT and local taxes.

V. 3 Atypical factors and events

Reduction of the GPW Group's costs of supervision over the capital market

The Act of 12 June 2015 amending the Capital Market Supervision Act and certain other Acts largely extended the list of entities required to finance supervision (by adding, among others, banks, insurers, investment funds, public companies, brokerage houses and foreign investment firms) and changed the amount of contributions of entities. As a result, the cost paid by the GPW Group was reduced significantly to PLN 9.1 million in 2016 compared to PLN 22.0 million in 2015. The cost of fees for market supervision was PLN 5.6 million in 2017, representing a decrease of 39.0%. However, according to internal analyses, the lower fee paid to PFSA was probably due to an excessive fee paid in 2016 when the PFSA cost was lower than initially expected by PFSA.

GPW as the organiser of WIBID and WIBOR reference rate fixings

The Group acting through its subsidiary GPW Benchmark expanded its services as of 30 June 2017 following the take-over of the function of organiser of WIBID and WIBOR reference rate fixings from the Financial Markets Association ACI Polska and the functions of the calculation agent previously performed by Thomson Reuters. The Group will apply for authorisation as an administrator within the meaning of Regulation 2016/2011.

The decision of GPW to take over the functions of the organiser of reference rate fixings followed a proposal extended by the Association ACI Polska to GPW. ACI Polska decided no longer to perform the functions of the organiser in view of Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds, which took effect in early 2018. The Regulation defines the three main categories of indices and imposes requirements on the entities which calculate the indices depending on such classification. In view of the Regulation, the Association ACI Polska decided that it would be unable to meet its requirements and approached GPW with a proposal to take over the functions of the organiser of WIBID and WIBOR reference rate fixings. Following an analysis, GPW decided to accept ACI Polska's proposal.

The transition will take place in phases including: starting the organisation of fixings, which took place on 30 June 2017; obtaining the authorisation to perform the functions of administrator; reviewing the rates methodology.

GPW's decision to take over the organisation of WIBID and WIBOR rate fixings is an important step in its history. While GPW previously focused on trade in capital and commodity market instruments, it now expands to financial market services.

GPW will take over the organisation of reference rate fixings in collaboration with the banks participating in the fixings. This is particularly relevant in view of the role of the banks in the process and the scope of use of reference rates in the banks' business.

Issue of series D and E bonds

On 13 October 2016, the GPW Management Board passed Resolution No. 1058/2016 to issue 1,200,000 bearer bonds with a nominal value of PLN 100 per bond and a total nominal value of PLN 120.0 million. The decision provided for the issue of two series of bonds: series D bonds with a total nominal value up to PLN 60 million and series E bonds with a total nominal value up to PLN 60 million.

The issue of series D and E bonds started in 2016 but the bonds were registered in January 2017, which is when the Company recognised the liability under the series D and E bonds on the books.

The bonds bear interest at a floating rate equal to WIBOR 6M plus a margin. The margin on series D and E bonds is 0.95%. The interest on the bonds is paid semi-annually. 2017 was the first period when interest cost was paid on the series D and E bonds. The series D and E bonds are due for redemption on 31 January 2022.

Events in the subsidiary TGE

On 25 January 2017, the Exchange Management Board was informed of the decision of the TGE Management Board to modify the tax policy for certain services as of 1 January 2017 and to adjust the resulting VAT for the years 2011-2016. The decision required the issuance of correction invoices to TGE's counterparties, requesting them to pay the VAT not previously charged for fees (for the period from December 2011 to December 2016, inclusive) for tax liabilities which were not overdue in the total amount of PLN 69.7 million. At the same time, TGE was required to pay to the account of the tax office an amount of the resulting tax debit under correction invoices issued to TGE's counterparties plus interest on the tax debit in the amount of PLN 9.9 million. The resulting outstanding tax liability and interest were paid to the Tax Office in March 2017.

As TGE was required to pay the tax liabilities and interest within 7-14 days after the submission of adjusted tax receipts to the tax office, and in view of the expected longer period of payment of amounts under the correction invoices by counterparties, Towarowa Giełda Energii S.A. took a bank loan of PLN 60 million from DNB Polska maturing in March 2018. The interest on the loan was WIBOR 1M plus a margin of 1.4%. In addition, TGE took a loan of PLN 10 million from GPW to pay the tax liabilities. The terms of the loan granted by GPW to the subsidiary were the same as the terms of the bank loan. The bank loan and the Group loan taken by TGE were repaid in full before maturity in November 2017. As a result of the bank loan and the GPW loan, TGE incurred interest costs of PLN 1.4 million. The interest cost excluding intra-Group interest was PLN 1.3 million (including the loan fee) in the consolidated financial statements.

TGE's receivables under the adjusted VAT were PLN 69.7 million. The outstanding balance was PLN 1.2 million as at 31 December 2017. The outstanding balance was PLN 0.5 million as at the date of publication of this report. According to the initial conservative judgment, PLN 3.5 million of receivables were expected not to be collected, and they were written off. Following payments received in Q4, the write-off was reduced to PLN 0.5 million.

V. 4 Group's assets and liabilities structure

The balance-sheet total of the Group was PLN 1.1 billion as at 31 December 2017, a decrease of 0.9% compared to PLN 1.2 billion as at 31 December 2016.

ASSETS

Total assets PLN 1.1 bn

Non-current assets PLN 596.4 m

Current assets PLN 550.7 m

The Group's **non-current assets** stood at PLN 596.4 million representing 52% of total assets as at 31 December 2017 compared to PLN 597.3 million or 52% of total assets as at 31 December 2016. The decrease of non-current assets was mainly driven by a decrease of the value of property, plant and equipment as well as intangible assets in the last year as replacement capital expenditures were lower than the annual depreciation and amortisation charges.

The Group's **current assets** stood at PLN 550.7 million representing 48% of total assets as at 31 December 2017 compared to PLN 560.6 million or 48% of total assets as at 31 December 2016.

The decrease in current assets in the last year (by 1.8%) was driven by a decrease of the balance of trade receivables. While cash increased by 8.9% year on year, the increase was lower than the decrease of trade receivables, which reduced the current assets.

The strong decrease of trade receivables was mainly due to a decrease of receivables of TGE from PLN 83.1 million at the end of 2016 to PLN 17.5 million at the end of 2017. The decrease of receivables resulted from the payment of receivables from issued correction invoices for VAT in TGE following the change of taxation on certain services provided by TGE. The receivables under the adjusted VAT were PLN 69.7 million. The outstanding balance was PLN 1.2 million as at 31 December 2017.

Following payments by counterparties, cash did not increase substantially as TGE repaid the bank loan it took to pay the outstanding VAT. While GPW generated profits, it paid capital expenditures during the year and paid a dividend to the shareholders at PLN 90.2 million, which reduced GPW's cash at the year's end. The increase of cash did not offset the decrease of receivables; as a consequence, current assets decreased year on year in 2017.

Table 49 Consolidated statement of financial position of GPW Group at the year's end in 2015 - 2017 (assets)

	As at					
PLN'000	31 December 2017	%	31 December 2016	%	31 December 2015	%
Non-current assets	**596,354**	**52%**	**597,287**	**52%**	**580,645**	**54%**
Property, plant and equipment	110,784	10%	119,130	10%	125,229	12%
Intangible assets	267,991	23%	273,815	24%	261,728	24%
Investment in associates	207,389	18%	197,231	17%	188,570	18%
Deferred tax assets	3,803	0%	1,809	0%	-	0%
Available-for-sale financial assets	271	0%	288	0%	282	0%
Non-current prepayments	6,116	1%	5,014	0%	4,836	0%
Current assets	**550,699**	**48%**	**560,561**	**48%**	**492,454**	**46%**
Inventory	56	0%	57	0%	135	0%
Corporate income tax receivables	71	0%	428	0%	369	0%
Trade and other receivables	64,096	6%	113,262	10%	131,557	12%
Cash and cash equivalents	486,476	42%	446,814	39%	360,393	34%
Total assets	**1,147,053**	**100%**	**1,157,848**	**100%**	**1,073,099**	**100%**

Source: Consolidated Financial Statements, Company

EQUITY AND LIABILITIES

Equity
PLN 811.5 m

Non-current liabilities
PLN 260.0 m

Current liabilities
PLN 75.6 m

The **equity** of the Group stood at PLN 811.5 million representing 71% of the Group's total equity and liabilities as at 31 December 2017 compared to PLN 745.3 million or 64% of total equity and liabilities as at 31 December 2016.

Non-controlling interests stood at PLN 0.6 million as at 31 December 2017 compared to PLN 0.5 million as at 31 December 2016.

Non-current liabilities of the Group stood at PLN 260.0 million representing 23% of the Group's total equity and liabilities as at 31 December 2017 compared to PLN 143.4 million or 12% of total equity and liabilities as at 31 December 2016. The main item of the Group's non-current liabilities as at 31 December 2017 were GPW's liabilities under outstanding series C bonds due for redemption on 6 October 2022 and series D and E bonds due for redemption on 31 January 2022. The series D and E bonds were issued on 2 January 2017, which is when the company recognised the liability on the books. The non-current liabilities under the bond issue as at 31 December 2016 included liabilities in respect of the series C bonds.

The non-current liabilities as at 31 December 2017 and as at 31 December 2016 included accruals and deferred income of PLN 5.6 million and PLN 6.2 million, respectively, in relation to deferred income under a refund from PSE in the PCR project. The refund is recognised over time under other income (see *Other income* for details). Details of the recognition of the cost refund paid by PSE to TGE are presented in Note 18 of the Consolidated Financial Statements of the Giełda Papierów Wartościowych w Warszawie S.A. Group for 2016.

In addition, non-current liabilities include deferred tax liabilities of PLN 7.1 million, employee benefits payable of PLN 1.5 million including retirement benefit provisions of PLN 0.6 million and annual bonus provisions for 2016 – 2017 for the Management Boards under the annual bonus system of the Group's Management Boards (i.e., bonus bank and phantom shares: PLN 0.4 million in GPW, PLN 0.2 million in BondSpot, PLN 0.2 million in IRGiT), and other liabilities of PLN 2.2 million in respect of payments to Euronext for the derivatives system module.

Current liabilities of the Group stood at PLN 75.6 million representing 7% of the Group's total equity and liabilities as at 31 December 2017 compared to PLN 269.2 million or 23% of total equity and liabilities as at 31 December 2016.

The decrease of current liabilities of the Group was driven by:

- ✓ redemption of series A and B bonds by GPW on 2 January 2017;
- ✓ decrease in other current liabilities due to the payment of TGE's VAT liabilities following changes of the tax policy for certain services as of 1 January 2017 and the adjustment of the VAT for the period from December 2011 to December 2016. The decision required the issuance of correction invoices to TGE's counterparties, requesting them to pay the VAT not previously charged for fees (for the period from December 2011 to December 2016, inclusive) for tax liabilities which were not overdue in the total amount of PLN 69.8 million. At the same time, TGE was required to pay to the account of the tax office an amount of the resulting tax debit under correction invoices issued to TGE's counterparties plus interest on the tax debit in the amount of PLN 9.9 million as at 31 December 2016. TGE's tax liabilities were paid in March 2017.

Trade payables increased from PLN 6.4 million to PLN 21.3 million and employment benefits payable increased from PLN 8.1 million to PLN 13.0 million in 2017 due to higher provisions for annual bonuses for 2017 of employees and Management Board of the GPW Group. Due to changes of provisions (release or non-formation of some provisions for annual bonuses of Management Board in 2016), provisions were lower at the end of 2016 than at the end of 2017. The increase of trade payables was partly due to the fact that PLN 8.9 million of accruals were presented under trade payables as of 2017. In addition, trade payables as at the end of 2017 included purchase of electricity and gas as well as margins of Nord Pool at PLN 3.5 million.

Table 50 Consolidated statement of financial position of GPW Group at the year's end in 2015 - 2017 (equity and liabilities)

PLN'000	As at					
	31 December 2017	%	31 December 2016	%	31 December 2015	%
Equity	**811,481**	**71%**	**745,252**	**64%**	**713,192**	**66%**
Share capital	63,865	6%	63,865	6%	63,865	6%
Other reserves	1,347	0%	1,184	0%	1,455	0%
Retained earnings	745,696	65%	679,678	59%	647,326	60%
Non-controlling interests	573	0%	525	0%	546	0%
Non-current liabilities	**259,951**	**23%**	**143,422**	**12%**	**258,930**	**24%**
Liabilities under bond issue	243,573	21%	123,459	11%	243,800	23%
Employee benefits payable	1,454	0%	1,832	0%	4,046	0%
Finance lease liabilities	-	0%	32	0%	84	0%
Accruals and deferred income	5,592	0%	6,200	1%	-	-
Deferred income tax liability	7,108	1%	9,675	1%	11,000	1%
Other liabilities	2,224	0%	2,224	0%	-	0%
Current liabilities	**75,621**	**7%**	**269,174**	**23%**	**100,977**	**9%**
Liabilities under bond issue	1,938	0%	122,882	11%	682	0%
Trade payables *	21,303	2%	6,387	1%	8,597	1%
Employee benefits payable	12,958	1%	8,114	1%	9,457	1%
Finance lease liabilities	31	0%	62	0%	55	0%
Deferred income tax liability	6,012	1%	16,154	1%	2,833	0%
Accruals and deferred income *	7,386	1%	7,144	1%	7,263	1%
Provisions for other liabilities and charges	210	0%	333	0%	621	0%
Other current liabilities	25,783	2%	108,098	9%	71,469	7%
Total equity and liabilities	**1,147,053**	**100%**	**1,157,848**	**100%**	**1,073,099**	**100%**

** As at 31 December 2017 accruals are presented under trade payables*

Source: Consolidated Financial Statements, Company

LIQUIDITY, FINANCIAL ASSETS AND FINANCIAL RISK MANAGEMENT OF THE GROUP

The activities of the Company and the Group are exposed to three types of financial risks: market risk, credit risk, and liquidity risk. Details of how financial risks are identified and managed have been described in the Consolidated Financial Statements.

In 2017, the Company's liquidity risk, which means inability to timely meet its payment obligations, was minor in view of material financial assets held and positive cash flows from operating activities which exceeded the value of existing liabilities. The current liquidity ratio amounted to 7.3 as at 31 December 2017 and 2.1 as at 31 December 2016.

GPW manages financial liquidity in accordance with the "Current Assets Allocation Procedure" adopted by the Management Board. Pursuant to this document, the procedures for investing free cash should be handled in view of the due dates of liabilities so as to minimise the liquidity risk for the parent entity and, at the same time, to maximise its financial income. In practical terms, this means that the Company invests its current assets in bank deposits and the average duration of a financial asset portfolio was around 68 days in 2017 and ca. 66 days in 2016.

In the opinion of the Management Board, the Company's financial assets and financial risk management process is effective and ensures timely meeting of payment obligations.

No threats have been identified to the Company's liquidity.

The risks inherent in financial instruments held are described in Note 3 to the Consolidated Financial Statements of the Giełda Papierów Wartościowych w Warszawie S.A. Group for the year ended 31 December 2017.

CASH FLOWS

The Group generated positive cash flows from **operating activities** at PLN 155.9 million in 2017 compared to positive cash flows of PLN 205.8 million in 2016.

The cash flows from **investing activities** were negative at PLN 16.7 million in 2017, mainly driven by GPW's investments and TGE's investments. The cash flows from investing activities were negative at PLN 14.5 million in 2016, mainly driven by GPW's investments in the replacement of the UTP server infrastructure.

The cash flows from **financing activities** were negative in 2017, mainly due to the payment of dividend by GPW at PLN 90.3 million and interest paid at PLN 8.9 million including interest on bonds at PLN 7.6 million and interest on TGE's bank loan at PLN 1.3 million. The cash flows from financing activities were negative at PLN 104.9 million in 2016, mainly due to the payment of dividend to the shareholders of GPW at PLN 99.1 million and interest paid on bonds at PLN 5.8 million.

Table 51 Consolidated cash flows of the Group

	Cash flows for the year ended 31 December		
PLN'000	2017	2016	2015
Cash flows from operating activities	155,924	205,814	93,090
Cash flows from investing activities	(16,719)	(14,456)	(14,631)
Cash flows from financing activities	(99,784)	(104,930)	(107,163)
Net increase / (decrease) in cash	**39,421**	**86,428**	**(28,704)**
Impact of change of fx rates on cash balances in foreign currencies	*241*	*(7)*	*55*
Cash and cash equivalents - opening balance	**446,814**	**360,393**	**389,042**
Cash and cash equivalents - closing balance	**486,476**	**446,814**	**360,393**

Source: Consolidated Financial Statements, Company

CAPITAL EXPENDITURE

The Group's total capital expenditure in 2017 amounted to PLN 22.7 million including expenditure for property, plant and equipment at PLN 10.3 million and expenditure for intangible assets at PLN 12.4 million. The Group's total capital expenditure in 2016 amounted to PLN 23.6 million including expenditure for property, plant and equipment at PLN 13.7 million and expenditure for intangible assets at PLN 9.9 million.

The capital expenditure for property, plant and equipment and intangible assets in 2017 included GPW's capital expenditure for maintenance of IT infrastructure: IT equipment including servers, switches, fixed assets preparing GPW to comply with MiFID2. The capital expenditure for intangible assets included investments in software in GPW: modifications of the AX accounting system, AX budgeting module, WIBIX application, as well as TGE's capital expenditure for intangible assets related to the implementation of the trading system.

The capital expenditure for property, plant and equipment and intangible assets in 2016 included GPW's capital expenditure for maintenance of IT infrastructure and IT equipment related to the trading system and the TGE Group's intangible assets related to the implementation of a trading and clearing system.

The value of contracted future investment commitments for property, plant and equipment was PLN 1,226 thousand as at 31 December 2017 including purchase of CISCO switches at TGE.

The value of contracted future investment commitments for intangible assets was PLN 1,979 thousand as at 31 December 2017, including mainly the trade surveillance system and the purchase of Microsoft licences for the GPW Group.

The value of contracted future investment commitments for property, plant and equipment was PLN 811.0 thousand as at 31 December 2016, including reconstruction of rooms in the GPW building.

The value of contracted future investment commitments for intangible assets was PLN 527.0 thousand as at 31 December 2016, including mainly the implementation of the financial and accounting system's controlling module and the implementation of a document flow system in GPW.

V. 5 Ratio analysis

DEBT AND FINANCING RATIOS OF THE GROUP

In the period under review, the debt of the Group posed no threat to its going concern and capacity to meet liabilities on time. The ratio of net debt to EBITDA remained negative, the same as in 2016, due to negative net debt (cash exceeds interest-bearing liabilities), combined with an increase of EBITDA.

The debt to equity ratio decreased year on year in 2017 due to an increase in equity. The Group raised additional capital in 2017 through an issue of series D and E bonds. The issue of series D and E bonds started in 2016 but the GPW bonds were registered by KDPW in January 2017, which is when the liability under the series D and E bonds was recognised on the books. On 2 January 2017, series A and B bonds were redeemed, and so GPW's debt remained stable. In March 2017, the subsidiary TGE took a bank loan of PLN 60 million to pay outstanding VAT liabilities. The loan was repaid in November 2017. The Group's debt was unchanged at 31 December 2017.

LIQUIDITY RATIOS

The current liquidity ratio was 7.3 as at 31 December 2017 compared to 2.1 as at 31 December 2016. The increase of the ratio was due to a decrease in current liabilities following the redemption of series A and B bonds and a decrease in other current liabilities including mainly VAT liabilities for 2011-2016. Non-current liabilities increased following the issue of series D and E bonds which are due for redemption in 2022. Consequently, the current liquidity ratio remained safe.

The coverage ratio of interest costs under the bond issue increased in 2017 year on year mainly due to the Group's higher EBITDA. Consequently, the Group generated cash flows from operating activities which were several times higher than necessary to cover current liabilities under the bond issue.

PROFITABILITY RATIOS

The profitability ratios improved year on year in 2017 driven by a higher growth rate of operating profit and net profit compared to the growth rate of revenue, as reflected in the improving return and cost/income ratios as well as ROE and ROA of the Group.

Table 52 Key financial indicators of GPW Group

		As at / For the 12-month period ended		
		31 December 2017	31 December 2016	31 December 2015
Debt and financing ratios				
Net debt / EBITDA (for a period of 12 months)	1), 2)	(1.1)	(1.1)	(0.6)
Debt to equity	3)	30.3%	33.1%	34.3%
Liquidity ratios				
Current liquidity	4)	7.3	2.1	4.9
Coverage of interest on bonds	5)	29.3	24.3	23.5
Return ratios				
EBITDA margin	6)	60.3%	59.1%	54.9%
Operating profit margin	7)	52.3%	50.8%	46.8%
Net profit margin	8)	44.3%	42.2%	37.1%
Cost / income	9)	47.1%	48.3%	53.2%
ROE	10)	20.1%	18.0%	17.3%
ROA	11)	13.5%	11.8%	11.4%

1) Net debt = interest-bearing liabilities less liquid assets of GPW Group (as at balance-sheet date)

2) EBITDA = GPW Group operating profit + depreciation and amortisation (for a period of 12 months; net of the share of profit of associates)

3) Debt to equity = interest-bearing liabilities / equity (as at balance-sheet date)

4) Current liquidity = current assets / current liabilities (as at balance-sheet date)

5) Coverage of interest on bonds = EBITDA / interest on bonds (interest paid and accrued for a period of 12 months)

6) EBITDA margin = EBITDA / GPW Group revenue (for a period of 12 months)

7) Operating profit margin = GPW Group operating profit / GPW Group revenue (for a period of 12 months)

8) Net profit margin = GPW Group net profit / GPW Group revenue (for a period of 12 months)

9) Cost / income = GPW Group operating expenses / GPW Group revenue (for a period of 12 months)

10) ROE = GPW Group net profit (for a period of 12 months) / Average equity at the beginning and at the end of the last 12 month period

11) ROA = GPW Group net profit (for a period of 12 months) / Average total assets at the beginning and at the end of the last 12 month period

Source: Company

V. 6 Other information

CURRENT AND EXPECTED FINANCIAL POSITION

It is expected that the Group will generate material cash flows from operating activities in the coming years; combined with revenues from financial assets, these will cover the Group's operating expenses, capital expenditures and debt service costs.

The Group is not planning to use external financing to an extent greater than as at the date of preparation of this Report. Should any unexpected events occur, which will require financing that could not be provided by the Group, the Group will consider obtaining additional external funds in a manner optimal for the Group's capital expense and structure.

The Group did not publish any financial forecasts for 2017. Consequently, no explanations are provided for the differences between the financial results disclosed in the Annual Report and any previously published forecasts.

INVESTMENTS AND LINKS TO OTHER ENTITIES

GPW has organisational and equity links to the Group subsidiaries and associates. The description of the Group and associates is to be found in section I.1 of this Report.

In 2017, GPW did not make or divest any equity investments in any entities other than related parties.

Equity links of GPW to the companies from outside the Group as at 31 December 2017 include the investment in InfoStrefa S.A. (formerly Instytut Rynku Kapitałowego WSE Research S.A.) at 19.98 % and the foreign investments in S.C. Sibex - Sibiu Stock Exchange S.A. at 1.3% and INNEX PJSC at 10%.

In addition to the stake in the above-mentioned companies, as well as in the Group subsidiaries and associates, GPW's major domestic investments as at 31 December 2017 include bank deposits.

Except for the investment in the Romanian stock exchange S.C. Sibex - Sibiu Stock Exchange S.A., INNEX PJSC and Aquis Exchange Ltd, Giełda Papierów Wartościowych w Warszawie S.A. has no other foreign investments. All the above investments were financed with own funds of Giełda Papierów Wartościowych w Warszawie S.A..

Details of the parent entity's investments were disclosed in the Separate Financial Statements of Giełda Papierów Wartościowych w Warszawie S.A. for the years ended 31 December 2017 and 31 December 2016.

Transactions of the Group with related parties are described in the Consolidated Financial Statements of Giełda Papierów Wartościowych w Warszawie S.A. for the years ended 31 December 2017 and 31 December 2016 and in Note 25 to the Separate Financial Statements of Giełda Papierów Wartościowych w Warszawie S.A. for the years ended 31 December 2017 and 31 December 2016.

CREDIT AND LOAN AGREEMENTS SIGNED AND TERMINATED DURING THE FINANCIAL YEAR

In March 2017, Towarowa Giełda Energii S.A. took a loan of PLN 60 million from DNB Polska maturing in March 2018. The interest rate of the loan was equal to WIBOR 1M plus a margin of 1.4%. The loan was taken to pay outstanding VAT liabilities, which were paid in March 2017. Although the maturity of the bank loan was March 2018, the company repaid the loan in full in November 2017.

In May 2017, GPW granted a loan of PLN 10 million to the subsidiary TGE maturing on 31 March 2018. The interest rate of the loan was equal to WIBOR 1M plus a margin of 1.4%. TGE repaid the loan in full in November 2017.

In January 2017, TGE granted a loan of PLN 400 thousand to the subsidiary InfoEngine maturing on 31 December 2017. The interest rate on the loan was 2%. In June 2017, TGE granted a loan of PLN 835 thousand to the subsidiary InfoEngine maturing on 30 June 2022. The interest rate on the loan was 3.3%.

The Group signed and terminated no other credit and loan agreements.

LOANS GRANTED IN THE FINANCIAL YEAR

Details of loans granted are presented above.

The Group granted no other loans in 2017.

GUARANTIES AND SURETIES GRANTED AND ACCEPTED DURING THE FINANCIAL YEAR

As at 31 December 2017, the subsidiary TGE held a bank guarantee of EUR 7.8 million issued to NordPool by a bank in respect of payments between TGE S.A. and NordPool in Market Coupling from 1 July 2017 to 30 June 2018.

The Company granted and accepted no other guarantees and sureties in 2017.

MATERIAL TRANSACTIONS OF THE ISSUER AND SUBSIDIARIES WITH RELATED PARTIES ON TERMS OTHER THAN AT ARM'S LENGTH IN THE FINANCIAL YEAR

In 2017, GPW and the subsidiaries did not make any significant transactions with related parties on terms other than at arm's length. The transactions with related parties are presented in detail in Note 25 to the Consolidated Financial Statements.

CONTINGENT LIABILITIES AND ASSETS

The Group had no contingent liabilities or contingent assets as at 31 December 2017.

Conditional agreement to sell Aquis shares

On 10 June 2016, GPW and other shareholders of Aquis signed an agreement concerning shares of Aquis Exchange Limited. Under an annex to the shareholders' agreement, GPW agreed to a conditional sale of the entire block of Aquis shares at GBP 37 per share. The call option could be exercised by Aquis shareholders in the event of GPW's negative decision concerning an IPO or in the event of GPW's negative decision concerning potential restructuring of Aquis necessary for an IPO. The call option was valid until 30 November 2017 and then expired. GPW did not exercise the option.

EVENTS AFTER THE BALANCE-SHEET DATE WHICH COULD SIGNIFICANTLY IMPACT THE FUTURE FINANCIAL RESULTS OF THE ISSUER

Making a decision to sign memorandum of understanding concerning Centrum Giełdowe real estate

On 16 January 2018, Giełda Papierów Wartościowych w Warszawie S.A. and Krajowy Depozyt Papierów Wartościowych S.A. decided to sign a memorandum of understanding with Centrum Bankowo - Finansowe „Nowy Świat" Spółka Akcyjna which is the majority shareholder of Centrum Giełdowe S.A.

Under the memorandum of understanding, the parties intend to enter into talks and negotiations in order to develop a detailed solution resulting in potential divestment of Centrum Bankowo – Finansowe as a shareholder of Centrum Giełdowe or in take-over by GPW and KDPW of the "Centrum Giełdowe" real estate at Książęca 4 St, Warsaw currently held by Centrum Bankowo – Finansowe „Nowy Świat".

GPW, KDPW and Centrum Bankowo - Finansowe „Nowy Świat" are the owners, co-owners or perpetual users of real estate within "Centrum Giełdowe". "Centrum Giełdowe" is an eight-storey building with a total floor area (office space and common space) of ca. 35,078 square meters. The space is held by GPW in 36%, KDPW in 22%, and CGSA in 42%. The "Centrum Giełdowe" houses among others the principal offices of GPW, KDPW and their subsidiaries.

The implementation of the memorandum of understanding may be conditional on the corporate approvals of each party required under its articles of association, in particular following relevant future decisions of the GPW Management Board and the corporate approvals including the approval of GPW shareholders. No such decisions or approvals were issued as at the date of approval of the Separate Financial Statements of Giełda Papierów Wartościowych w Warszawie S.A. for 2017 and the Consolidated Financial Statements of the Giełda Papierów Wartościowych w Warszawie S.A. Group for 2017.

There were no other events after the balance-sheet date which could significantly impact the future financial results of the issuer.

Start of negotiations of the boundary conditions of a sale of the stake in an associate

On 19 February 2018, the Exchange Management Board decided to start negotiations of the boundary conditions of a potential sale of the stake in the associate Aquis Exchange ("Aquis"), in which GPW holds 20.31% of votes and economic rights, if Aquis decides to have an IPO.

The terms, conditions and parameters of the potential transaction will be subject to negotiation. The potential agreement will be conditional on satisfactory outcome of the negotiations and required corporate and administrative approvals.

VI. FINANCIAL POSITION AND ASSETS OF GPW

VI. 1 Summary of results

GPW S.A. generated revenue of PLN 203.4 million in 2017, an increase of 16.0% compared to 2016. Operating expenses stood at PLN 109.9 million in 2017, representing an increase of 9.8% compared to 2016. GPW S.A.'s EBITDA[44] was PLN 109.1 million in 2017, an increase of 19.8% compared to PLN 91.1 million in 2016.

The Company generated a separate operating profit of PLN 89.6 million in 2017 compared to PLN 71.7 million in 2016, an increase of 25.0% or PLN 17.9 million year on year.

The increase of the operating profit year on year in 2017 was mainly a result of higher revenue (by PLN 28 million) combined with higher operating expenses (by PLN 9.8 million). The Company's revenue increased mainly due to higher revenue from trading in equities and equity-related instruments (by PLN 20 million). Operating expenses increased mainly due to higher external service charges (by PLN 9.7 million) including a higher cost of software modifications (by PLN 7.7 million) required to bring GPW's systems in line with the MiFID2/MiFIR requirements.

GPW S.A.'s net profit was PLN 69.0 million in 2017 compared to PLN 116.1 million in 2016, a decrease of 40.5% or PLN 47.1 million. The decrease of the net profit year on year in 2017 was due a lower balance of financial income and expenses. In 2016, GPW received PLN 61.6 million in dividends from subsidiaries and associates, including PLN 59.5 million in dividends from the subsidiary TGE. In 2017, Towarowa Giełda Energii paid no dividend as it was required to repay a bank loan taken to pay outstanding VAT liabilities following changes of the tax policy on certain services provided by the Company and the required adjustment of VAT for the years 2011-2016.

Detailed information on changes in revenues and expenses is presented in the sections below.

[44] GPW S.A.'s operating profit before depreciation and amortisation

Table 53 Separate profit and loss account of GPW S.A. by quarter in 2016 and 2017 and by year in 2015 – 2017

	2017				2016				2017	2016	2015
PLN'000	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1			
Sales revenue	**51,301**	**47,690**	**50,900**	**53,552**	**47,629**	**44,608**	**40,885**	**42,331**	**203,443**	**175,454**	**191,781**
Financial market	**48,893**	**45,655**	**49,359**	**52,322**	**46,765**	**44,039**	**40,313**	**41,781**	**196,229**	**172,899**	**188,730**
Trading	31,910	29,037	33,059	35,743	30,752	28,504	24,199	25,873	129,749	109,328	126,562
Listing	5,998	6,022	5,865	6,142	5,959	5,589	5,919	5,701	24,027	23,167	23,652
Information services	10,985	10,596	10,435	10,437	10,055	9,947	10,195	10,207	42,453	40,404	38,516
Commodity market	**90**	**87**	**86**	**85**	**78**	**90**	**80**	**79**	**348**	**327**	**-**
Information services *	90	87	86	85	78	90	80	79	348	327	-
Other revenue	**2,318**	**1,948**	**1,455**	**1,145**	**786**	**479**	**492**	**471**	**6,866**	**2,228**	**3,052**
Operating expenses	**34,014**	**21,871**	**24,557**	**29,474**	**26,612**	**18,580**	**25,173**	**29,705**	**109,916**	**100,070**	**120,354**
Depreciation and amortisation	4,876	4,884	4,998	4,714	4,201	5,205	5,033	4,901	19,472	19,340	21,472
Salaries	8,151	7,228	6,665	7,347	7,295	4,610	9,056	8,128	29,391	29,089	30,398
Other employee costs	2,123	1,859	1,942	2,044	1,705	1,555	1,815	2,206	7,968	7,281	7,602
Rent and maintenance fees	1,879	1,874	1,934	1,785	1,751	1,520	1,569	1,507	7,472	6,347	7,108
Fees and charges	176	(2,933)	175	6,447	182	(954)	220	6,764	3,865	6,212	21,815
incl.: PFSA fees	*(1)*	*(3,160)*	-	*6,260*	*19*	*(1,172)*	*1*	*6,611*	*3,099*	*5,460*	*21,094*
External service charges	15,697	8,092	7,805	6,190	10,508	5,767	6,510	5,270	37,783	28,055	27,646
Other operating expenses	1,113	867	1,038	947	970	877	971	928	3,965	3,746	4,313
Other income	122	317	303	198	428	63	55	135	940	680	497
Other expenses	270	382	808	3,369	3,416	343	24	547	4,829	4,330	1,345
Operating profit	**17,138**	**25,755**	**25,838**	**20,907**	**18,029**	**25,748**	**15,743**	**12,214**	**89,638**	**71,734**	**70,579**
Financial income	847	893	2,353	949	1,285	60,092	3,550	1,427	5,042	66,354	48,153
Financial expenses	2,246	1,933	1,921	2,771	2,039	2,023	1,994	2,017	8,871	8,073	8,965
Profit before income tax	**15,739**	**24,715**	**26,270**	**19,085**	**17,276**	**83,817**	**17,299**	**11,624**	**85,809**	**130,015**	**109,768**
Income tax expense	3,059	4,751	4,718	4,248	4,049	4,655	2,967	2,258	16,776	13,930	12,863
Profit for the period	**12,680**	**19,964**	**21,552**	**14,837**	**13,227**	**79,161**	**14,331**	**9,366**	**69,033**	**116,085**	**96,905**

** a new segment was extracted on the commodity market, therefor the Information services data on the financial market were adjusted in previous quarters*

Source: Consolidated Financial Statements, Company

Table 54 Separate statement of financial position of GPW S.A. by quarter in 2015 – 2017

	2017				2016				2015
PLN'000	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Non-current assets	**462,760**	**464,296**	**466,977**	**470,706**	**472,942**	**463,407**	**467,871**	**468,484**	**472,253**
Property, plant and equipment	96,269	96,672	97,470	99,650	101,034	91,303	93,071	93,642	94,773
Intangible assets	68,963	69,807	71,444	73,979	75,918	76,079	78,607	79,451	81,601
Investment in associates	36,959	36,959	36,959	36,959	36,959	36,959	36,959	36,959	36,959
Investment in subsidiaries	254,985	254,985	254,985	254,985	254,985	254,984	254,984	254,985	254,985
Available-for-sale financial assets	271	280	278	278	288	287	290	284	282
Prepayments	5,313	5,593	5,841	4,855	3,758	3,795	3,960	3,163	3,653
Current assets	**275,535**	**259,360**	**337,304**	**326,360**	**291,788**	**283,451**	**313,659**	**302,561**	**261,770**
Inventories	56	54	53	59	58	62	68	55	119
Corporate income tax receivable	-	-	-	3,355	-	-	-	-	-
Trade and other receivables	26,272	33,964	38,198	36,475	23,941	24,296	26,376	29,929	26,091
Other current financial assets	-	10,123	10,046	-	-	-	-	-	-
Cash and cash equivalents	249,207	215,219	289,007	286,471	267,789	259,094	287,215	272,577	235,560
Total assets	**738,295**	**723,656**	**804,281**	**797,066**	**764,730**	**746,859**	**781,530**	**771,045**	**734,023**
Equity	**450,887**	**438,216**	**418,252**	**486,939**	**472,102**	**458,849**	**379,687**	**464,254**	**454,881**
Share capital	63,865	63,865	63,865	63,865	63,865	63,865	63,865	63,865	63,865
Other reserves	(125)	(114)	(114)	(114)	(114)	(141)	(141)	(297)	(304)
Retained earnings	387,147	374,465	354,501	423,188	408,351	395,124	315,963	400,686	391,320
Non-current liabilities	**253,744**	**253,802**	**252,174**	**251,892**	**136,794**	**136,199**	**135,545**	**132,563**	**258,242**
Liabilities under bond issue	243,573	243,475	243,378	243,281	123,459	123,733	123,669	123,606	243,800
Employee benefits payable	883	837	1,296	1,799	1,435	1,187	2,828	2,615	2,382
Deferred income tax liability	7,064	7,266	5,276	4,588	9,676	9,055	6,824	6,342	12,060
Other liabilities	2,224	2,224	2,224	2,224	2,224	2,224	2,224	-	-
Current liabilities	**33,664**	**31,638**	**133,855**	**58,235**	**155,834**	**151,812**	**266,298**	**174,228**	**20,900**
Liabilities under bond issue	1,938	2,100	1,895	2,069	122,882	123,003	121,047	122,881	682
Trade payables*	11,954	4,040	2,727	3,752	4,297	1,511	5,720	5,333	6,599
Employee benefits payable	8,481	6,779	4,895	3,560	6,490	4,924	6,614	4,400	7,023
Corporate income tax payable	5,685	4,226	6,822	12,282	14,445	11,473	9,547	7,448	1,976
Accruals and deferred income *	21	9,972	23,903	31,687	1,712	9,151	22,231	29,666	1,776
Provisions for other liabilities and charges	211	190	317	317	317	-	-	-	-
Other current liabilities	5,374	4,331	93,296	4,568	5,691	1,748	101,139	4,501	2,844
Total equity and liabilities	**738,295**	**723,656**	**804,281**	**797,066**	**764,730**	**746,859**	**781,530**	**771,045**	**734,023**

** As at 31 December 2017 accruals are presented under trade payables*

Source: Consolidated Financial Statements, Company

VI. 2 Presentation of the financials

REVENUE

The Company has the following revenue-generating segments:

- financial market,
- commodity market including only information services on the commodity market,
- other revenues.

Revenues from the financial market include revenues from:

- trading;
- listing;
- information services and calculation of reference rates.

Trading revenue includes fees paid by market participants in respect of:

- transactions on markets of equities and equity-related instruments;
- transactions in derivative financial instruments;
- transactions in debt instruments;
- transactions in other cash market instruments;
- other fees paid by market participants.

Revenues from transactions in equities and equity-related securities are the Company's main source of trading revenues and its main source of sales revenues in general.

Revenues from transactions in derivative financial instruments are the second biggest source of trading revenues on the financial market. Transactions in WIG20 index futures account for the majority of revenues from transactions in derivatives.

Revenues from other fees paid by market participants include mainly fees for services providing access to and use of the trading system.

Revenues from transactions in debt instruments are generated by the Catalyst market.

Revenues from transactions in other cash market instruments include fees for trading in structured products, investment certificates, warrants and ETF (Exchange Traded Fund) units.

Listing revenues include two elements:

- one-off fees paid for introduction of shares and other instruments to trading on the exchange;
- periodic listing fees.

Revenues from information services mainly include fees paid by data vendors for real-time market data on the financial market and the commodity market as well as historical and statistical data on the financial market. Real-time data fees include fixed annual fees and monthly fees based on the data vendor's number of subscribers and the scope of data feeds used by a subscriber. Revenues from information services include revenue from WIBOR and WIBID reference rates.

The Company's other revenues include revenues from office space lease and sponsorship.

The Company's sales revenues amounted to PLN 203.4 million in 2017, an increase of 16% (PLN 28 million) year on year. The revenue from trade in equities and equity-related instruments was the biggest contributor of the increase of revenue.

The revenue from trading in equities and equity-related instruments increased by 22.4% or PLN 20 million year on year in 2017. The increase of revenue in 2017 was driven by an increase of the value of trade on the equity market.

The revenue from trade in derivatives decreased by 2.6% or PLN 0.3 million year on year in 2017 due to a decrease in the volume of trade in derivatives by 4.4% year in year. The rate of the decrease in the revenue from trade in derivatives was lower than the rate of the decrease in the volume of trade in derivatives due to a lower decrease in the volume of trade in WIG20 futures (by 3.7%) and the disproportion between the revenue and the volume of trade in view of the structure of fees including the applicable fixed fees.

In the years under review, the share of revenue from trade in derivatives in total operating income decreased from 7.0% in 2016 to 6.0% in 2017 while the share of revenue from trade in equities increased from 51% in 2016 to 54.0% in 2017. The sharp increase in the revenue from trade in equities caused the share of listing revenue to drop from 13.0% in 2016 to 12.0% in 2017 and the revenue from information services from 23% in 2016 to 21% in 2017.

Table 55 Separate revenues of GPW S.A. and revenue structure in 2015 - 2017

	Year ended 31 December						Change (2017 vs 2016)	Change (%) (2017 vs 2016)
PLN'000	2017	%	2016	%	2015	%		
Financial market	**196,229**	**96%**	**172,899**	**99%**	**188,730**	**98%**	**23,330**	**13.5%**
Trading	129,749	64%	109,328	62%	126,562	66%	20,421	18.7%
Equities and equity-related instruments	109,564	54%	89,520	51%	107,941	56%	20,044	22.4%
Derivative instruments	11,888	6%	12,202	7%	11,578	6%	(314)	-2.6%
Other fees paid by market participants	7,498	4%	6,835	4%	6,383	3%	663	9.7%
Debt instruments	371	0%	361	0%	283	0%	10	2.8%
Other cash instruments	428	0%	410	0%	376	0%	18	4.4%
Listing	24,027	12%	23,167	13%	23,652	12%	860	3.7%
Listing fees	19,570	10%	19,508	11%	18,862	10%	62	0.3%
Introduction fees, other fees	4,457	2%	3,659	2%	4,790	2%	798	21.8%
Information service	42,453	21%	40,404	23%	38,516	20%	2,049	5.1%
Real-time information	39,412	19%	37,743	22%	36,133	19%	1,669	4.4%
Historical and statistical information and indices	3,041	1%	2,661	2%	2,383	1%	380	14.3%
Commodity market	**348**	**0%**	**327**	**0%**	**-**	**0%**	**21**	**-**
Information services *	348	0%	327	0%	-	0%	21	6.4%
Other revenue	**6,866**	**3%**	**2,228**	**1%**	**3,052**	**2%**	**4,638**	**208.2%**
Total	**203,443**	**100%**	**175,454**	**100%**	**191,781**	**100%**	**27,989**	**16.0%**

** a new segment was extracted on the commodity market, therefor the Information services data on the financial market were adjusted in previous quarters*

Source: Consolidated Financial Statements, Company

The Company earns revenue both from domestic and foreign clients. The table below presents revenue by geographic segment.

Table 56 Separate revenues of GPW S.A. by geographical segment in 2015 - 2017

	Year ended 31 December						Change (2017 vs 2016)	Change (%) (2017 vs 2016)
PLN'000	2017	%	2016	%	2015	%		
Revenue from foreign customers	75,610	37%	63,887	36%	62,782	33%	11,723	18.4%
Revenue from local customers	127,833	63%	111,567	64%	128,999	67%	16,266	14.6%
Total	**203,443**	**100%**	**175,454**	**100%**	**191,781**	**100%**	**27,989**	**16.0%**

Source: Consolidated Financial Statements, Company

The average EUR/PLN exchange rate was 4.26 EUR/PLN in 2017, 4.36 EUR/PLN in 2016, and 4.18 EUR/PLN in 2015.

The Company is not dependent on any single client as no client has a share exceeding 10% of the total sales revenue.

FINANCIAL MARKET

TRADING

The revenues of the Company from trading on the financial market stood at PLN 129.7 million in the year ended on 31 December 2017 compared to PLN 109.3 million in 2016.

The share of trading revenue on the financial market in the total sales revenue of the Company was 64% in 2017 compared to 62% in 2016. The biggest share in trading revenue (93.3%) is that of the revenue on the Main Market, which stood at PLN 121 million in 2017 (an increase of 19.7 million year on year). The remaining share in revenue is that of NewConnect and Catalyst.

Revenue from:

- ✓ trade in equities and equity-related instruments;
- ✓ trade in derivatives;
- ✓ other fees paid by trading participants

is presented in detail in section V.2.

Debt instruments

Revenues of the Company from transactions in **debt instruments** were stable and stood at PLN 0.37 million in 2017, an increase of 2.8% year on year (PLN 0.36 million in 2016).

The revenue of the Company from transactions in debt instruments is generated by the Catalyst market.

Table 57 Data for the debt instruments market

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
Financial market, trading revenue: debt instruments *(PLN million)*	**0.37**	**0.36**	**0.28**	**0.01**	**2.8%**
Catalyst:					
Value of trading *(PLN billion)*	2.33	2.37	1.93	0.01	-1.7%
incl.: Value of trading in non-Treasury instruments (PLN billion)	1.45	1.39	1.34	0.06	4.3%

Source: Company

Other cash market instruments

Revenues from transactions in **other cash market instruments** amounted to PLN 428 thousand in 2017 compared to PLN 410 thousand in 2016. The revenues include fees for trading in structured products, investment certificates, ETF units and warrants. The revenue from trade in structured certificates had the highest share (73.6%).

LISTING

Listing revenues of the Company on the financial market amounted to PLN 24.0 million in 2017 compared to PLN 23.2 million in 2016.

Revenues from **listing fees** amounted to PLN 19.6 million in 2017 compared to PLN 19.5 million in 2016. The main driver of revenues from listing fees is the number of issuers listed on the GPW markets and their capitalisation at the year's end.

Revenues from **fees for introduction and other fees** amounted to PLN 4.5 million in 2017 compared to PLN 3.7 million in 2016. The revenues are driven mainly by the number and value of new listings of shares and bonds on the GPW markets. The value of IPOs and SPOs in 2017 increased significantly year on year.

Listing revenue on the GPW Main Market and NewConnect is presented in detail in section V.2.

Listing revenues from Catalyst increased by 26.7% year on year in 2017. The increase resulted from an increase in the number of listed instruments: 573 at the end of 2017 compared to 505 at the end of 2016, as well as the value of issued instruments, in particular non-Treasury instruments by 35.3%. The table below presents the key financial and operating figures.

Table 58 Data for Catalyst

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	2016	2015		
Catalyst					
Listing revenue *(PLN million)*	**1.7**	**1.3**	**1.1**	**0.4**	**26.7%**
Number of issuers	148	152	160	(4)	-2.6%
Number of issued instruments	573	505	452	68	13.5%
including: non-Treasury instruments	531	464	416	67	14.4%
Value of issued instruments *(PLN billion)*	743.0	690.0	594.4	53.0	7.7%
including: non-Treasury instruments	87.1	64.4	50.9	22.7	35.3%

Source: Company

INFORMATION SERVICES

Revenues from information services on the financial market and the commodity market amounted to PLN 42.8 million in 2017 compared to PLN 40.7 million in 2016. One new data vendor was acquired and the number of subscribers grew. The increase in revenue from information services in 2017 was driven by a large increase of the number of subscribers and by the launch of WIBID and WIBOR reference rate services.

Table 59 Data for information services

	Year ended 31 December			Change (2017 vs 2016)	Change (%) (2017 vs 2016)
PLN'000	2017	2016	2015		
Revenues from information services and WIBID and WIBOR reference rate services * (PLN million)	**42.8**	**40.7**	**38.5**	**2.1**	**5.1%**
Number of data vendors	52	51	54	1	2.0%
Number of subscribers *('000 subscribers)*	244.8	224.6	221.1	20.2	9.0%

Source: Company

OTHER REVENUES

The Company's other revenues amounted to PLN 6.9 million in 2017 compared to PLN 2.2 million in 2016. The Company's other revenues include revenues from educational and PR services, office space lease, services provided to GPW Group companies, colocation services, and sponsorship. The biggest revenue item in 2017 was the revenue from services provided to GPW subsidiaries (PLN 3.2 million). These include financial, accounting, HR, office and marketing services. The second biggest revenue category was the revenue from office space lease and colocation (PLN 2.9 million). The remaining amount of revenues were revenues from sponsorship.

OPERATING EXPENSES

Total operating expenses stood at PLN 109.9 million in 2017, representing an increase of 9.8% (PLN 9.8 million) year on year. The cost/income ratio decreased to 54.0% in 2017 from 57.0% in 2016. The increase of operating expenses was mainly driven by the cost of software modifications in harmonisation with MiFID2 requirements.

Table 60 Separate operating expenses of GPW S.A. and structure of operating expenses in 2015 - 2017

	Year ended 31 December						Change (2017 vs 2016)	Change (%) (2017 vs 2016)
PLN'000, %	2017	%	2016	%	2015	%		
Depreciation and amortisation	19,472	18%	19,340	19%	21,472	18%	132	0.7%
Salaries	29,391	27%	29,089	29%	30,398	25%	302	1.0%
Other employee costs	7,968	7%	7,281	7%	7,602	6%	687	9.4%
Rent and other maintenance fees	7,472	7%	6,347	6%	7,108	6%	1,125	17.7%
Fees and charges	3,865	4%	6,212	6%	21,815	18%	(2,347)	-37.8%
including PFSA fees	*3,099*	*3%*	*5,460*	*5%*	*21,094*	*18%*	*(2,361)*	*-43.2%*
External service charges	37,783	34%	28,055	28%	27,646	23%	9,728	34.7%
Other operating expenses	3,965	4%	3,746	4%	4,313	4%	219	5.8%
Total	**109,916**	**100%**	**100,070**	**100%**	**120,354**	**100%**	**9,846**	**9.8%**

Source: Consolidated Financial Statements, Company

The Company is not dependent on any single supplier or provider as no contractor has a share exceeding 10% of the total expenses of the Company.

Depreciation and amortisation

Depreciation and amortisation charges stood at PLN 19.5 million in 2017, representing an increase of 0.7% (PLN 0.1 million) compared to PLN 19.3 million in 2016. Consequently, depreciation and amortisation charges were stable year on year.

Salaries and other employee costs

Salaries and other employee costs amounted to PLN 37.4 million in 2017, representing an increase of 2.7% (PLN 1.0 million) compared to PLN 36.4 million in 2016.

The increase of salaries in 2017 was driven by a decrease of the cost of gross salaries by PLN 1.7 million, an increase of the cost of annual bonuses by PLN 2.7 million, a decrease of the cost of reorganization by PLN 1.4 million, and an increase of the cost of provisions for unused holiday leave by PLN 0.3 million and the cost of overtime pay by PLN 0.4 million. The higher cost of annual bonuses was mainly due to the effect of a lower base of 2016 due to the release of provisions for bonuses of the Management Board for 2015 at PLN 2.6 million. Furthermore, social security contributions paid to ZUS and allocations to the Company Social Fund increased as well in 2017.

The headcount of the Company was 189 FTEs as at 31 December 2017 compared to 185 FTEs as at 31 December 2016. The increase of the headcount of the Company year on year in 2017 was a result of the recovery of some human resources reduced in the workforce restructuring in 2016.

Table 61 Employment in GPW S.A.

	As at		
# FTEs	31 December 2017	31 December 2016	31 December 2015
GPW	189	185	201
Total	**189**	**185**	**201**

Source: Company

Rent and other maintenance fees

Rent and other maintenance fees amounted to PLN 7.5 million in 2017 compared to PLN 6.3 million in 2016, representing an increase of 17.7% year in year. The increase of rent in 2017 was mainly driven by additional space leased by GPW for its subsidiaries in the process of physical integration of the Group, i.e., relocation of the offices of the subsidiaries to the principal offices of GPW. The cost of additional space leased by GPW is reinvoiced to the subsidiaries as shown in *Other sales revenues*.

Fees and charges

Fees and charges stood at PLN 3.9 million in 2017, a decrease of 37.8% (PLN 2.3 million) year on year. The main component of fees and charges of the Company are fees paid to the Polish Financial Supervision Authority, which changed as of the beginning of January 2016 with the extension of the group of entities which pay the cost of market supervision. The supervision fees stood at PLN 3.1 million in 2017 as compared to PLN 5.5 million paid in 2016. According to internal analyses, the much lower fee paid to PFSA in 2017 was probably due to an excessive fee paid in 2016 when the PFSA cost was lower than initially expected by PFSA.

External service charges

External service charges amounted to PLN 37.8 million in 2017 compared to PLN 28.1 million in 2016.

Table 62 Separate external service charges of GPW S.A. and structure of external service charges in 2015 - 2017

PLN'000, %	Year ended 31 December						Change (2017 vs 2016)	Change (%) (2017 vs 2016)
	2017	%	2016	%	2015	%		
IT cost:	23,722	63%	15,668	56%	14,275	52%	8,054	51.4%
IT infrastructure maintenance	10,018	*27%*	9,331	*33%*	9,746	*35%*	*687*	*7.4%*
Data transmission lines	4,218	*11%*	4,508	*16%*	4,416	*16%*	*(290)*	*-6.4%*
Software modification	9,486	*25%*	1,829	*7%*	113	*0%*	*7,657*	*418.7%*
Office and office equipment maintenance:	2,768	7%	2,244	8%	2,260	8%	524	23.4%
Repair and maintenance of installations	870	*2%*	863	*3%*	875	*3%*	*7*	*0.8%*
Security	1,181	*3%*	735	*3%*	675	*2%*	*446*	*60.7%*
Cleaning	449	*1%*	370	*1%*	372	*1%*	*79*	*21.4%*
Phone and mobile phone services	268	*1%*	276	*1%*	338	*1%*	*(8)*	*-2.9%*
Leasing, rental and maintenance of vehicles	159	0%	135	0%	225	1%	24	18.1%
Transportation services	91	0%	81	0%	100	0%	10	12.3%
Promotion, education, market development	3,804	10%	4,381	16%	4,298	16%	(577)	-13.2%
Market liquidity support	521	1%	564	2%	920	3%	(43)	-7.7%
Advisory (including: audit, legal services, business consulting)	2,918	8%	2,301	8%	2,633	10%	617	26.8%
Information services	2,212	6%	1,348	5%	1,132	4%	864	64.1%
Training	621	2%	540	2%	823	3%	81	15.0%
Mail fees	40	0%	44	0%	40	0%	(5)	-9.1%
Bank fees	42	0%	48	0%	52	0%	(6)	-12.5%
Translation	318	1%	177	1%	185	1%	141	79.7%
Other	567	2%	524	2%	703	3%	43	8.2%
Total	**37,783**	**100%**	**28,055**	**100%**	**27,646**	**100%**	**9,728**	**34.7%**

Source: Consolidated Financial Statements, Company

The increase of external service charges by PLN 9.7 million year on year in 2017 was mainly driven by an increase of the cost of software modifications by PLN 7.7 million to PLN 9.5 million in 2017. In addition, the following costs also increased:

- information services – increase by PLN 0.9 million,
- IT infrastructure maintenance – increase by PLN 0.7 million,
- advisory – increase by PLN 0.6 million,
- security – increase by PLN 0.4 million,
- translation – increase by PLN 0.1 million.

The increase of the cost of software modifications by PLN 7.7 million was mainly due to the modifications of the trading system UTP in line with the MiFID2 requirements. The cost of modification of GPW's software was PLN 9.5 million in 2017, including PLN 9.3 million of the cost of modifications of the trading system UTP in line with the MiFID2 requirements.

The increase of the cost of IT infrastructure maintenance in GPW was mainly driven by a higher cost of licences and maintenance fees, including the cost of harmonisation with the MiFID2 requirements, which stood at PLN 0.6 million.

The cost of advisory was PLN 2.9 million in 2017 compared to PLN 2.3 million in 2016, an increase of 26.8%. The cost of advisory included:

- legal advisory – PLN 553.8 thousand,
- tax advisory – PLN 383.3 thousand,
- other advisory – PLN 1,580.3 thousand,
- tax and accounting audits – PLN 400.3 thousand.

Other advisory of PLN 1.5 million mainly includes the cost of business and management consulting as well as the representation office in London.

The cost of promotion, education and market development decreased at the biggest rate from PLN 4.4 million in 2016 to PLN 3.8 million in 2016. The cost of promotion, education and market development included:

- Financial and in-kind sponsorship – PLN 284.2 thousand,
- Promotion and business development – PLN 639.9 thousand,
- Conference partnership – PLN 1,140.7 thousand,
- Catering – PLN 354.6 thousand,
- Media monitoring – PLN 46.0 thousand,
- Public relations – PLN 644.1 thousand,
- Radio, TV and press advertising – PLN 539.3 thousand,
- Conferences and training – PLN 155.3 thousand.

Other operating expenses

Other operating expenses increased by 5.8% or PLN 0.2 million year on year in 2017. Other operating expenses amounted to PLN 3.96 million, including the cost of material and energy consumption at PLN 2.4 million, industry organisation membership fees at PLN 0.4 million, non-life insurance at PLN 0.23 million, perpetual usufruct write-downs at PLN 0.1 million, business travel at PLN 0.6 million, conference participation at PLN 0.14 million, and other costs at PLN 18 thousand.

OTHER INCOME AND EXPENSES

Other income of GPW S.A. stood at PLN 0.94 million in 2017 compared to PLN 0.68 million in 2016. Other income in 2017 included mainly gains on the sale of property, plant and equipment at PLN 0.26 million, medical services reinvoiced for employees at PLN 0.27 million, the annual correction of input VAT at PLN 0.11 million, and other income at PLN 0.29 million, mainly income from reinvoicing.

Other expenses of GPW S.A. stood at PLN 4.8 million in 2017 compared to PLN 4.3 million in 2016 mainly due to higher donations paid.

In 2017, GPW paid donations of PLN 3.0 million to the Polish National Foundation, PLN 140 thousand to the Archdiocese of Warsaw, PLN 414 thousand to the GPW Foundation, and PLN 25 thousand to the Wolność i Demokracja Foundation.

In 2016, GPW paid donations of PLN 3.0 million to the Polish National Foundation, PLN 34.4 thousand to the Lesław A. Paga Foundation, PLN 28.5 thousand to the Polish-Chinese Cooperation Forum Association, PLN 27.5 thousand to the GPW Foundation, and PLN 10 thousand to the Youth Entrepreneurship Foundation and Caritas Diecezji Łowickiej each.

Other expenses also include receivables write-offs (PLN 0.5 million) and reinvoiced costs of subsidiaries in respect of the modernisation and remodelling of office space, as well as advisory services in the WIBOR project.

FINANCIAL INCOME AND EXPENSES

Financial income of the Company stood at PLN 5.0 million in 2017 compared to PLN 66.4 million in 2016. Financial income includes mainly dividends paid by subsidiaries and associates, interest on bank deposits, as well as positive FX differences.

Dividends received stood at PLN 1.3 million in 2017 compared to PLN 61.6 million in 2016. The difference was due to the fact that the subsidiary TGE paid no dividend for 2016 in 2017. The subsidiary paid no dividend as it was required to repay the bank loan taken in Q1 2017 to pay outstanding VAT liabilities.

Income from interest on bank deposits was PLN 3.6 million in 2017 and PLN 4.1 million in 2016. The Company earned income of loans granted at PLN 152 thousand.

Financial expenses of the Company stood at PLN 8.9 million in 2017 compared to PLN 8.1 million in 2016. The higher expenses in 2017 were mainly driven by FX differences which stood at negative PLN 1.2 million in 2017 comparted to a positive balance in 2016 shown under financial income.

The largest item of the Company's financial expenses is the interest cost under outstanding bonds. The interest cost of the bonds decreased to PLN 7.6 million in 2017 compared to PLN 8.0 million in 2016. The cost in 2017 resulted from interest on series D and E bonds at 2.76%, which remained unchanged throughout the year despite the floating interest rate on the bonds, and interest on series C bonds at 3.19%. The interest cost in 2016 resulted from interest on series A and B bonds at 2.94% in H1 2016 and 2.96% in H2 2016 and interest on series C bonds at 3.19%.

The bonds issued by GPW are presented in detail in section V.2.

INCOME TAX

Income tax of the Company was PLN 16.8 million in 2017 and PLN 13.9 million in 2016. The **effective income tax rate** in the periods under review was 19.6% and 10.7%, respectively, as compared to the standard Polish corporate income tax rate of 19%. The difference between the effective tax rate and the standard tax rate was mainly due to non-taxable dividends paid by subsidiaries and associates and shown in profit before tax. The Company uses a tax relief for dividends paid by subsidiaries and associates as it holds more than 10% of their stake for a period longer than two years.

GPW received no dividend from the subsidiary TGE in 2017; hence, the effective tax rate for 2017 was similar to the official corporate income tax rate in Poland.

VI. 3 Atypical factors and events

Atypical factors and events impacting the results are presented in detail in section V.3.

VI. 4 Company's assets and liabilities structure

The balance-sheet total of the Company was PLN 738.3 million as at 31 December 2017, a decrease of 3.5% (PLN 26.4 million) compared to PLN 764.7 million as at 31 December 2016.

ASSETS

Total assets
PLN 738.3 m

Non-current assets
PLN 462.8 m

Current assets
PLN 275.5 m

The Company's **non-current assets** stood at PLN 462.8 million representing 63% of total assets as at 31 December 2017 compared to PLN 472.9 million or 62% of total assets as at 31 December 2016. The decrease of non-current assets was mainly driven by a decrease of the value of property, plant and equipment as well as intangible assets as a result of depreciation and amortisation charges.

The Company's **current assets** stood at PLN 275.5 million representing 37% of total assets as at 31 December 2017 compared to PLN 291.8 million or 38% of total assets as at 31 December 2016. The change of current assets in 2017 was driven by a decrease of cash flows from operating and investing activities. On the other hand, trade receivables and other receivables increased.

Table 63 Separate statement of financial position of GPW S.A. at the year's end in 2015 - 2017 (assets)

	As at					
PLN'000	31 December 2017	%	31 December 2016	%	31 December 2015	%
Non-current assets	**462,760**	**63%**	**472,942**	**62%**	**472,253**	**64%**
Property, plant and equipment	96,269	13%	101,034	13%	94,773	13%
Intangible assets	68,963	9%	75,918	10%	81,601	11%
Investment in associates	36,959	5%	36,959	5%	36,959	5%
Investment in subsidiaries	254,985	35%	254,985	33%	254,985	35%
Available-for-sale financial assets	271	0%	288	0%	282	0%
Prepayments	5,313	1%	3,758	0%	3,653	0%
Current assets	**275,535**	**37%**	**291,788**	**38%**	**261,770**	**36%**
Inventory	56	0%	58	0%	119	0%
Trade and other receivables	26,272	4%	23,941	3%	26,091	4%
Cash and cash equivalents	249,207	34%	267,789	35%	235,560	32%
Total assets	**738,295**	**100%**	**764,730**	**100%**	**734,023**	**100%**

Source: Consolidated Financial Statements, Company

Trade receivables and other receivables stood at PLN 26.3 million in 2017 compared to PLN 23.9 million in 2016. The increase of trade receivables and other receivables was mainly driven by an increase of trade receivables by PLN 1.0 million, receivables from subsidiaries in respect of income tax payments within the Tax Group at PLN 0.9 million, and an increase of prepayments by PLN 0.4 million.

EQUITY AND LIABILITIES

Equity
PLN 450.9 m

Non-current liabilities
PLN 253.7 m

Current liabilities
PLN 33.7 m

The **equity** of the Company stood at PLN 450.9 million representing 61% of the total equity and liabilities as at 31 December 2017 compared to PLN 472.1 million or 62% of total equity and liabilities as at 31 December 2016.

Non-current liabilities of the Company stood at PLN 253.7 million representing 34% of the Group's total equity and liabilities as at 31 December 2017 compared to PLN 136.8 million or 18% of total equity and liabilities as at 31 December 2016. The significant year-on-year change of non-current liabilities as at 31 December 2017 was due to the issue (recognition) in January 2017 of series D and E bonds due for redemption on 31 January 2022. Non-current liabilities as at 31 December 2016 decreased following the reclassification as current liabilities of some liabilities under the series A and B bonds due for redemption on 2 January 2017.

Current liabilities of the Company stood at PLN 33.7 million representing 5% of the total equity and liabilities as at 31 December 2017 compared to PLN 155.8 million or 20% of total equity and liabilities as at 31 December 2016. The decrease of current liabilities was driven by the redemption of series A and B bonds in January 2017 and a decrease of the corporate income tax payable. The year-on-year decrease of the corporate income tax payable as at 31 December 2017 was due to a change of the method of payment of taxes in 2017 following the formation of a Tax Group by GPW and its subsidiaries and quarterly payment of current tax liabilities. Income tax payable as at 31 December 2017 is the outstanding current tax payable after Q4 2016. In 2016, GPW used the simplified method of monthly income tax advances equal to 1/12 of the tax due for 2014. As a result, the tax payable as at 31 December 2016 was higher.

Other current liabilities were lower as at 31 December 2017 due to lower investment commitments and accruals, which are presented under trade payables as of 2017.

Table 64 Separate statement of financial position of GPW S.A. at the year's end in 2015 - 2017 (equity and liabilities)

	As at					
PLN'000	31 December 2017	%	31 December 2016	%	31 December 2015	%
Equity	**450,887**	**61%**	**472,102**	**62%**	**454,881**	**62%**
Share capital	63,865	9%	63,865	8%	63,865	9%
Other reserves	(125)	0%	(114)	0%	(304)	0%
Retained earnings	387,147	52%	408,351	53%	391,320	53%
Non-current liabilities	**253,744**	**34%**	**136,794**	**18%**	**258,242**	**35%**
Liabilities under bond issue	243,573	33%	123,459	16%	243,800	33%
Employee benefits payable	883	0%	1,435	0%	2,382	0%
Deferred income tax liability	7,064	1%	9,676	1%	12,060	2%
Other liabilities	2,224	0%	2,224	-	-	-
Current liabilities	**33,664**	**5%**	**155,834**	**20%**	**20,900**	**3%**
Liabilities under bond issue	1,938	0%	122,882	16%	682	0%
Trade payables *	11,954	2%	4,297	1%	6,599	1%
Employee benefits payable	8,481	1%	6,490	1%	7,023	1%
Corporate income tax payable	5,685	1%	14,445	2%	1,976	0%
Accruals and deferred income *	21	0%	1,712	0%	1,776	0%
Provisions for other liabilities and charges	211	0%	317	0%	-	0%
Other current liabilities	5,374	1%	5,691	1%	2,844	0%
Total equity and liabilities	**738,295**	**100%**	**764,730**	**100%**	**734,023**	**100%**

** As at 31 December 2017 accruals are presented under trade payables*

Source: Consolidated Financial Statements, Company

LIQUIDITY, FINANCIAL ASSETS AND FINANCIAL RISK MANAGEMENT OF THE COMPANY

The activities of the Company and the Group are exposed to three types of financial risks: market risk, credit risk, and liquidity risk. Details of how financial risks are identified and managed have been described in the Separate Financial Statements.

In 2017, the Company's liquidity risk, which means inability to timely meet its payment obligations, was minor in view of material financial assets held and positive cash flows from operating activities which exceeded the value of existing liabilities. The current liquidity ratio amounted to 8.2 following a decrease to 1.9 in 2016. The decrease of the liquidity ratio in 2016 was mainly due to the shorter time to maturity of series A and B bonds under 1 year and the reclassification of liabilities under the bonds as current liabilities. Series A and B bonds were redeemed on January 2017 and paid for with funds raised through the issue of series D and E bonds which are due for redemption in 2022.

GPW manages financial liquidity in accordance with the "Current Assets Allocation Procedure" adopted by the Management Board. Pursuant to this document, the procedures for investing free cash should be handled in view of the due dates of liabilities so as to minimise the liquidity risk for the parent entity and, at the same time, to maximise its financial income. In practical terms, this means that the Company invested its current assets in bank deposits in 2017 and the average duration of a financial asset portfolio was around 68 days in 2017 and ca. 66 days in 2016.

In the opinion of the Management Board, the Company's financial assets and financial risk management process is effective and ensures timely meeting of payment obligations.

No threats have been identified to the Company's liquidity.

The risks inherent in financial instruments held are described in Note 3 *Financial Risk Management* to the Separate Financial Statements.

CASH FLOWS

The Company generated positive cash flows from **operating activities** at PLN 84.0 million in 2017 compared to positive cash flows of PLN 87.2 million in 2016.

The cash flows from **investing activities** were negative at PLN 4.6 million in 2017 compared to positive cash flows of PLN 49.8 million in 2016. The negative cash flows from investing activities in 2017 were due to investments of PLN 10.4 million, which was more than the interest received and the dividend paid by BondSpot. The positive cash flows at PLN 49.8 million in 2016 were mainly due to dividends received at PLN 61.6 million and investments of PLN 16.0 million.

The cash flows from **financing activities** were negative at PLN 98.4 million in 2017, mainly due to the payment of dividend to the shareholders at PLN 90.2 million and interest paid on bonds issued by the Company. The cash flows from financing activities were negative in 2016, mainly due to the payment of dividend to the shareholders of GPW at PLN 99.0 million and interest paid on bonds at PLN 5.8 million.

Table 65 Separate cash flows of GPW S.A.

	Cash flows for the 12-month period ended 31 December		
PLN'000	**2017**	**2016**	**2015**
Cash flows from operating activities	84,014	87,205	84,609
Cash flows from investing activities	(4,632)	49,842	49,809
Cash flows from financing activities	(98,387)	(104,808)	(106,944)
Net increase / (decrease) in cash and cash equivalents	**(19,005)**	**32,239**	**27,473**
Impact of change of fx rates on cash balances in foreign currencies	*423*	*(10)*	*51*
Cash and cash equivalents - opening balance	**267,789**	**235,560**	**208,035**
Cash and cash equivalents - closing balance	**249,207**	**267,789**	**235,560**

Source: Consolidated Financial Statements, Company

CAPITAL EXPENDITURE

The Company's total capital expenditure in 2017 amounted to PLN 10.4 million including expenditure for property, plant and equipment at PLN 6.4 million and expenditure for intangible assets at PLN 4.0 million. The Company's total capital expenditure in 2016 amounted to PLN 16.0 million including expenditure for property, plant and equipment at PLN 13.1 million and expenditure for intangible assets at PLN 2.8 million.

The capital expenditure for property, plant and equipment and intangible assets in 2017 were due to maintenance of IT infrastructure including acquisition of network devices and IT equipment such as servers, as well as the acquisition of licences. Part of the capital expenditure prepared GPW to comply with MiFID2.

The capital expenditure for property, plant and equipment and intangible assets in 2016 included maintenance of IT infrastructure and IT equipment related to the trading system.

The value of contracted future investment commitments for property, plant and equipment was PLN 77.0 thousand as at 31 December 2017, including mainly reconstruction of rooms in the GPW building.

The value of contracted future investment commitments for intangible assets was PLN 1,203 thousand as at 31 December 2017, including mainly Microsoft licences and the trade surveillance system.

The value of contracted future investment commitments for property, plant and equipment was PLN 811 thousand as at 31 December 2016, including reconstruction of rooms in the GPW building.

The value of contracted future investment commitments for intangible assets was PLN 527 thousand as at 31 December 2016, including mainly the implementation of the financial and accounting system's controlling module and the implementation of a document flow system.

VI. 5 Ratio analysis

DEBT AND FINANCING RATIOS OF THE COMPANY

In the period under review, the debt of the Company posed no threat to its going concern and capacity to meet liabilities on time. The ratio of net debt to EBITDA increased year on year in 2017 but remained negative due to negative net debt (cash exceeds interest-bearing liabilities). The debt to equity ratio increased modestly year on year in 2017 due to a decrease in equity as at 31 December 2017. Interest-bearing debt was unchanged year on year (PLN 245.5 million as at 31 December 2017 compared to PLN 246.3 million as at 31 December 2016).

LIQUIDITY RATIOS

The current liquidity ratio was 8.2 as at 31 December 2017 compared to 1.9 as at 31 December 2016. The increase of the current liquidity ratio was due to an increase in non-current liabilities following the issue of series D and E bonds. The ratio was lower at 31 December 2016 due to reclassification of debt under series A and B bonds as current liabilities (maturity of the bonds on 2 January 2017).

The coverage ratio of interest costs under the bond issue increased to 15.1 in 2017 compared to 12.0 in 2016. Consequently, the Company generated cash flows from operating activities which were several times higher than necessary to cover current liabilities under the bond issue.

PROFITABILITY RATIOS

The profitability ratios EBITDA and EBIT improved year on year in 2017 driven by an increase of revenue and operating profit. The Company's cost/income ratio decreased as the growth rate of revenue was much bigger than the growth rate of expenses in 2017. Return on assets (ROA) and return on equity (ROE) decreased due to a lower net profit in 2017 compared to the net profit of 2016. The net profit of the Company was lower in the absence of dividend payments from the subsidiary TGE.

Table 66 Key financial indicators of GPW S.A.

		As at / For the 12-month period ended		
		31 December 2017	31 December 2016	31 December 2015
Debt and financing ratios				
Net debt / EBITDA for 12 months	1), 2)	(0.04)	(0.2)	0.1
Debt to equity	3)	54.5%	52.2%	53.7%
Liquidity ratios				
Current liquidity	4)	8.2	1.9	12.5
Coverage of interest on bonds	5)	15.1	12.0	12.0
Return ratios				
EBITDA	6)	53.6%	51.9%	48.0%
Operating profit margin	7)	44.1%	40.9%	36.8%
Net profit margin	8)	33.9%	66.2%	50.5%
Cost / income	9)	54.0%	57.0%	62.8%
ROE	10)	15.0%	25.0%	21.2%
ROA	11)	9.2%	15.5%	13.2%

1) Net debt = interest-bearing liabilities less liquid assets of GPW (as at balance-sheet date)

2) EBITDA = GPW operating profit + depreciation and amortisation (for a period of 12 months)

3) Debt to equity = interest-bearing liabilities / equity (as at balance-sheet date)

4) Current liquidity = current assets / current liabilities (as at balance-sheet date)

5) Coverage of interest on bonds = EBITDA / interest on bonds (interest paid and accrued for a period of 12 months)

6) EBITDA margin = EBITDA / GPW revenue (for a period of 12 months)

7) Operating profit margin = GPW operating profit / GPW revenue (for a period of 12 months)

8) Net profit margin = GPW net profit / GPW revenue (for a period of 12 months)

9) Cost / income = GPW operating expenses / GPW revenue (for a period of 12 months)

10) ROE = GPW net profit (for a period of 12 months) / Average equity at the beginning and at the end of the last 12 month period

11) ROA = GPW net profit (for a period of 12 months) / Average total assets at the beginning and at the end of the last 12 month period

Source: Company

Glossary

Cogeneration – technological process where electricity and heat are generated simultaneously in a combined heat and power plant; thanks to lower consumption of fuel, cogeneration provides material economic benefits and environmental advantages over separate generation of heat in a traditional heat plant and of electricity in a condensation power plant

Colocation – a service where the exchange provides physical space and allows clients to install hardware and software in direct proximity to the exchange's trading system

ECM – Equity Capital Market, value of equity raised on the financial market by companies and shareholders through sale or issue of shares or warrants in public offers or private placements

EOB – Electronic Order Book, trade excluding block trades

ETF – Exchange Traded Funds, track the performance of an exchange index. Similar to other investment funds, ETFs are regulated under EU Directives and national regulations

ETP – Exchange Traded Products, structured products – financial instruments whose price is linked to the value of a market indicator (the underlying instrument)

FESE – Federation of European Stock Exchanges

Free float – free float shares are shares other than held by shareholders which hold more than 5% each, Treasury shares for cancellation, and registered shares; free float includes all shares held by investment funds, pension funds and asset managers and shares participating in depository receipt issue programmes

GCM – Global Clearing Member

HVF – High Volume Funds, a promotion programme addressed to investment funds actively trading in shares on GPW

HVP – High Volume Provider, a promotion programme addressed to legal entities whose core business is to invest on financial markets only on own account

IPO - Initial Public Offering. In this report, PwC IPO Watch Europe reports and FESE data, IPO means all offerings where a company first raises equity on the capital market, either in a public offering or a private placement

ISV – Independent Software Vendors, providers of client software for exchange members used to trade on the trading platform

MRC – Multi-regional Coupling, European project of operational integration of spot electricity markets

MTF - Multilateral Trading Facility, addressed mainly to institutional investors, offers trade in stocks combined with very short lead times for the execution of orders as well as low trading fees. MTFs are usually operated by investment firms (banks, brokers) or securities exchanges. MTFs offer trade in the same stocks as those listed on other markets and do not provide listings

OTC – Over the Counter, a non-regulated market outside the exchange, where trade in non-standard financial instruments is made directly between counterparties without the mediation of a securities exchange

Post-trade services – depository, clearing and settlement services

REIT – Real Estate Investments Trusts are special companies and funds investing in real estate; they manage a real estate portfolio to earn a fixed income from rent, and pay out most of the earnings to shareholders as dividend

RES – renewable energy sources

SPO – Secondary Public Offering

Velocity - a measure of liquidity of trade in stocks equal to turnover in a period to average capitalisation at the beginning and at the end of the period

WFE – World Federation of Exchanges

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Warsaw, 27 February 2018