



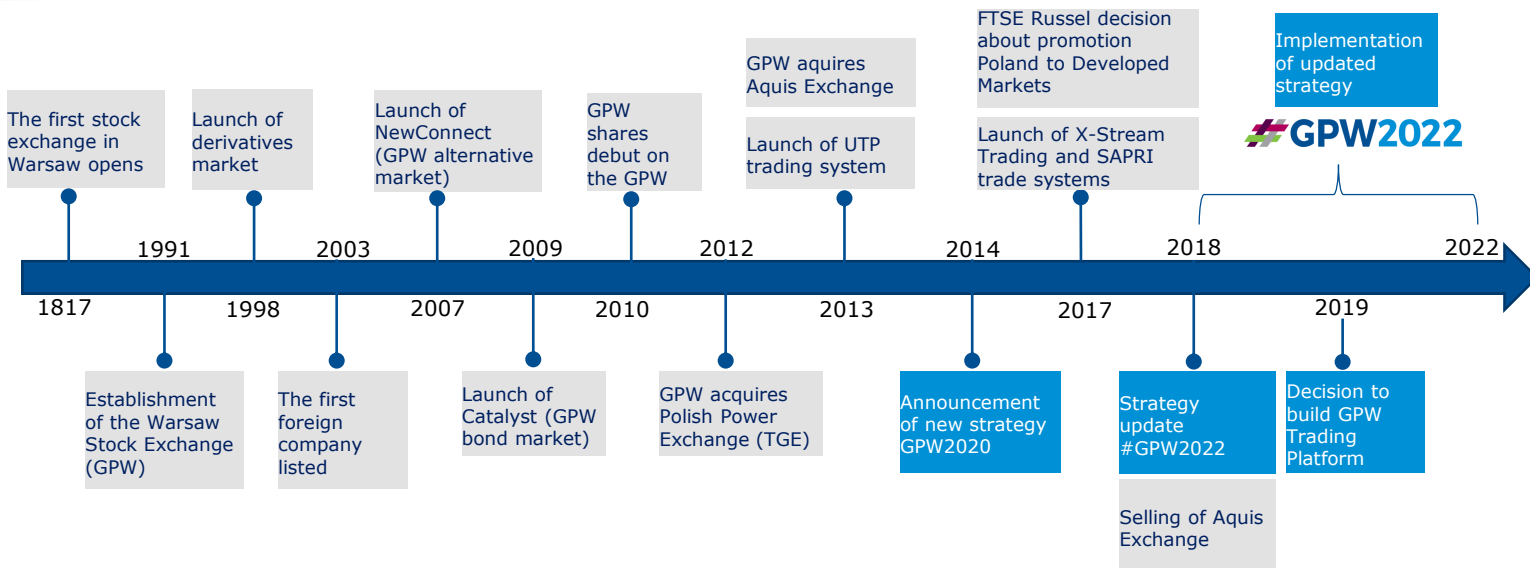
Warsaw Stock Exchange Group

Investor Presentation

December 2019

I. Executive Summary of GPW Group	3
II. Business activity in Q3 2019	8
III. Market highlights and opportunities	13
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Key milestones



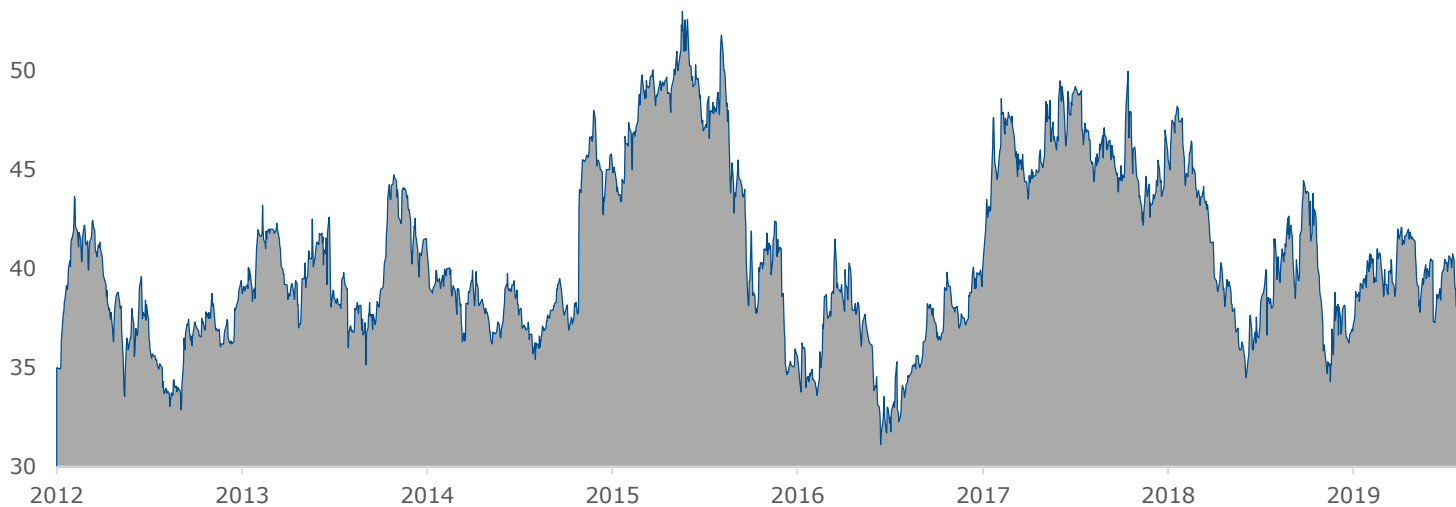
GPW2022

The updated development strategy of the GPW Group is based on building shareholder value through the development of existing business lines and new segments at sustained profitability levels combined with risk management discipline. The strategy update focuses on four areas of development of the GPW Group:

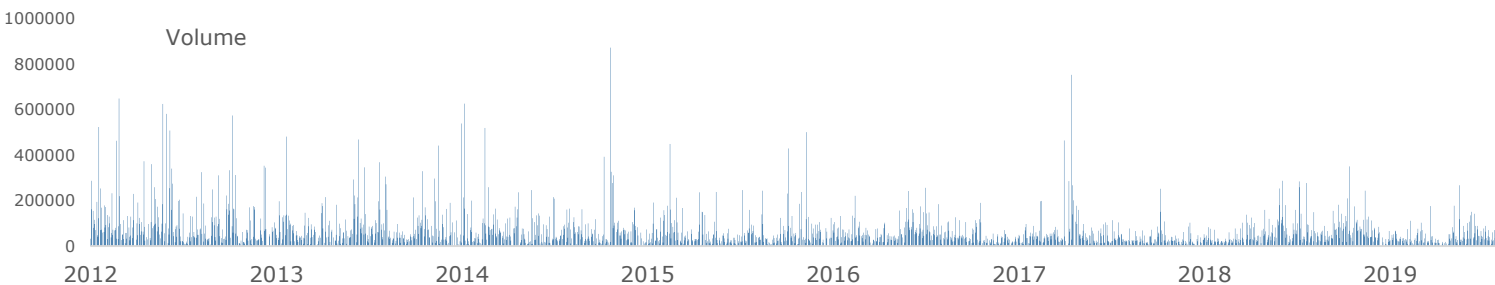
- core business development
- development through diversification and new business areas
- development of new technological solutions
- sustained attractive dividend policy

GPW share price

55 PLN (closing price)

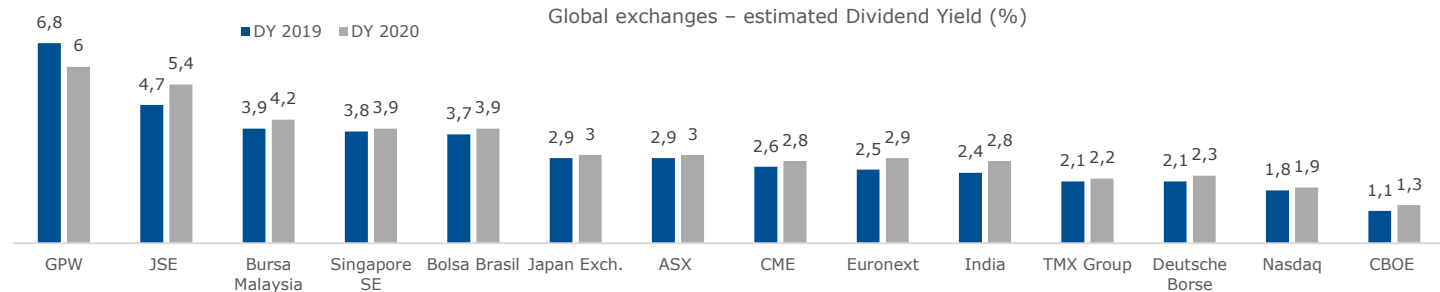
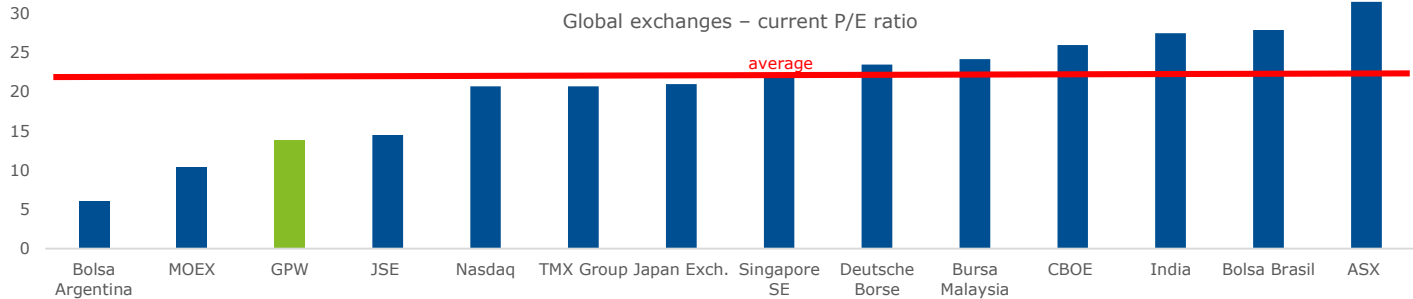


Volume



Source: Bloomberg

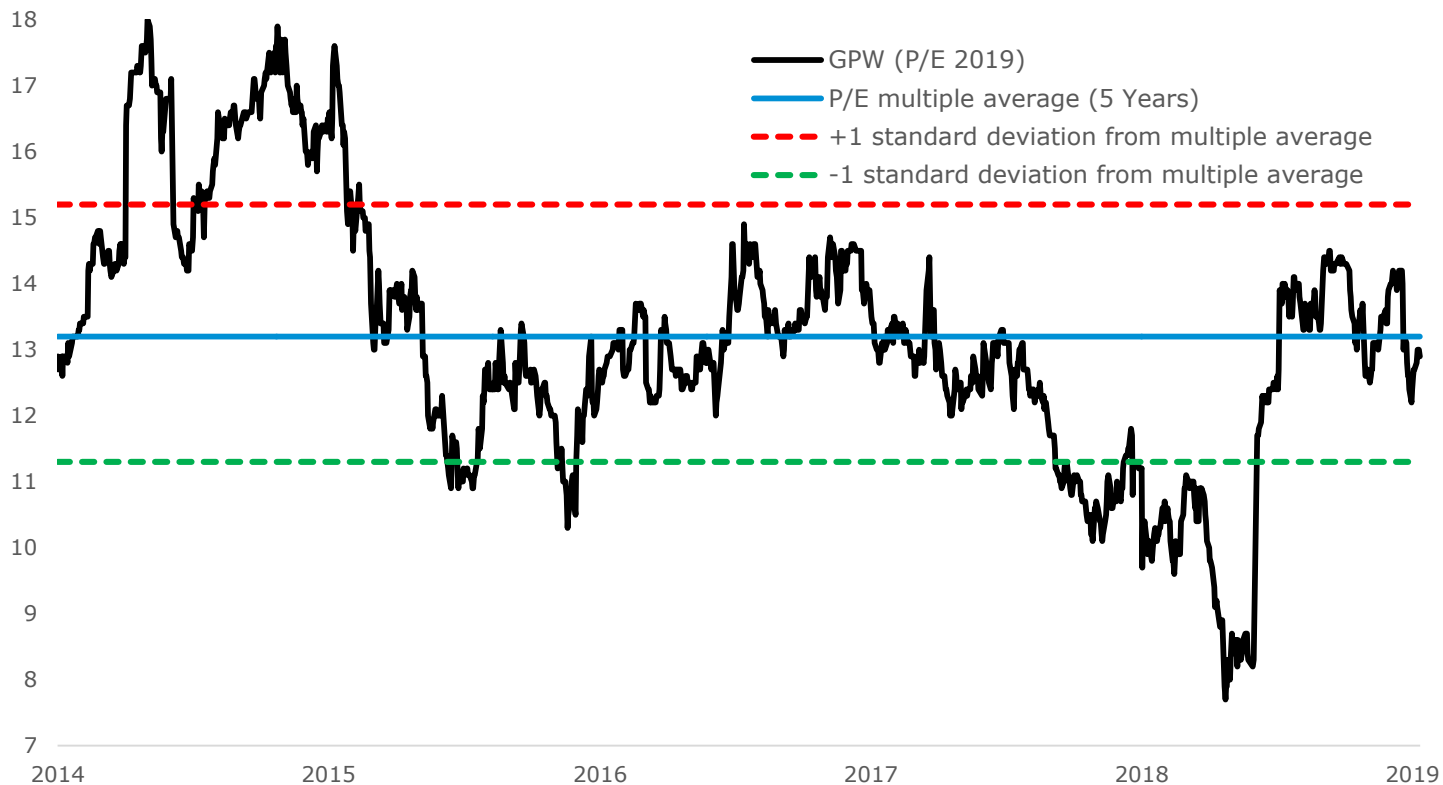
The highest dividend yield among global peers



	P/E 2019	P/E 2020	EV/EBITDA 2019	EV/EBITDA 2020	Dividend Yield 2019	Dividend Yield 2020	Market Cap (EUR mn)
Median (24 global peers)	23.9	21.6	15.4	14.2	2.9%	3.4	-
GPW	13.9	14.9	6.6	7.3	6.8%	6.0	488
Discount (%)	-42%	-31%	-57%	-49%	-	-	-

Source: Bloomberg

Present versus historical valuation



Source: Bloomberg

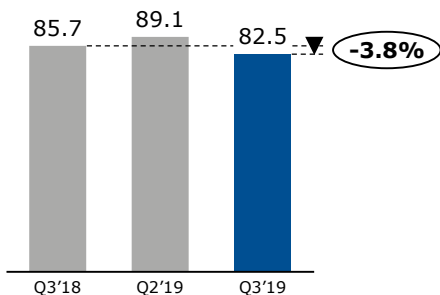
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Improved profitability with a contribution of one-offs

Sales revenue

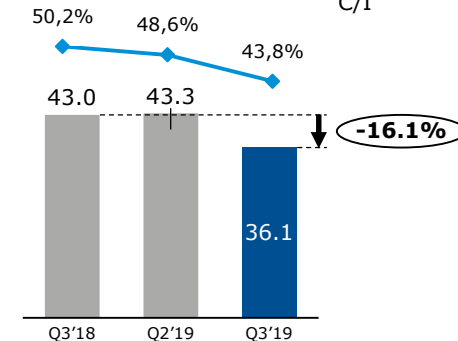
PLN mn



Operating expenses

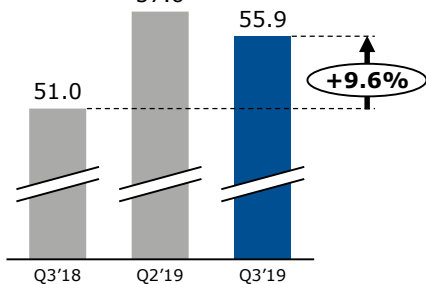
PLN mn

C/I



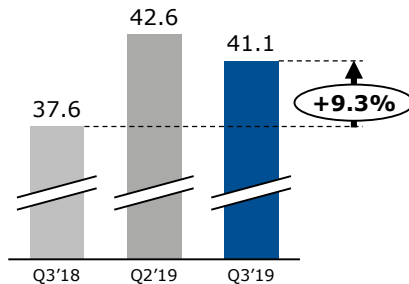
EBITDA

PLN mn



Net profit

PLN mn



◆ Sales revenue

Sales revenue down by 7.4% QoQ and 3.8% YoY in Q3'19.

◆ Operating expenses

Operating expenses down by 16.7% QoQ and down by 16.1% YoY (provisions for KNF fees at PLN 12.9 mn booked in Q1'19; provisions of PLN 6.2 mn released in Q3'19; final KNF fee at PLN 6.7 mn in 2019 v. PLN 12.5 mn in 2018).

◆ EBITDA

EBITDA down by 2.9% QoQ and up by 9.6% YoY to PLN 55.9 mn in Q3'19.

◆ Financial costs

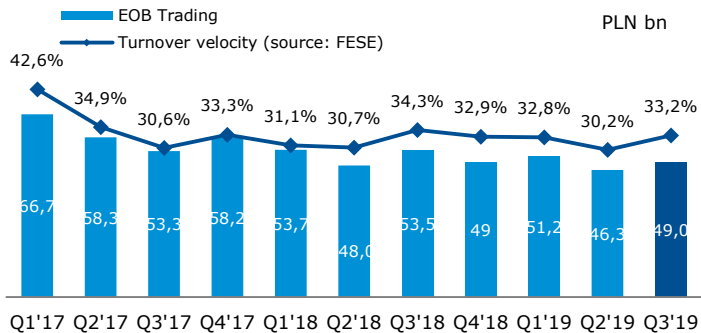
Increase of financial costs in Q3'19 as a result of interest on tax liabilities resulting from CIT for previous years at TGE in the amount of PLN 1.2 million.

◆ Net profit

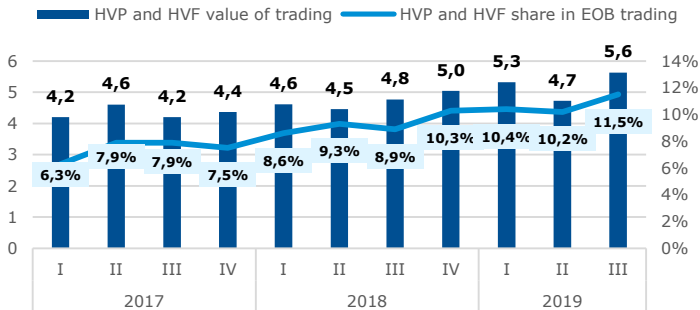
Net profit down by 3.3% QoQ and up by 9.3% YoY in Q3'19.

Investor activity in Q3'19

Value of EOB trade on the Main Market

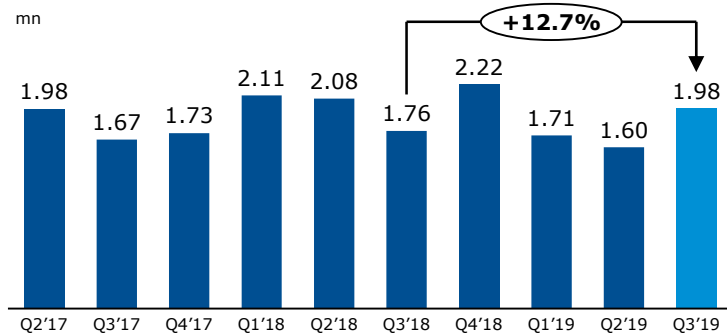


Activity of HVP and HVF clients vs. market turnover

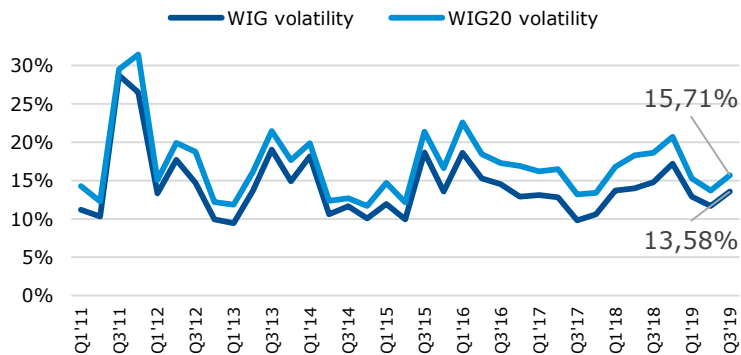


- ◆ Velocity ratio: 33.2% in Q3'19 vs. 30.2% in Q2'19 and 34.3% in Q3'18.
- ◆ WIG20 lost 6.6% in Q3'19 vs. WIG20 gained 7.0% in Q3'18.
- ◆ Value of EOB trade in shares: PLN 49.0 bn in Q3'19 vs. 53.5 bn in Q3'18 (high reference base due to promotion of Poland from EM to DM by FTSE Russell in September 2018).
- ◆ Launch of the Three Seas Region index CEEplus.
- ◆ Introduction to trading of futures on WIG.GAMES and macrosector indices WIG.MS-FIN, WIG.MS-BAS, WIG.MS-PET.
- ◆ Share of HVP and HVF participants in trade in shares: 11.5% in Q3'19 vs. 10.2% in Q2'19 and 8.9% in Q3'18.

Volume of trade in derivatives



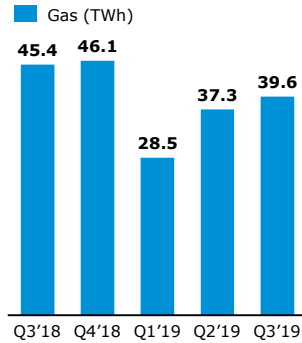
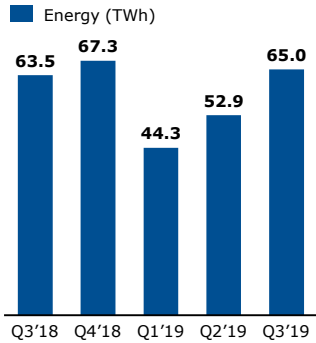
Quarterly volatility of WIG and WIG20



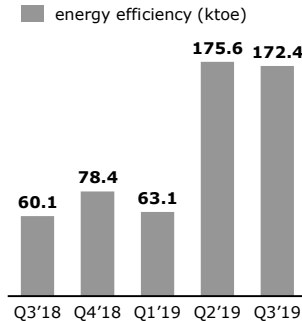
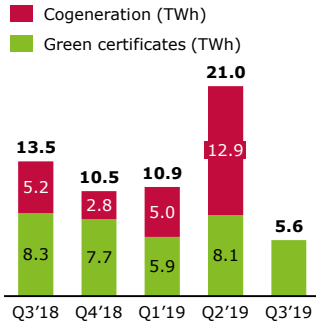
- ◆ Total volume of trade in derivatives: 1.98 mn contracts in Q3'19 vs. 1.76 mn in Q3'18, up by 12.7% YoY.
- ◆ Volume of trade in WIG20 futures: 1.07 mn contracts in Q3'19 vs. 0.98 mn in Q3'18, up by 9.0% YoY.
- ◆ Volume of trade in currency futures: 0.44 mn contracts in Q3'18 vs. 0.40 mn in Q3'18, up by 9.7% YoY.
- ◆ WIG20 volatility: 15.7% in Q3'19 (vs. 13.7% in Q2'19), WIG volatility 13.6% (vs. 11.7% in Q2'19).
- ◆ Share of proprietary traders in futures trade: 9.9% in Q3'19 vs. 9.9% in Q2'19 and 10.6% in Q3'18.

Strong commodity market in Q3'19

Volume of spot and forward trade in electricity and gas



Volume of trade in property rights



- Electricity market:** Total volume of trade in electricity: **65.0 TWh** in Q3'19 (+2.4% YoY, +22.9% QoQ). Volume of spot transactions: 8.0 TWh (+29.0% YoY, -4.3% QoQ). Volume of forward transactions: 57.0 TWh (-0.5% YoY, +28.0% QoQ).
- Gas market:** Total volume of trade on the gas markets: **39.6 TWh** in Q3'19 (-12.7% YoY, +6.3% QoQ). Volume of spot transactions in gas: 3.4 TWh (+57.2% YoY, -26.3% QoQ). Volume of forward transactions: 36.2 TWh (-16.2% YoY, +11.0% QoQ).
- Property rights market :**
 - ✓ No more trade in property rights from cogeneration as of Q3'19.
 - ✓ Volume of trade in RES property rights: **5.6 TWh** in Q3'19 (-32.6% YoY, -30.9% QoQ).
 - ✓ Volume of trade in property rights in energy efficiency: **172.4 ktoe** in Q3'19 (+186.9% YoY, -1.9% QoQ).
- Maker-Taker:** On 1 January 2019, TGE opened a Maker-Taker pilot liquidity support programme to minimise operating expenses of market participants by narrowing the spread between bids and asks. After six months, TGE reviewed the programme performance and decided to continue the programme from 1 August to 31 December 2019.
- CO2 emission allowances:** On 18 July 2019, TGE reopened the Financial Instruments Market which lists CO2 emission allowances; under MiFID2, allowances are a financial instrument.
- White certificates:** The support scheme for energy efficiency certificates was extended on 29 June 2019 to the end of June 2021.
- Cogeneration in the Register of Guarantees of Origin:** On 2 October 2019, TGE introduced guarantees of origin of electricity from high-efficiency cogeneration to trading in the Register of Guarantees of Origin.

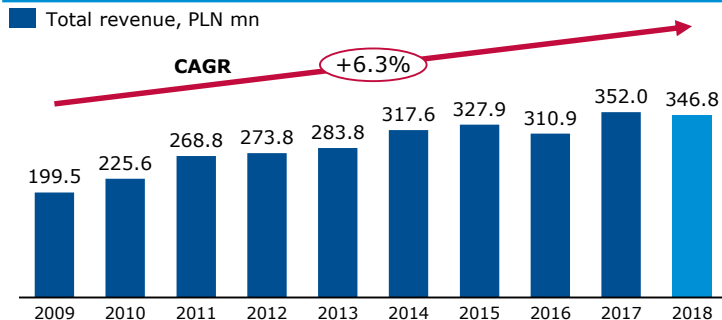
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Our market highlights and opportunities

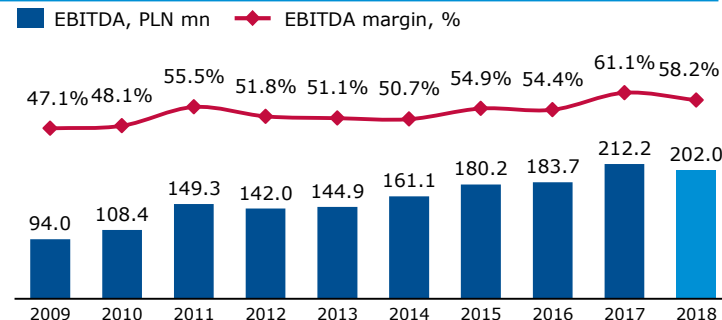
- 1 Solid financial performance and attractive dividend
- 2 Diversified revenue structure
- 3 The largest CEE economy and growth leader in EU
- 4 Large and still growing client base
- 5 Potential for further growth in free float and liquidity in financial segment
- 6 Employee Capital Plans (ECP)
- 7 Dynamic commodity segment
- 8 Strategy update #GPW2022 (strategic initiatives)
- 9 Promotion to Developed Market status (FTSE Russell and STOXX)

1 Sound financial performance

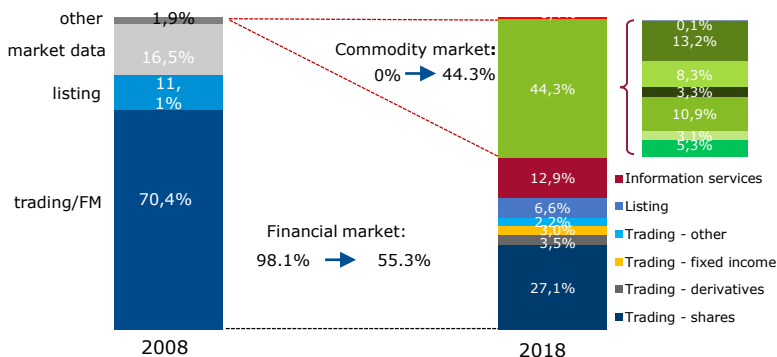
Solid top-line growth ...



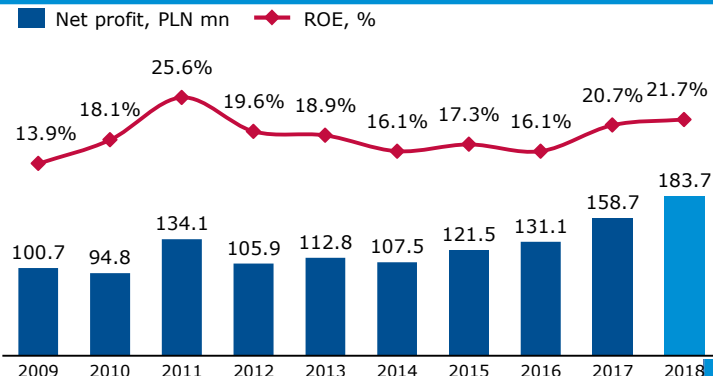
... and high operating leverage



... underpinned by increasing diversification



... and consistent profitability



1 Ambitious financial targets

GPW Group financial targets for 2022

Revenue

- PLN 470 mn in 2022

EBITDA

- PLN 250 mn in 2022

ROE

- ROE: 19% in 2022 (it may temporarily fall below 19% due to strategy implementation expenditures)

Cost/Income

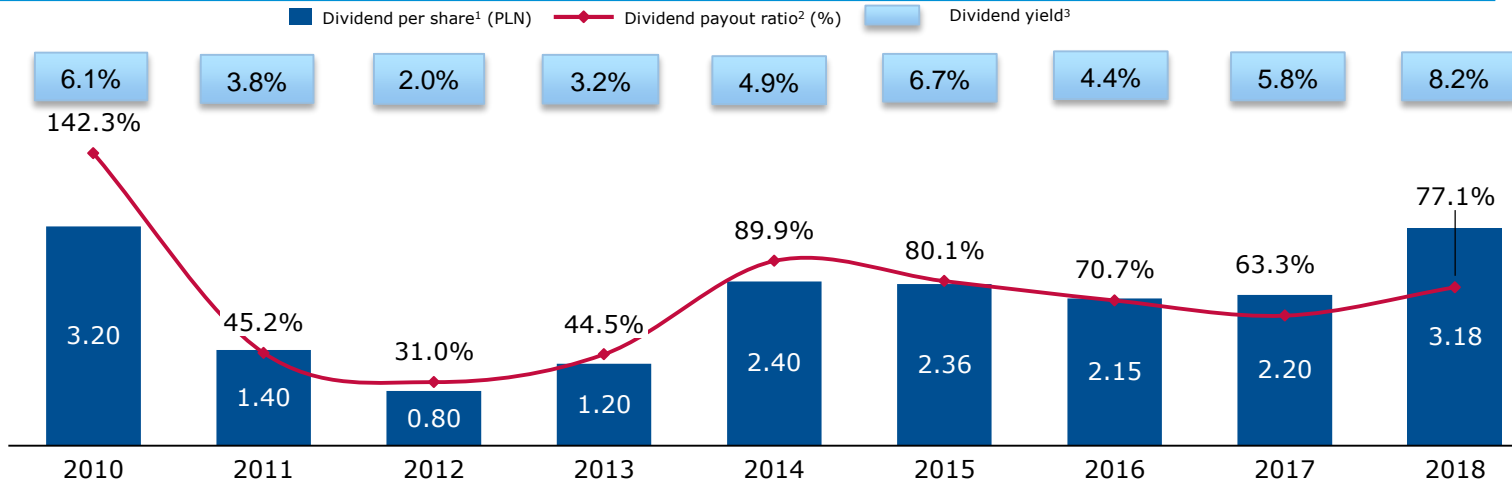
- C/I under 50% after 2022 (it may temporarily range from 63% to 55% due to strategy implementation expenditures)

Dividend

- dividend payout rate not lower than 60% of consolidated net profit
- dividend not lower than PLN 2.4 per share from 2019 profit
- annual increase in the dividend from the 2020-2022 profits by at least PLN 0.1 per share

1 Attractive dividend policy

A very good track of attractive dividends



DIVIDEND POLICY:

- ✓ dividend payout rate not lower than 60% of consolidated net profit of GPW Group for the financial year attributable to GPW shareholders, adjusted for the share of profit of associates
- ✓ dividend at least PLN 2.4 per share from 2019 profit
- ✓ annual increase in the dividend from the 2020-2022 profits by at least PLN 0.1 per share

¹ By financial year for which dividend was paid

² Based on the consolidated profit attributable to the shareholders of the parent entity and adjusted for the share of profit of associates

³ Based on the share price as at the dividend record date

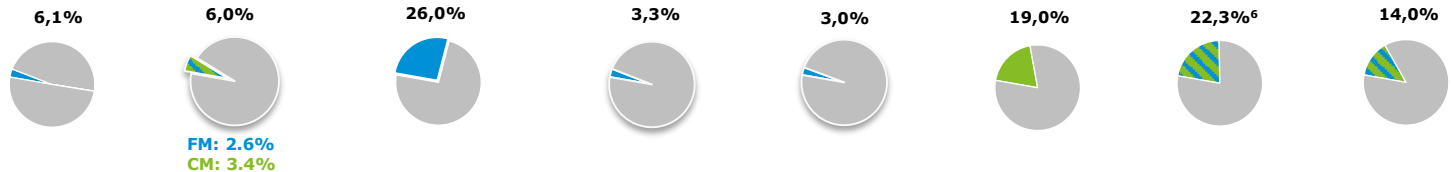
2 Diversified revenue structure

GPW Group

Listing	Trading					Post-trading <i>including COR¹ and RGO²</i>	Market data
	Membership	Equities & other	Derivatives	Bonds	Commodities		
<ul style="list-style-type: none"> Equities Bonds ETFs Warrants Structured products 	<ul style="list-style-type: none"> Access and use of GPW trading system Membership and participation on the commodity markets 	<ul style="list-style-type: none"> Equities Structured products Warrants ETFs Investment certificates 	<ul style="list-style-type: none"> Futures: <ul style="list-style-type: none"> index single stock fx interest rate Options <ul style="list-style-type: none"> index 	<ul style="list-style-type: none"> Corporate bonds Municipal bonds Bank bonds T-bills T-bonds 	<ul style="list-style-type: none"> Electricity spot and forward contracts Natural gas spot and forward contracts Property rights in certificates of origin CO₂ emission allowances 	<ul style="list-style-type: none"> Settlement Custody Clearing COR¹ RGO² <p>kdpw³</p>	<ul style="list-style-type: none"> Real-time data Non-display data Delayed data Historical data Indices

■ Financial market ■ Commodity market

Share in total revenue⁴, LTM⁵



¹ Certificate of Origin Register

² Register of Guarantees of Origin

³ Associate company (33.33%); KDPW Group offers post-trading services on the financial market

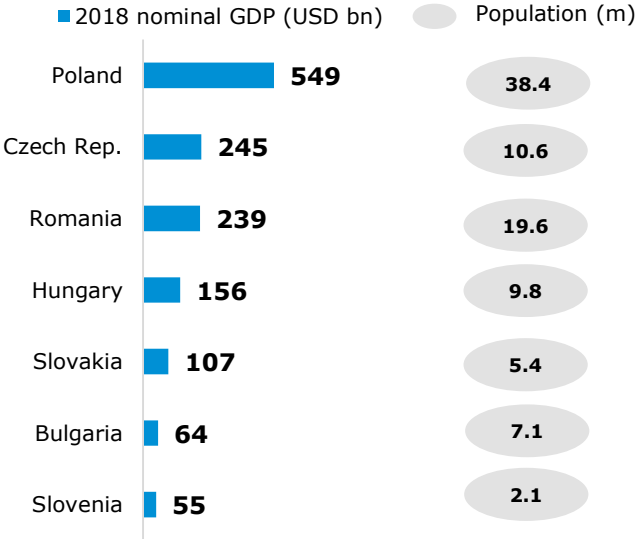
⁴ Does not include other revenues, which constitute 0.3% of GPW Group revenues

⁵ Last twelve months ending on 30 September 2019

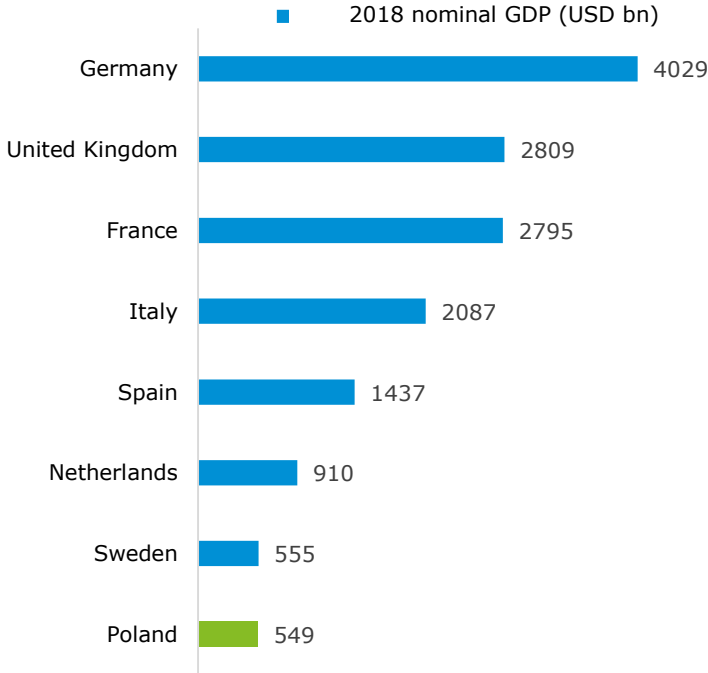
⁶ Does not include the KDPW revenues (associate company; equity method is applied)

3 Largest economy in the CEE region...

Largest economy in CEE region...



And 8th largest economy in the EU



Source: IMF; GDP, current prices, US Dollars, 2018

3 ...and a growth leader in the EU

Poland has an excellent macro readings¹

- ◆ Real GDP growth +3.9% YoY in Q3 2019
- ◆ Unemployment rate 5.1% in September 2019
- ◆ CPI inflation +2.6% YoY in September 2019

A2
outlook
stable

MOODY'S

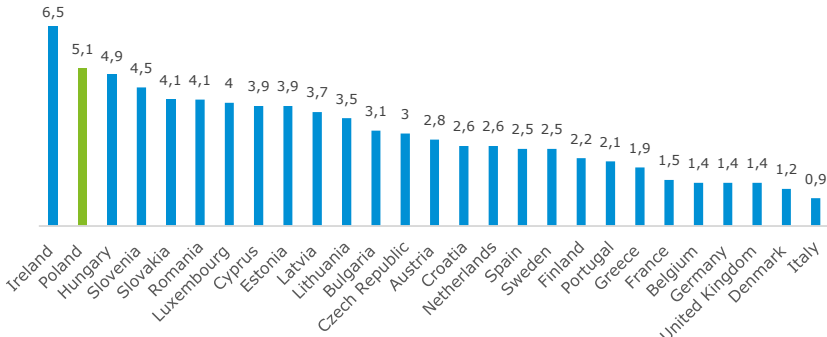
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Fitch
Ratings

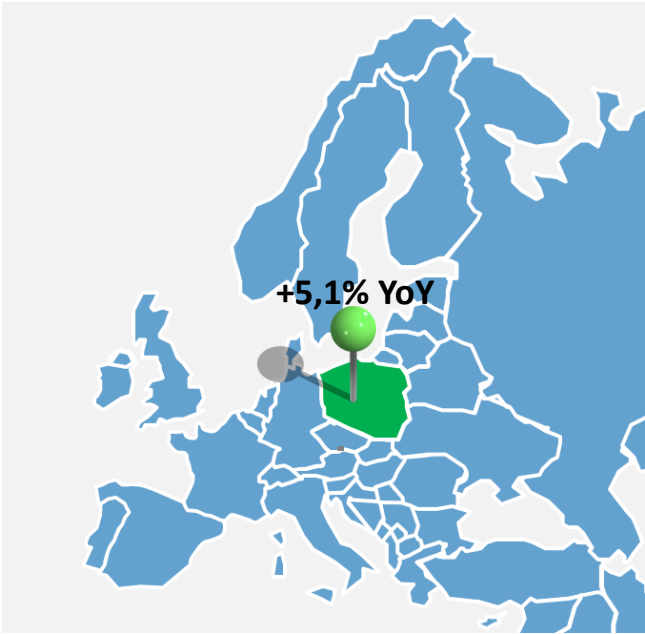
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STANDARD
& POOR'S

One of fastest growing economy in EU in 2018²



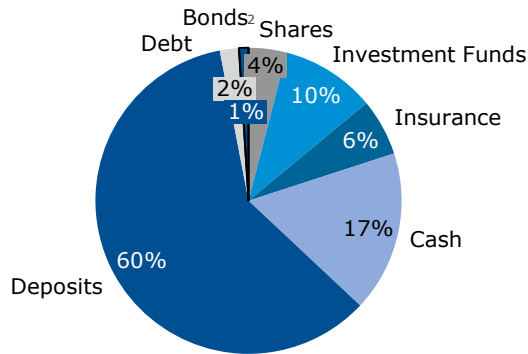
Dynamic GDP growth in 2018³



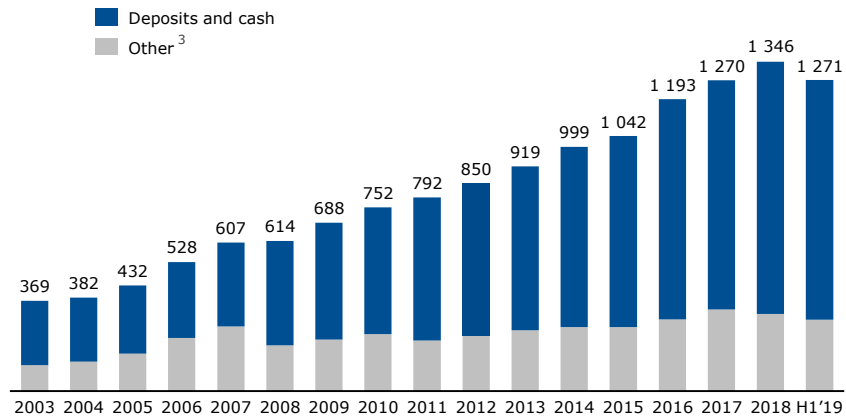
¹ Central Statistical Office of Poland
² Bloomberg
³ Central Statistical Office of Poland

4 Potential for retail investment growth

Poles' savings (%)¹



Household assets ¹ (PLN bn)



- ◆ Most of Poles' savings are located in bank deposits: in view of record-low interest rates, a growth potential for direct and indirect investments on the GPW exists
- ◆ Stocks represent only 4.0% of Poles' savings; however, individual investors are very active on the GPW (turnover share at 13% in H1 2019; individual investor portfolio turnover ratio at 44% in H1 2019)
- ◆ GPW initiatives: education, joint initiatives with market participants, promotion of direct and indirect investment on the Exchange, including pension savings
- ◆ New flows to be injected into the Polish capital market by Employee Capital Plans (PPK) – started from July 2019

¹ Net of pension entitlements (pension funds and Social Insurance Institution sub-accounts), non-listed shares, other equity interest

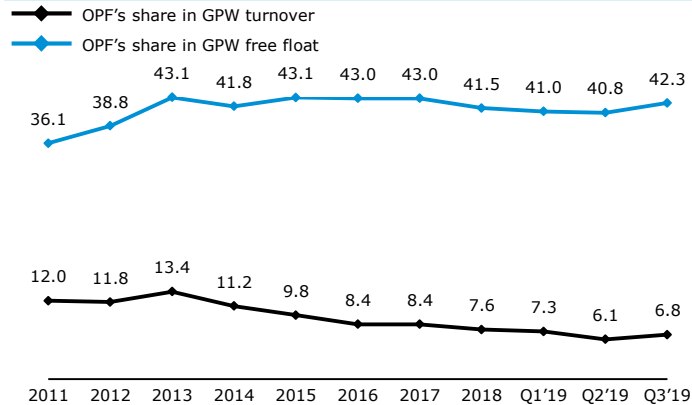
² Short and long-term debt securities, short and long-term loans

³ Listed shares, insurance, investment funds, short and long-term debt securities, short and long-term loans

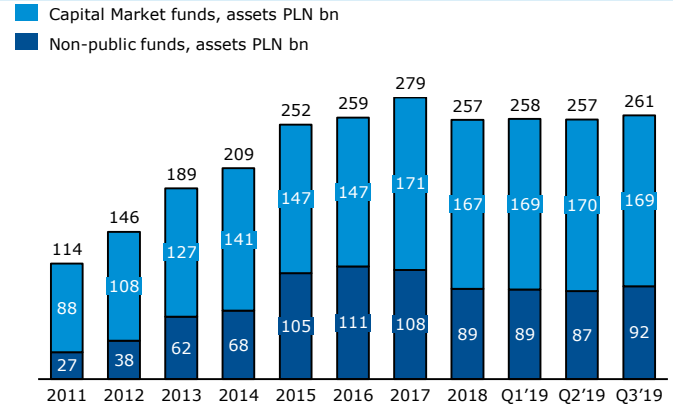
Source: National Bank of Poland (NBP); data as of the end of June 2019, latest data available

4 Strong domestic institutional investor base

Open Pension Funds¹



Investment funds in Poland²



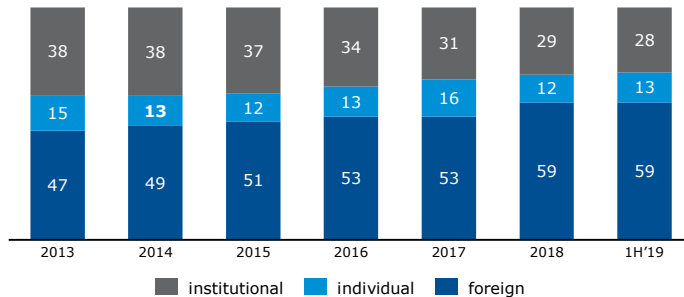
- ◆ Largest institutional investor pool in the CEE region
- ◆ Open Pension Fund net assets value amounts to PLN 154,3 bn as of Q3 2019
- ◆ Investment funds enjoy strong confidence of retail investors who increasingly seek more sophisticated savings and investment products
- ◆ As a long-term investor, pension funds freeze a large part of the free float on GPW
- ◆ Part of the free float in pension fund portfolios could be released through securities lending -> necessary regulatory change

¹PFSA, NBP, GPW

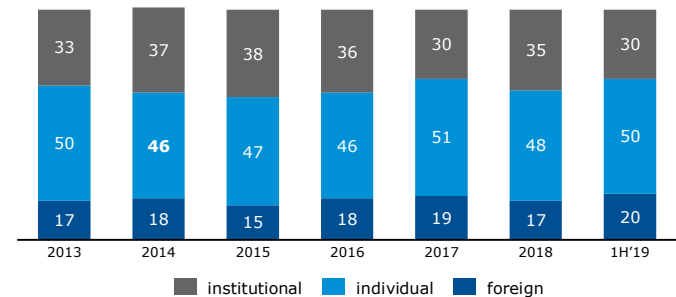
²According to the classification of funds created by IZFiA (The Chamber of Fund and Asset Management), the non-public funds sector includes those whose assets are not invested in capital markets. Non-public funds include: securitization, real estate and non-public assets.

4 Strong and growing foreign investor base

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



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



Portfolio turnover ratio of selected investors on the GPW²

Year	Domestic investors			Foreign Investors
	Pension Funds	Investment Funds	Individual Investors	
2008	28%	71%	62%	42%
2009	26%	92%	134%	50%
2010	21%	73%	89%	53%
2011	19%	80%	100%	57%
2012	13%	69%	89%	44%
2013	14%	75%	83%	48%
2014	9%	60%	62%	41%
2015	9%	59%	59%	43%
2016	7%	60%	59%	44%
2017	7%	53%	70%	50%
2018	5%	61%	50%	57%
H12019	4%	51%	44%	43%

- ◆ Focused efforts, in co-operation with issuers, to spark interest in GPW-listed companies among foreign investors
- ◆ Close co-operation with investment banks
- ◆ Value of GPW listed shares held by foreign investors accounted for 38.7%¹ of the market capitalization of domestic shares listed on the GPW

¹ Data as of the end of Q1 2019, latest available data

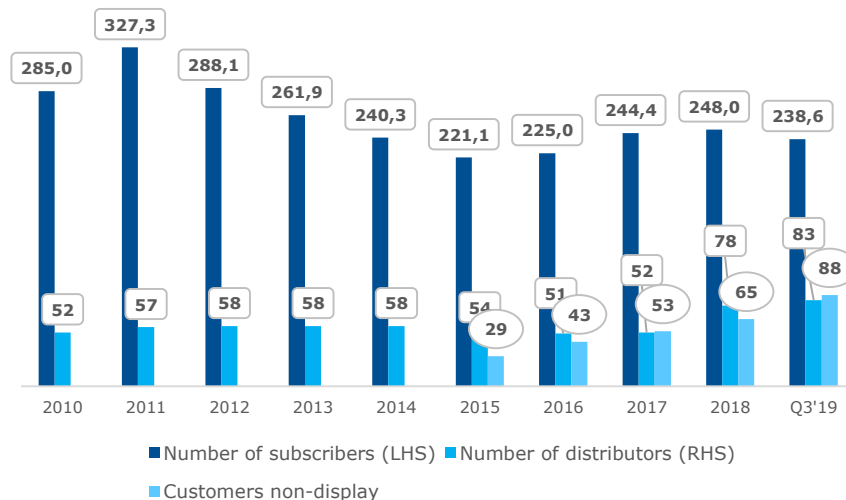
² GPW estimates; portfolio turnover ratio: value of the electronic order book (buy and sell trades)/2/average portfolio value; data as of the end of H1 2019

Source: PFSa, NBP, GPW

Strong reach via number of distributors and subscribers

- ◆ New clients of GPW and WIBOR data in different market segments attracted in Q3'19:

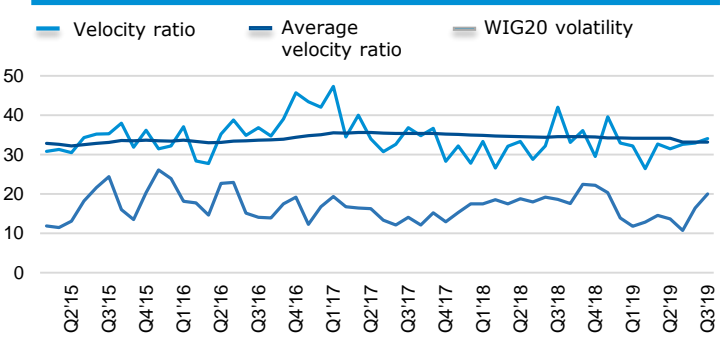
- ✓ 2 data vendors,
- ✓ 2 non-display clients,
- ✓ 4 users of historical data.



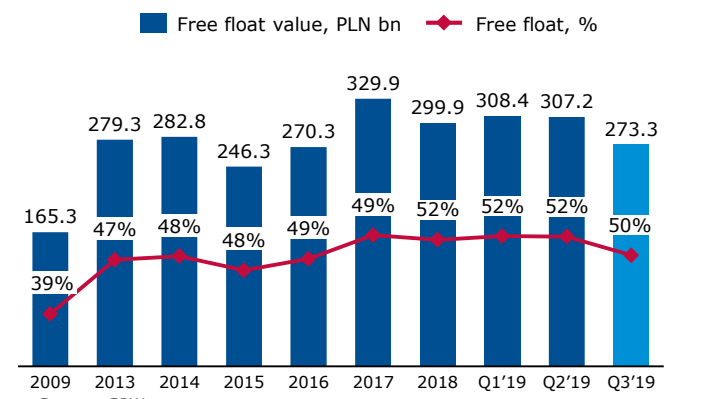
Information products represent an attractive opportunity for GPW to enhance revenues by leveraging its central role in the Polish capital market infrastructure

Equity market: potential for further free float and liquidity growth

Turnover velocity and volatility

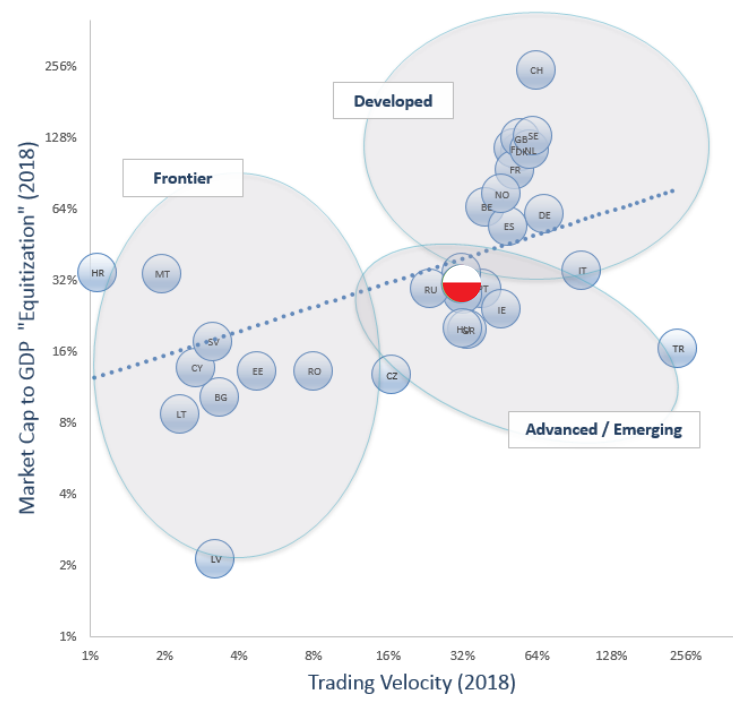


Material upside potential of free float



Source: GPW

European markets equitisation and trading velocity*



* Source: Turnover, Mkt Cap - Thomson Reuters, GDP - Eurostat (except of TR, UA, IL, RU - IMF).

5 Diversified issuers portfolio

Issuer activity on GPW markets¹

Equity market



Main Market

409 domestic companies
49 foreign issuers

Market cap:

PLN 551 bn
PLN 562 bn

Equity market for SME



NewConnect

376 domestic companies
6 foreign issuers

Market cap:

PLN 9,0 bn

Debt market



Catalyst

142 issuers (incl. State)
513 listed non-Treasury
Issues

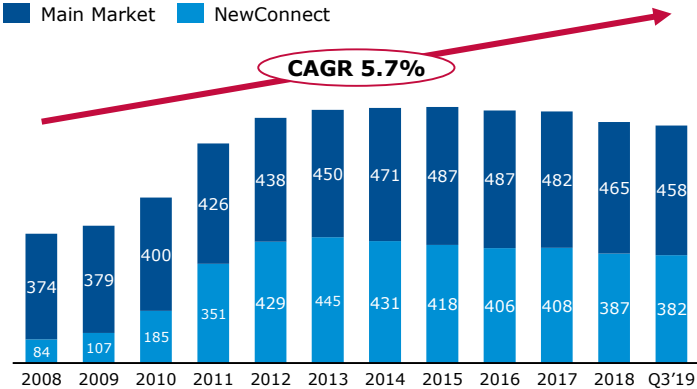
Value of non-

Treasury issues:
PLN 92,8 bn

Acquisition of issuers

- ◆ On the radar: family companies, PE funds, CEE companies, state-owned companies and their subsidiaries
- ◆ Intensive activities aimed at promoting the stock market as a place to raise capital for development
- ◆ Individual meetings with companies previously inactive on the GPW markets

Flow of new companies to the market



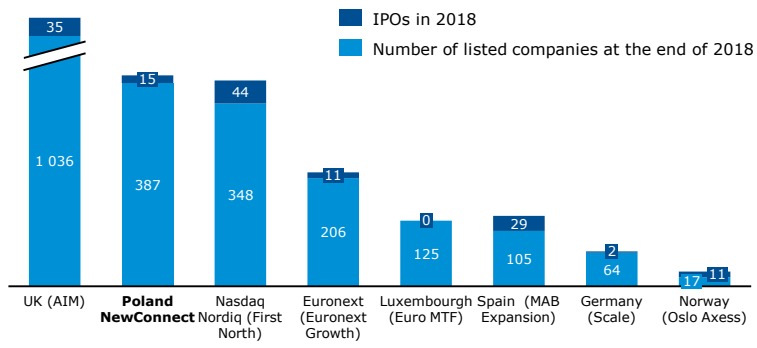
GPW Growth

- ◆ Launch of a comprehensive educational program **GPW Growth** oriented to support the development of small and medium enterprises
- ◆ Supporting non-public companies in building their value through expansion using external sources of financing, in particular with a strong accent of development through the capital market

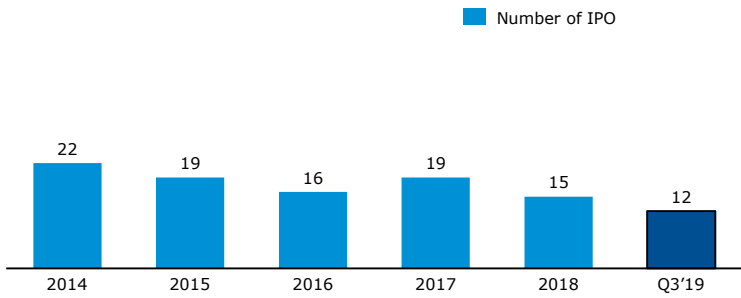
¹ As of the end of Q3 2019; Source: GPW

Strong position of NewConnect on the European SME scene

NewConnect is second amongst European SME markets in terms of the number of listings, just after AIM



Number of IPOs on NewConnect Market

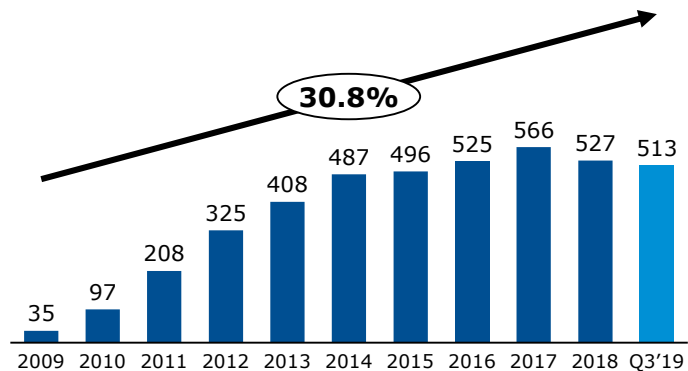


- ◆ **NewConnect** has the status of an organized market; it is operated by the GPW outside the regulated market as an alternative trading system. In July 2019, NewConnect has been approved by Polish FSA (KNF) to get the status of SME Growth Market, and thus joined the group of only a few markets with this status, i.e. London Stock Exchange AIM, AIM Italia, Zagreb Stock Exchange, Nex Exchange.
- ◆ **It is an offer for small and growing companies**, especially in the high-tech sector (but companies from other sectors may naturally be eligible for trading). Since the beginning of this year, the rate of return from the NC Index has been close to **26 percent**. The growth was mainly due to companies from the gaming sector, which have been recently popular in the market.
- ◆ NewConnect has been operating since **2007** and capitalization of the market has reached **PLN 9,0 bn¹**
- ◆ NewConnect is dominated by domestic individual investors – in H1 2019 the group has generated **84%** of turnover
- ◆ Since the begining of NewConnect over **600¹** new companies have joined the platform
- ◆ Since the begining of NewConnect the value of IPOs and SPOs amounted to around **PLN 5.0 bln**
- ◆ NewConnect is the way of developing and moving to the Main Market - **15%** of companies have already moved to the Main Market
- ◆ **PLN 564 mn** is the amount that companies listed on NC have paid in total to their shareholders in dividends from the beginning of the market.

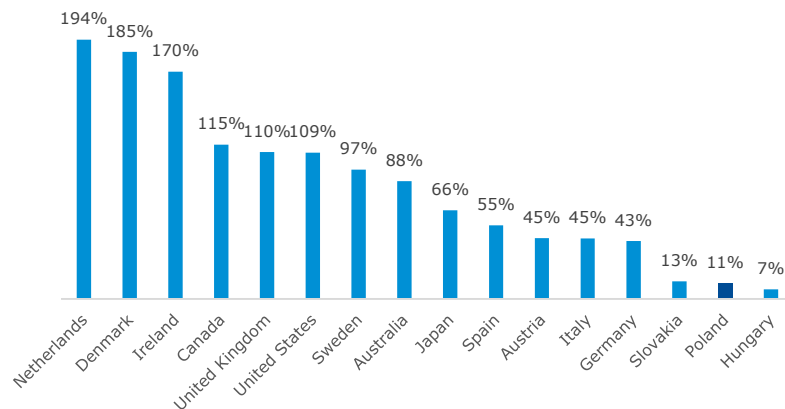
¹ Source: GPW at the end of September 2019
² Source: WFE data at end of 2018, PwC IPO Watch Europe 2018

5 Opportunities for further debt market development

Number of non-Treasury issues on Catalyst



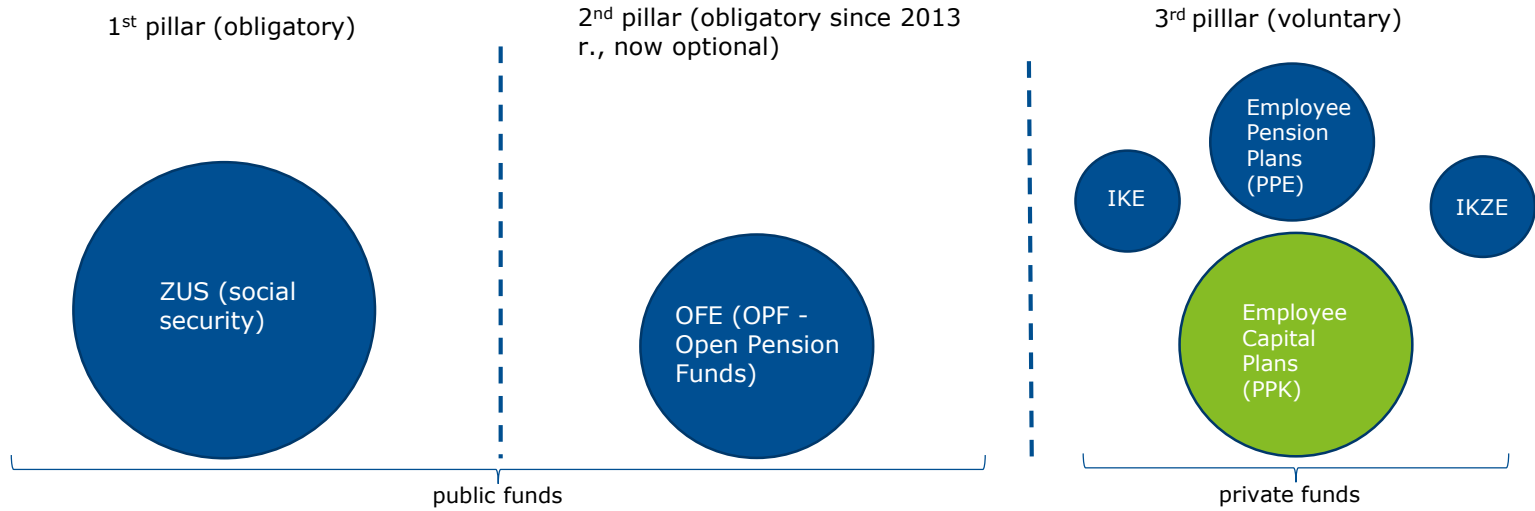
Total debt securities by residence of issuer as % of GDP¹



- ◆ Segmentation of the corporate debt market architecture
- ◆ Active role of the Exchange in attracting new issuers
- ◆ Single banking licence: an opportunity to grow bank activity as debt market participants

¹ Source: BIS (non-Treasury bonds as at the end of 2018), IMF (GDP in 2018, World Economic Outlook Database)

6 Employee Capital Plans (ECP)



- ❑ **Employee Capital Plans (ECP)/Pracownicze Plany Kapitałowe (PPK)** are a new system of private long-term pension savings, mandatory for employers but optional for employees, based on contributions of **employees, employers and the public budget**.
- ❑ **PPK** scheme are very similar to UK Workplace Pension System
- ❑ **PPK's** impact on GPW:
 - ✓ Increase of market turnover and increase of the velocity rate
 - ✓ Attracting new issuers: growing number of IPOs
 - ✓ A stronger market in equities, corporate bonds, treasury bonds, real estate investment funds
 - ✓ Improved trust in and promotion of the capital market

6 Employee Capital Plans (ECP)

ECP to start in 2H 2019

Size of company (number of employees)	number of potential participants (mn)	Start
>250	3.3	01.07.2019
50-249	2	01.01.2020
20-49	1.1	01.07.2020
others	5.1	01.01.2021
Total	11.5	

Source: Ministry of Finance of Poland

The ECP bill assumes three sources of contribution

	Basic contribution	Voluntary contribution	Max contribution
Employee contribution	2% of gross wage	up to 2,0% gross wage	4% gross wage
Employer contribution	1,5% of gross wage	up to 2,5% gross wage	4% gross wage
Maximum total contribution			8% gross wage

Contribution paid by public budget:	welcome payment – PLN 250
	annual payment – PLN 240

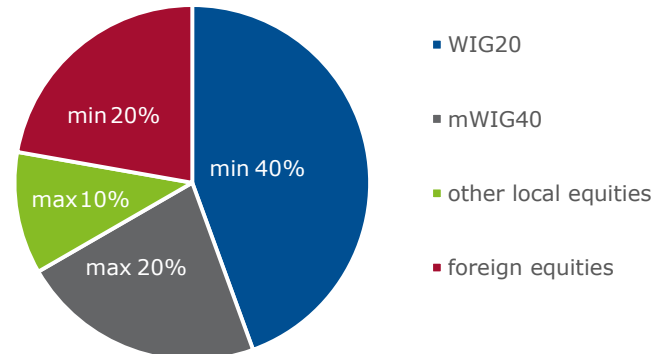
Source: Ministry of Finance of Poland

Equities/debt share in total assets

Time left to the defined date (reaching 60 years old)	Equities	Debt
>20 years	60-80%	20-40%
11-20 years	40-70%	30-60%
6-10 years	25-50%	50-75%
1-5 years	10-30%	70-90%
After reaching the defined date (60 years)	<15%	>85%

Source: Ministry of Finance of Poland

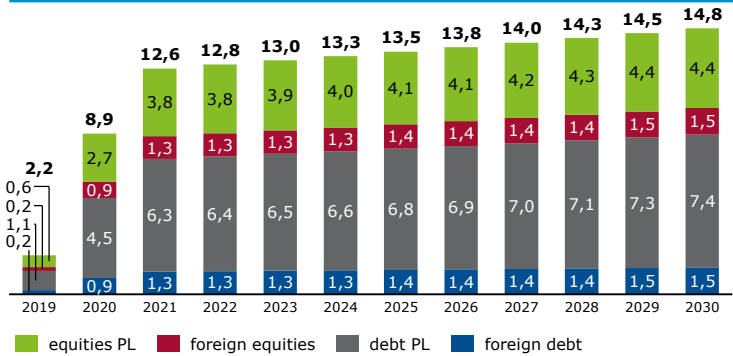
Equity portfolio structure



Source: Ministry of Finance of Poland

6 Employee Capital Plans (ECP) – base scenario

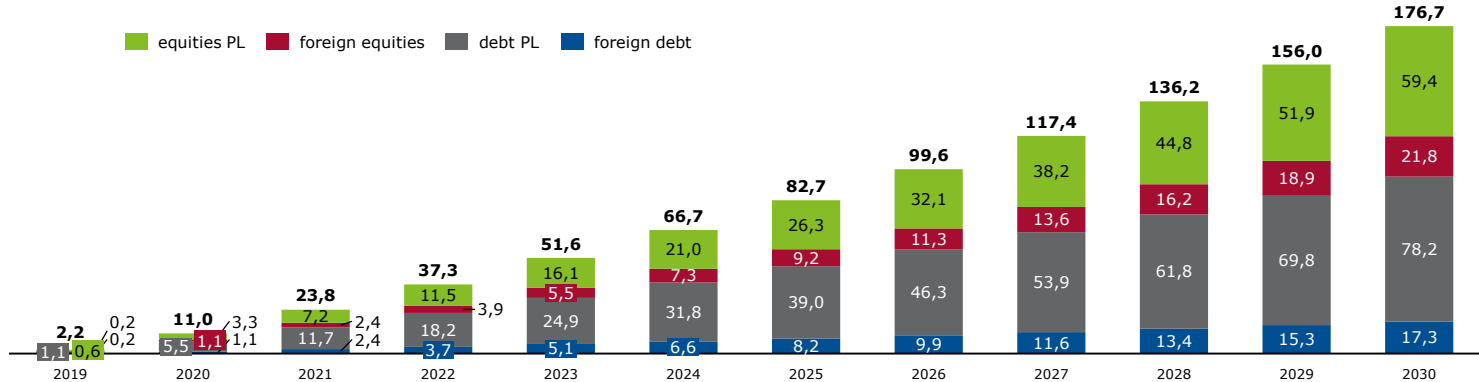
Estimated yearly inflows into ECPs (PLN bn)



„Base scenario” assumptions:

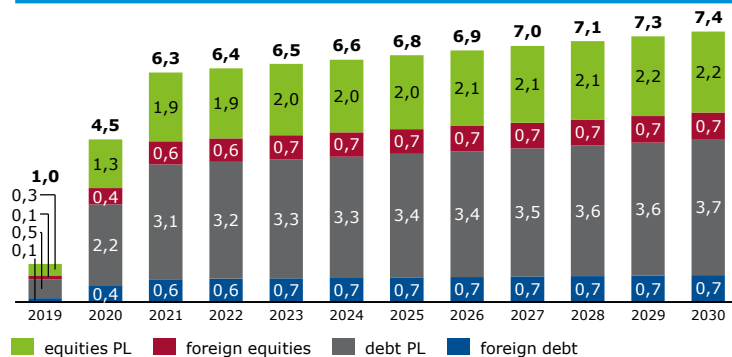
- ☐ participation rate **50%**
- ☐ average portfolio structure:
 - ✓ 30% - equities PL
 - ✓ 10% - foreign equities
 - ✓ 50% - debt PL
 - ✓ 10% - foreign debt
- ☐ weight of rates:
 - ✓ 0% - highest contribution rate 8%
 - ✓ 100% - lowest contribution rate 3.5%

Estimated AUM of ECP funds (PLN bn)



Source: GPW estimates

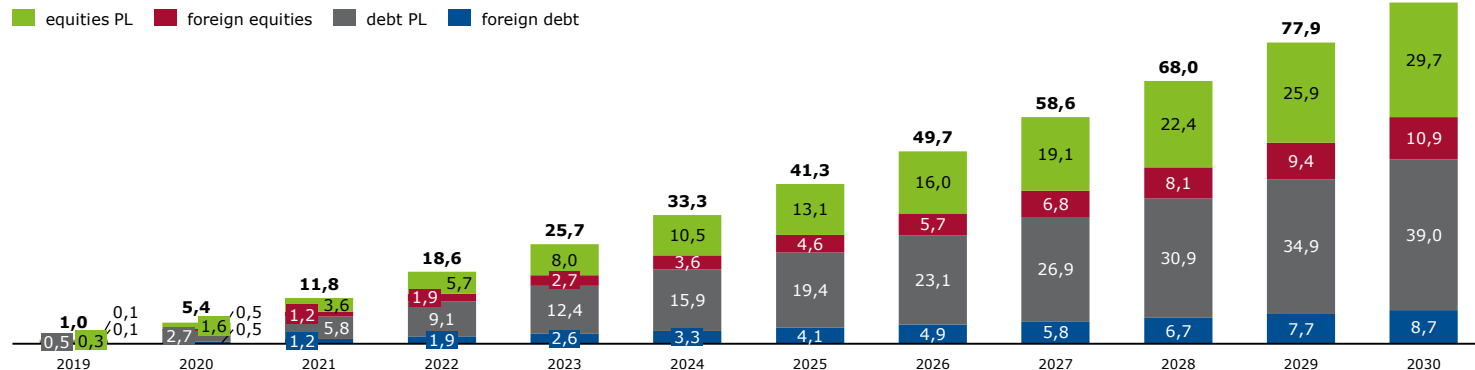
Estimated yearly inflows into ECPs (PLN bn)



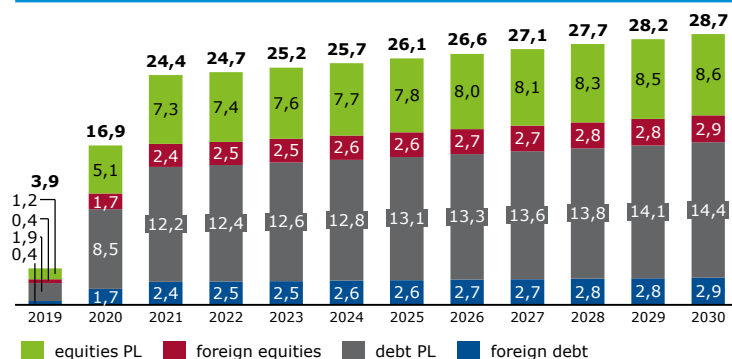
„Pesimistic scenario” assumptions:

- participation rate **25%**
- average portfolio structure:
 - ✓ 30% - equities PL
 - ✓ 10% - foreign equities
 - ✓ 50% - debt PL
 - ✓ 10% - foreign debt
- weight of rates:
 - ✓ 0% - highest contribution rate 8%
 - ✓ 100% - lowest contribution rate 3.5%

Estimated AUM of ECP funds (PLN bn)



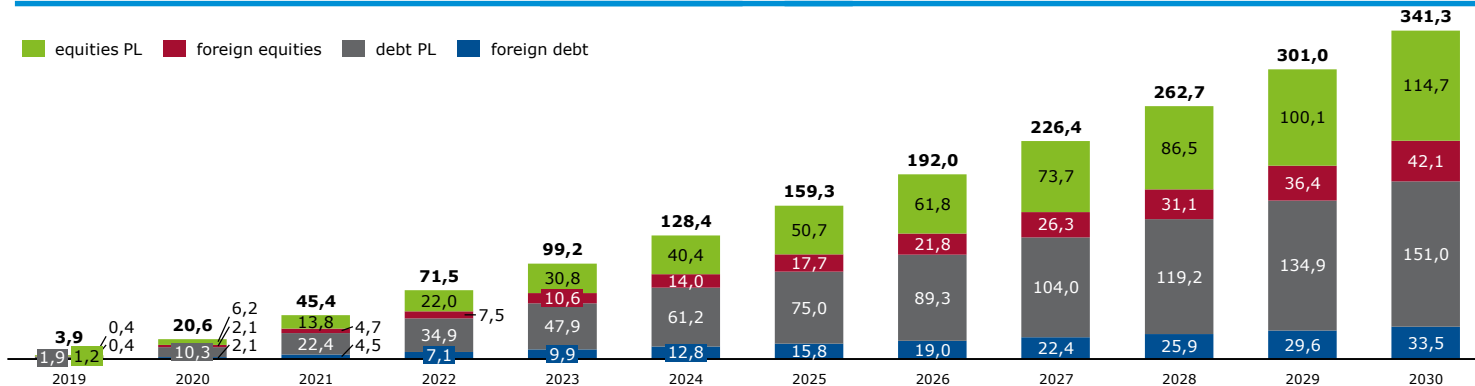
Estimated yearly inflows into ECPs (PLN bn)



„Optimistic scenario” assumptions:

- participation rate **75%**
- average portfolio structure:
 - ✓ 30% - equities PL
 - ✓ 10% - foreign stocks
 - ✓ 50% - debt PL
 - ✓ 10% - foreign debt
- weight of rates:
 - ✓ 25% - highest contribution rate 8%
 - ✓ 75% - lowest contribution rate 3.5%

Estimated AUM of ECP funds (PLN bn)



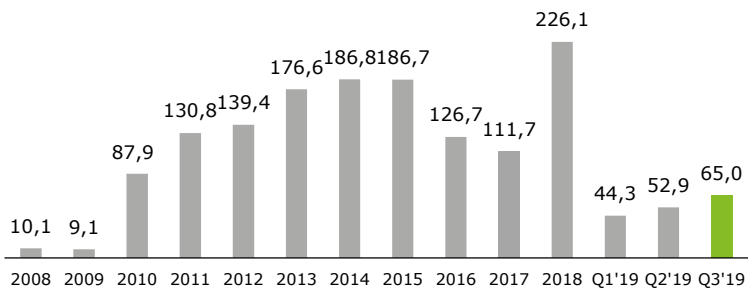
Source: GPW estimates

Commodity market growth drivers

- ◆ **Lunch of Agricultural Market** – pilot wheat trading from March to August 2020.
- ◆ **Maker-Taker:** On 1 January 2019, TGE opened a Maker-Taker pilot liquidity support programme to minimise operating expenses of market participants by narrowing the spread between bids and asks. After six months, TGE reviewed the programme performance and decided to continue the programme from 1 August to 31 December 2019.
- ◆ **CO2 emission allowances:** On 18 July 2019, TGE reopened the Financial Instruments Market which lists CO2 emission allowances; under MiFID2, allowances are a financial instrument.
- ◆ **White certificates:** The *Act amending the Excise Tax Act and certain other Acts* of 29 June 2019 extended the support scheme for energy efficiency certificates to the end of June 2021.
- ◆ **Organised Trading Facility (OTF)** - transformation of TGE's forward commodity market into an organised trading facility (OTF) under MiFID II
- ◆ **Energy market** – obligation to sell a proportion of Energy on the exchange – increased from 30% to 100%.

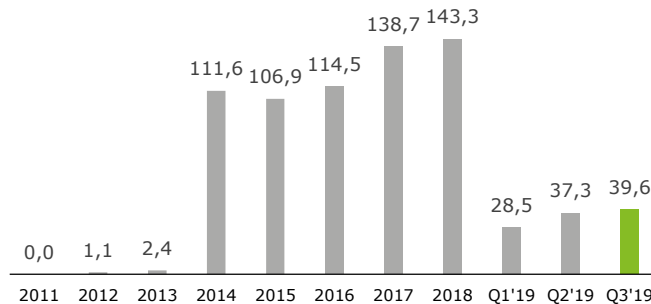
TGE electricity trade volumes (spot+forward)

TWh



Natural gas trading (spot+forward)

TWh



7 Commodities trading in Europe – TGE’s full product offer

Exchange	electricity spot	electricity futures/forward	natural gas spot	natural gas futures/forward
EEX	NO	YES	NO	NO
Epex Spot	YES	NO	NO	NO
Powernext/Pegas	NO	NO	YES	YES
Nord Pool	YES	NO	NO	NO
Nasdaq Commodities	NO	YES	NO	NO
HUPX	YES	NO	NO	NO
HUDEX	NO	YES	NO	YES
TGE	YES	YES	YES	YES

- ◆ **Natural gas and electricity trading** in Europe is usually concentrated on one-commodity dedicated exchanges.
- ◆ Nonetheless there are some essential cases of many companies leading one-commodity trading being part of one capital group – e.g. EEX, Epex Spot and Powernext/Pegas from the list above are members of EEX Group.

GPW Group



9 Poland's Promotion to Developed Markets: Success of Poland's Economy and Capital Market



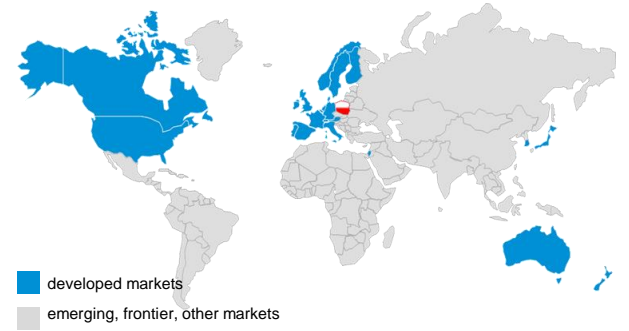
Highly appreciated Polish capital market...

- ◆ Well-developed and stable market infrastructure
- ◆ Broad selection of listed stocks and high liquidity
- ◆ Wide and unlimited access to professional market intermediaries
- ◆ Independent supervision over the market and high standards of corporate governance
- ◆ Efficient and secure trading and post-trading services
- ◆ Little limitations on investing by foreign investors
- ◆ Extensive, legally regulated added value services including short selling and omnibus securities accounts

Ceremony at London Stock Exchange



Aids classification of Poland amongst the 25 Developed Markets...



FTSE Developed Markets ranking in numbers¹

0.12%

Poland's share in FTSE Developed All Cap Index as of September '19

1.33%

Poland's previous share in FTSE Emerging All Cap Index

USD 3,000 bn

Assets under management of passive funds based on FTSE and Russell indices

September 2018

Poland's reclassification

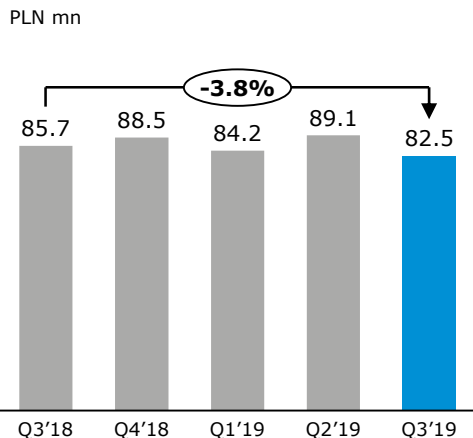
¹ Source: FTSE Russell data as of September 2019

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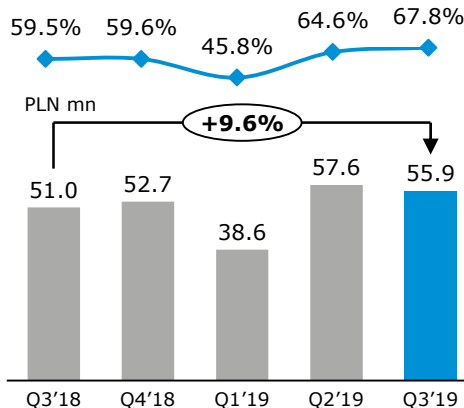
Increase of EBITDA margin and net profit margin



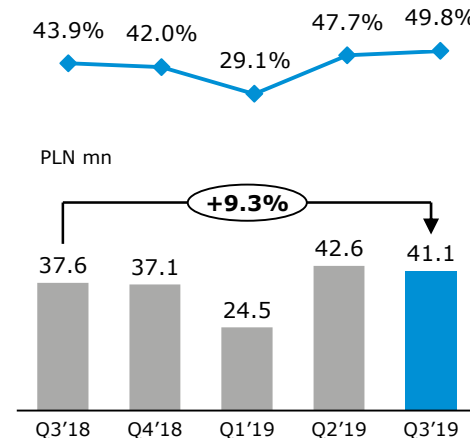
Revenue



EBITDA and EBITDA margin



Net profit and net profit margin



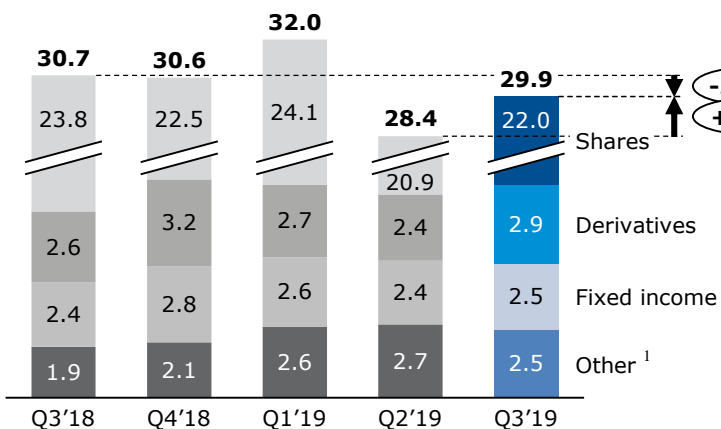
- ◆ Consolidated revenue: PLN 82.5 mn in Q3'19 (-3.8% YoY, -7.4% QoQ) due to lower revenue from the financial market and the commodity market.
- ◆ GPW Group's EBITDA: PLN 55.9 mn in Q3'19 (+9.6% YoY, -2.9% QoQ).
- ◆ GPW Group's net profit: PLN 41.1 mn in Q3'19 (+9.3% YoY, -3.3% QoQ). YoY increase mainly driven by lower operating expenses (release of part of provisions for KNF fee).

Trading revenue on the financial market

Trading revenue – financial market

PLN mn

Q3'19: 36.2%



- Trading revenue on the financial market: PLN 29.9 mn in Q3'19 (-2.5% YoY, +5.2% QoQ). YoY decrease mainly due to a lower value of trade in equities.
- Average EOB turnover in shares per session: PLN 772.6 mn in Q3'19 (vs. PLN 784.3 mn in Q2'19 and PLN 895.0 mn in Q3'18). Average velocity up by 3 percentage points QoQ.
- Average fee on the stock market: 2.16 bps in Q3'19 vs. 2.16 bps in Q3'18 vs. 2.19 bps in Q2'19.

Investor activity on GPW markets

	Q3'18	Q4'18	Q1'19	Q2'19	Q3'19
Shares – value of trade (EOB, PLN bn)	53.5	49.0	51.2	46.3	49.0
					-8.5% YoY +5.8% QoQ
Futures and options – volume of trade (mn contracts)	1.8	2.2	1.7	1.6	2.0
					+12.8% YoY +24.2% QoQ
Treasury bonds – TBSP, cash transactions (PLN bn)	28.3	46.6	36.4	17.8	21.1
					-25.6% YoY +18.6% QoQ
Treasury bonds – TBSP, conditional transactions (PLN bn)	68.8	75.4	57.9	70.5	35.3
					-48.8% YoY -50.0% QoQ

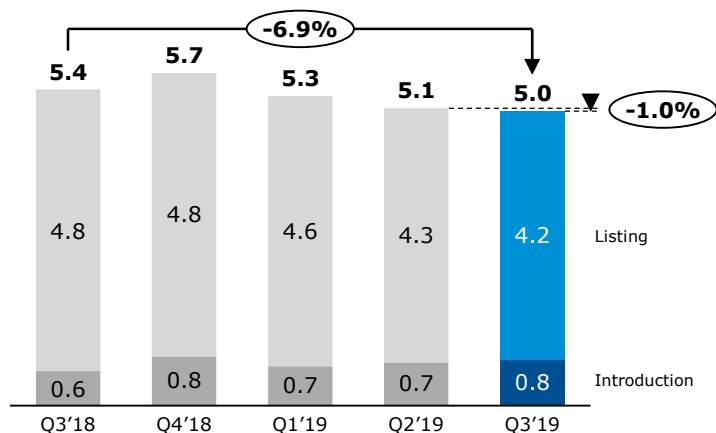
¹ Other cash market instruments, other fees paid by market participants

Listing revenue

Listing revenue

PLN mn

Q3'19: 6.1%



- ◆ Two transfers from NewConnect to the Main Market in Q3'19 (HM Inwest and Ultimate Games).
- ◆ Three new listings on NewConnect in Q3'19 (Moonlit Games, DB Energy, Carpatia Capital).
- ◆ Total listing revenue: PLN 5.0 mn in Q3'19 vs. PLN 5.1 mn in Q2'19 and PLN 5.4 mn in Q3'18.
- ◆ Free float on the Main Market: 50.0% in Q3'19 vs. 52.0% in Q2'19 and 52.0% in Q3'18.

Issuer activity

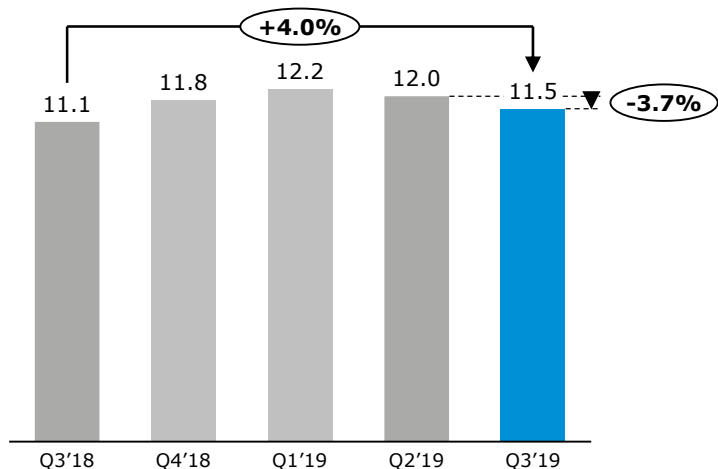
Q3'18	Q4'18	Q1'19	Q2'19	Q3'19
Number of new listings on the Main Market				
2	0	2	2	2
Capitalisation of domestic companies (PLN bn)				
587.3	578.9	597.7	594.4	551.1
-6,2% YoY				
-7,3% QoQ				
Value of IPOs (PLN mn)				
22	0	10	40	5

Revenue from information services – financial market

Revenue from information services¹

PLN mn

Q3'19: 14.0%



- ◆ New clients of GPW and WIBOR data in different market segments attracted in Q3'19:
 - ✓ 2 data vendors,
 - ✓ 2 non-display clients,
 - ✓ 4 users of historical data.
- ◆ The number of GPW data subscribers dropped in Q3'19.

Data vendors, subscribers and non-display clients

	Q3'18	Q4'18	Q1'19	Q2'19	Q3'19
Number of subscribers (thou.)	246.3	248.0	253.9	250.1	238.6
					-3.1% YoY -4.6% QoQ
Number of vendors	74	78	80	82	83
					+9 szt. YoY +1 szt. QoQ
Non-display	58	65	83	86	88
					+30 szt. YoY +2 szt. QoQ

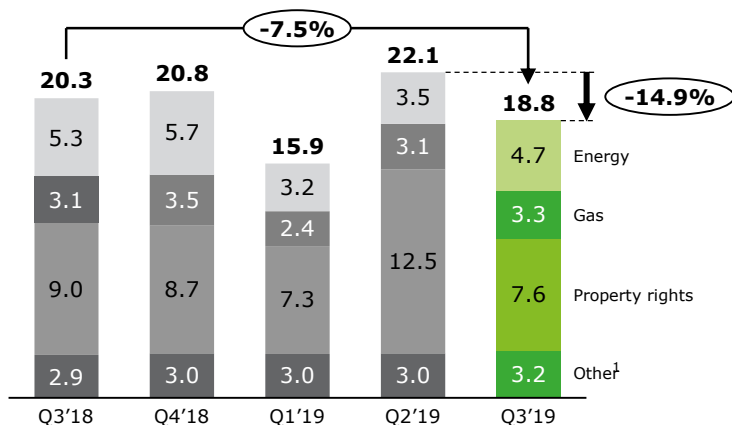
¹ Following the introduction of a separate item: Commodity market information services, the presented data include only the revenue from the financial market and may differ from the presentation in previous quarters

Revenue from the electricity and gas markets

Trading revenue – commodity market

PLN mn

Q3'19: 22.8%



- Revenue from trading in electricity up by 36.4% QoQ to PLN 4.7 mn in Q3'19 and down 10.2% YoY (mainly due to a lower turnover on the forward market, down by 17.8% YoY).
- Revenue from trading in gas up by 3.9% YoY and up by 5.2% QoQ to PLN 3.3 mn due to an increase in volumes of spot transactions by 47.1% YoY and forward transactions by 0.3% YoY.
- Revenue from trading in property rights down by 15.2% YoY and down by 39.0% QoQ to PLN 7.6 mn in Q3'19. The decrease of revenue was due to the discontinuation of trade in cogeneration certificates.

Investor activity on the commodity market

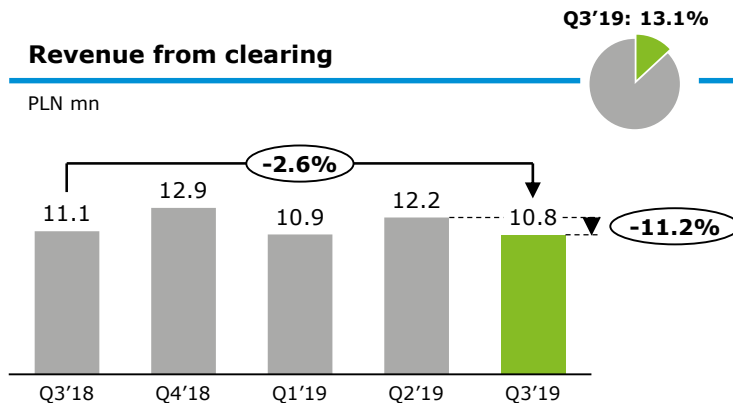
	Q3'18	Q4'18	Q1'19	Q2'19	Q3'19
Electricity – volume of trade (TWh)	63.5	67.3	44.3	52.9	65.0
					+2,4% YoY +22,9% QoQ
Natural gas – volume of trade (TWh)	45.4	46.1	28.5	37.3	39,6
					-12,7% YoY +6,3% QoQ
Property rights – volume of trade (TWh)	13.5	10.5	10.9	21.1	5.6
					-58,4% YoY -73,3% QoQ

¹ Other fees paid by market participants at TGE, IRGIT and InfoEngine

Revenue from clearing

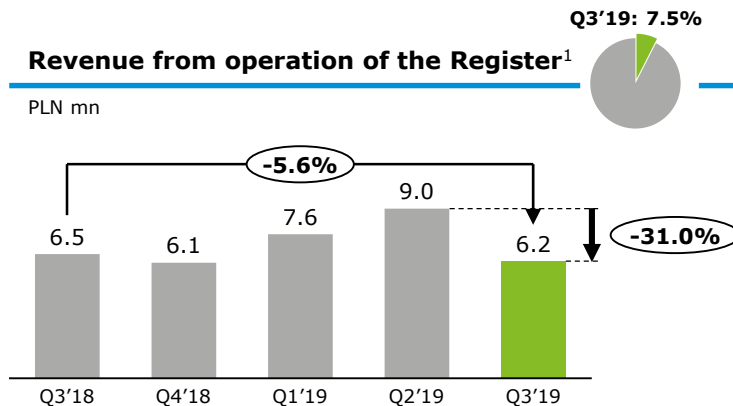
Revenue from clearing

PLN mn



Revenue from operation of the Register¹

PLN mn



¹ including revenue from the Register of Guarantees of Origin

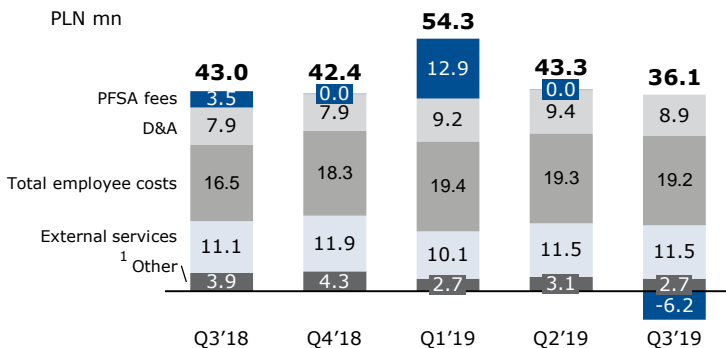
- ◆ Revenue from clearing down by 2.6% YoY and by 11.2% QoQ in Q3'19, mainly due to a decrease in volumes of trade in property rights.
- ◆ Revenue from the operation of the Register of Certificates of Origin down by 5.6% YoY and 31.0% QoQ due to discontinuation of the support scheme for energy from cogeneration in the form of certificates and a lower volume of trade in certificates of origin of renewable energy sources.
- ◆ The volume of transactions in the Register of Guarantees of Origin was 4,073,668 MWh in Q3'19 vs. 4,101,817 MWh in Q2'19 and 3,675,262 MWh in Q3'18.

Activity of participants of the Register of Certificates of Origin

	Q3'18	Q4'18	Q1'19	Q2'19	Q3'19
Volume of issued property rights (TWh)	7.2	7.2	18.0	8.3	4.8
					-33,3% YoY
					-42,2% QoQ
Volume of cancelled certificates of origin (TWh)	22.7	6.8	7.2	19.9	13.1
					-42,3% YoY
					-34,2% QoQ
Guarantees of Origin – volume of trade (TWh)	3.7	9.8	6.0	4.1	4.1
					+10,8% YoY
					0,0% QoQ

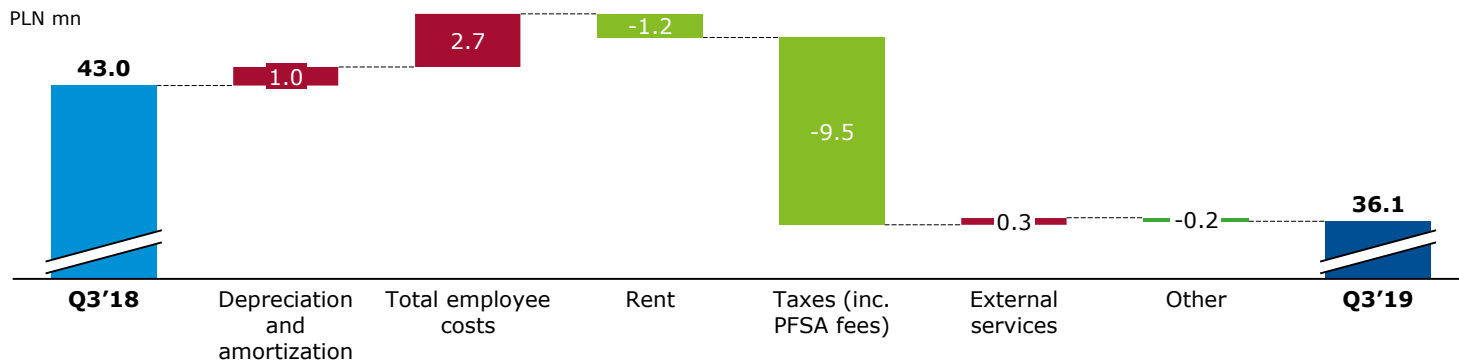
Operating expenses impacted by release of part of provisions for KNF fees in Q3'19

Operating expenses: -16.1% YoY and -16.7% QoQ



- Operating expenses: PLN 36.1 mn in Q3'19 (-16.1% YoY, -16.7% QoQ).
- Final KNF fees calculated in Q3'19: PLN 6.7 mn in 2019 vs. PLN 12.5 mn in 2018.
- Cost/income ratio (C/I)²: 43.8% in Q3'19 vs. 50.2% in Q3'18.
- Depreciation and amortisation: PLN 8.9 mn in Q3'19 (+12.0% YoY, -5.5% QoQ). YoY increase in depreciation/amortisation mainly driven by the implementation of IFRS 16 Leases in all Group companies. As a result, the cost of rent went down 52.4% YoY and up 1.3% QoQ.
- Total salaries up to PLN 19.2 mn in Q3'19 (+16.4% YoY, -0.6% QoQ). YoY increase driven by additional headcount in the implementation of the strategy #GPW2022.
- External service charges: PLN 11.5 mn in Q3'19 (+3.1% YoY, -0.4% QoQ). YoY increase mainly driven by: 1) higher cost of IT infrastructure maintenance; 2) higher cost of advisory; and 3) launch of GPW's Pilot Analytical Coverage Support Programme.

Change in operating expenses

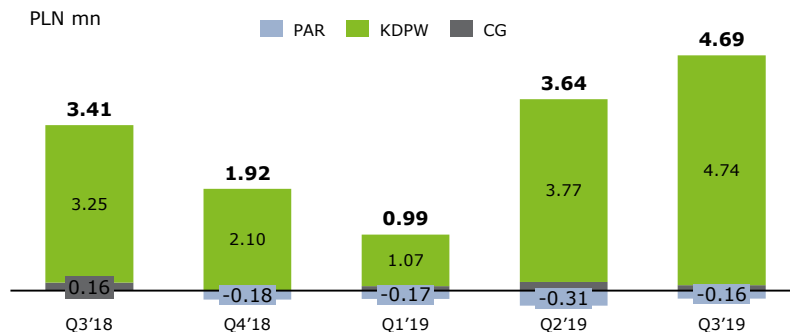


¹ Other includes rent, fees and charges (net of the KNF fees), and other operating expenses

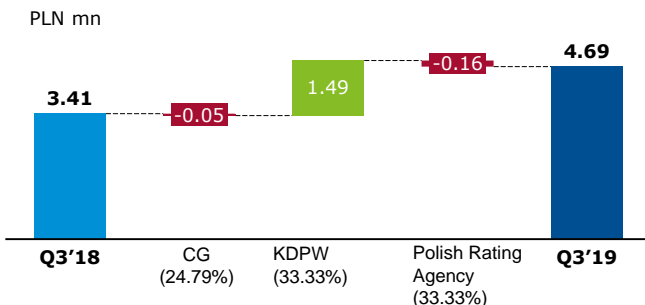
² C/I based on reported data

Share of profit of entities measured by the equity method

Share of profit of entities measured by the equity method



Change of share of profit of entities measured by the equity method



- ◆ Group's share of profit of entities measured by the equity method: PLN 4.69 mn in Q3'19 (+37.5% YoY, +28.9% QoQ).
- ◆ KDPW:
 - ✓ The Group's share of the net profit of KDPW (GPW holds 33.33% of shares): PLN 4.74 mn in Q3'19 vs. PLN 3.25 mn in Q3'18 and PLN 3.77 mn in Q2'19. The YoY increase was mainly driven by lower costs for PFSA.
- ◆ The share of profit of Centrum Geldowe: PLN 111 k in Q3'19.
- ◆ The Group's share of the loss of PAR: PLN 162 k in Q3'19.
- ◆ PAR was refused ESMA authorisation as a rating provider; consequently, impairment loss on investment in other entities in the amount of PLN 1.1 mn was recognised in the P&L in Q3'19.

GPW Group's consolidated statement of financial position



PLN mn	31.09.2018	30.06.2019	30.09.2019
Non-current assets , including among others	575,1	585,9	585,5
Property, plant and equipment	106,2	100,6	97,3
Intangible assets	254,5	246,8	247,3
Share of profit of associates	203,3	204,8	208,4
Current assets , including among others	618,3	771,9	645,4
Trade and other receivables	78,7	73,2	56,2
Financial assets measured at amortised cost	364,2	217,7	333,7
Cash and cash equivalents	173,1	478,1	253,4
Total assets	1 193,4	1 357,8	1 231,0

◆ Increase of total assets YtD as at 30 September 2019 mainly driven by an increase of cash and cash equivalents.

◆ Decrease of financial assets measured at amortised cost by PLN 43.8 mn YtD as at 30 September 2019 mainly due to a decrease in held corporate bonds and certificates of deposit.

PLN mn	31.09.2018	30.06.2019	30.09.2019
Equity	853,4	823,9	861,8
Non-current liabilities	268,3	281,3	282,9
Liability under the bond issue	243,9	244,2	244,3
Current liabilities , including among others	71,8	252,6	86,2
Trade payables	7,9	31,9	13,8
Employee benefits payable	11,7	13,6	16,5
Income tax payable	1,1	22,2	
Contract liabilities	12,5	22,2	12,0
Accruals and deferred income	0,6	0,0	
Other current liabilities	35,8	171,9	34,0
Total equity and liabilities	1 193,4	1 357,8	1 231,0

◆ Increase of current liabilities YtD as at 30 September 2019 mainly driven by an increase of other current liabilities (current VAT payable in TGE).

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GPW Group's consolidated statement of comprehensive income



PLN mn	Q3'18	Q2'19	Q3'19
Revenue	85,7	89,1	82,5
Financial market	47,1	45,4	46,4
Trading	30,7	28,4	29,9
Listing	5,4	5,1	5,0
Information services	11,1	12,0	11,5
Commodity market	38,1	43,4	36,0
Trading	20,3	22,1	18,8
Register of Certificates of Origin	6,5	9,0	6,2
Clearing	11,1	12,2	10,8
Information services	0,1	0,2	0,2
Other operating income	0,5	0,3	0,1
Operating expenses	43,0	43,3	36,1
Other income	0,3	1,9	1,9
Impairment gains/(losses) on receivables	0,4	1,4	-0,3
Other expenses	0,3	0,9	0,9
Operating profit	43,1	48,2	47,0
Financial income	1,8	2,4	2,6
Financial expenses	2,2	2,3	3,3
balance on financial income and expencies	-0,4	0,1	-0,7
Impairment loss on investments in other entitie:	0,0	0,0	-1,1
Share of profit/(loss) of entities measured by equity method	3,4	3,6	4,7
Profit before income tax	46,1	51,9	50,0
Income tax	8,5	9,4	8,8
Net profit	37,6	42,6	41,1
EBITDA	51,0	57,6	55,9

- ◆ YoY decrease of revenue in Q3'19 driven by a decrease of revenue from the commodity market (by PLN 2.1 mn) and a decrease of revenue from the financial market (by PLN 0.7 mn).
- ◆ Operating expenses decreased by PLN 6.9 mn YoY in Q3'19 mainly due to a decrease of fees and charges (down by PLN 9.5 mn) as a result of a lower KNF fee, combined with an increase of salaries and other employee costs (up by PLN 2.7 mn) due to an increase of the headcount.
- ◆ Impairment loss on investment in PAR at PLN 1.1 mn recognised in Q3'19.
- ◆ Increase of financial costs compared to Q3'18 and Q2'19 as a result of interest on tax liabilities resulting from CIT for previous years at TGE in the amount of PLN 1.2 million.

GPW Group's consolidated statement of cash flows

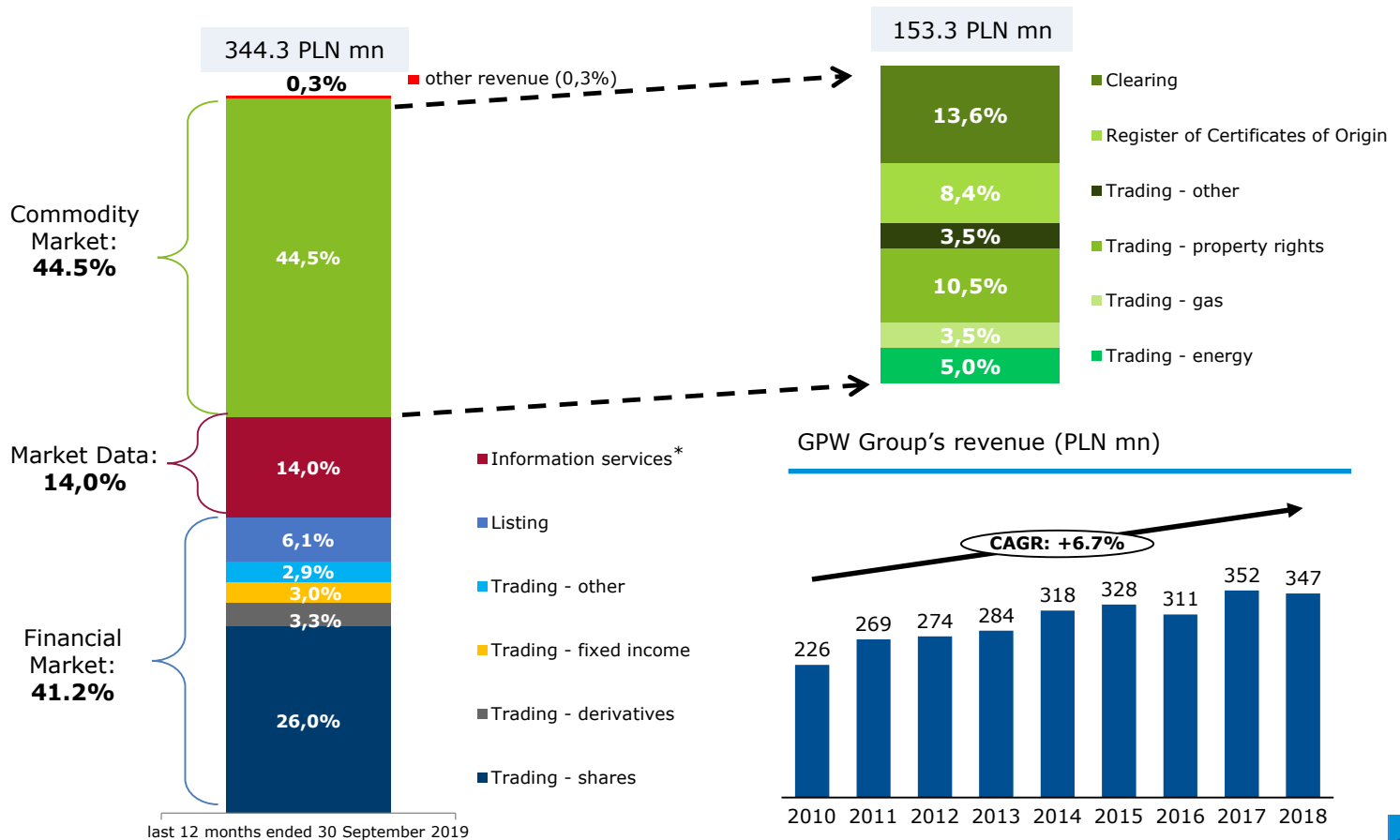


Nine-month period ended 30 September of

PLN mn	2019	2018
Cash flows from operating activities, including among others:	160,2	96,6
Cash flows from operating activities	191,7	132,1
Net profit of the period	108,1	146,6
Adjustments:	83,6	-14,4
Income tax	24,1	32,8
Depreciation and amortization	27,5	23,9
Interest (income) on deposits, certificates of deposits and corporate bonds	-3,8	-3,0
Interest on issued bonds	5,4	5,8
Financial cost of the bond issue	0,3	0,0
Share of profit of associates	-9,3	-8,6
Change of assets and liabilities, including among others:	39,7	-20,7
(Increase)/Decrease of trade payables	5,2	-13,4
(Increase)/Decrease of other liabilities (excluding investment and dividend)	11,1	7,1
Interest on tax liabilities paid/refunded	0,0	-0,1
Income tax paid/(refund)	-31,5	-35,5
Cash flows from investing activities, including among others:	47,0	-66,1
Purchase of property, plant and equipment	-2,4	-7,7
Purchase of intangible assets	-6,4	-6,0
Proceeds from sale of property, plant and equipment and intangible assets	0,9	0,2
Interest received on financial assets measured at amortised cost	4,2	2,3
Purchase of financial assets measured at amortised cost	-595,2	-680,3
Sale of financial assets measured at amortised cost	638,6	567,5
Cash flows from financing activities, including among others:	-142,8	-93,3
Dividend paid	-133,4	-92,3
Interest paid on bonds issued	-5,3	-5,3
Lease payments made (interest, IFRS 16)	-0,5	0,0
Lease payments made (principal, IFRS 16)	-3,5	0,0
Payments received for the acquisition of PAR by PFR and BIK	0,0	4,4
Increase/decrease of net cash and cash equivalents	64,4	-62,8
Cash and cash equivalents - opening balance	188,7	235,9
Cash and cash equivalents - closing balance	253,4	173,1

- Positive cash flows from operating activities in 9M ended 30 September 2019 increased by PLN 63.6 YoY mainly due to a positive evolution of assets and liabilities (PLN 39.7 mn vs. -PLN 20.7 mn in 9M ended 30 September 2018).
- Positive cash flows from investing activities in 9M ended 30 September 2019 increased by PLN 113.1 mn YoY mainly due to transactions in assets measured at amortised cost (higher gains on investments in 2019).
- Cash flows from financing activities in 9M ended 30 September 2019 were negative at PLN 142.8 mn, down by PLN 49.5 mn YoY, mainly due to a higher dividend (PLN 133.4 mn vs. PLN 92.3 mn in 9M 2018).

GPW Group's revenue structure

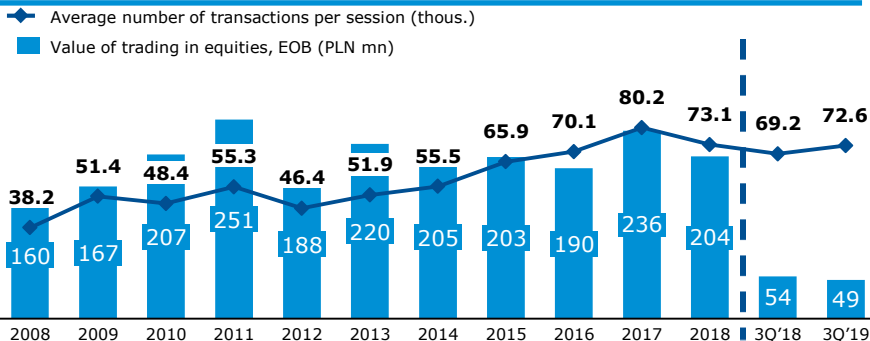


* "Information services" revenue include financial market and commodity market



26.7%¹

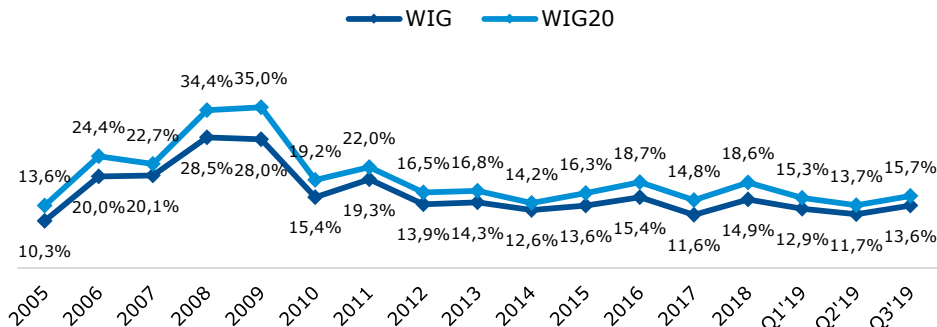
Value of trade in equities and number of transactions



◆ Revenue drivers:

- ✓ Value of trade in equities
- ✓ Structure of orders (small, large, mid-sized)

Volatility – WIG and WIG20



¹ Share in GPW Group's revenue in Q3 2019

Financial market: Trade in derivatives

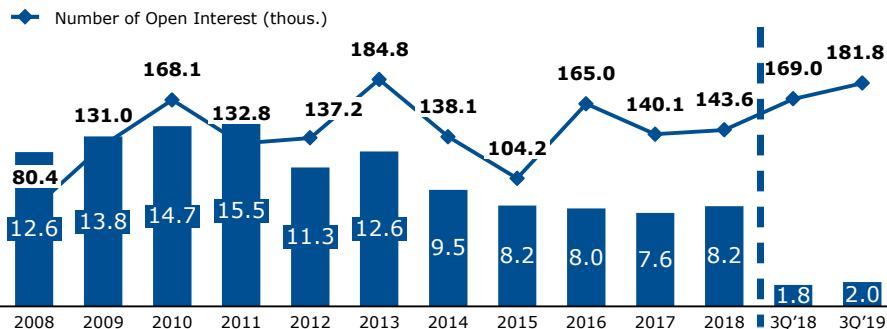


3.5%²

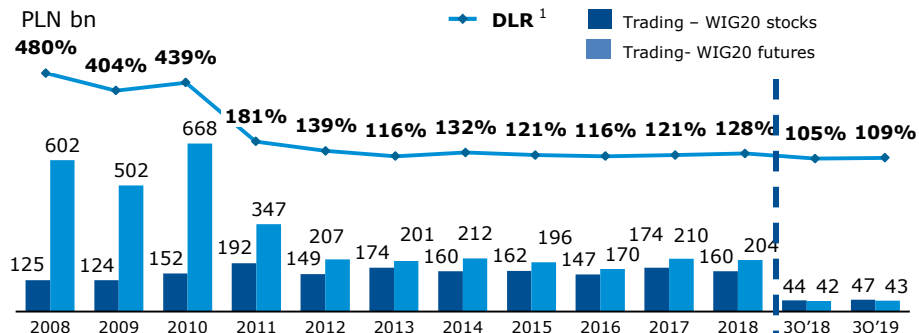
◆ Revenue drivers:

- ✓ Volume of trade in futures
- ✓ Number of open interest
- ✓ Volatility

Volume of trade in derivatives



Volume of trade in futures vs. volatility



¹ Velocity ratio (value of trade in WIG20 futures to value of trade in WIG20 stocks)

² Share in GPW Group's revenue in Q3 2019

Financial market: Other instruments and fees paid by participants



3.0%¹

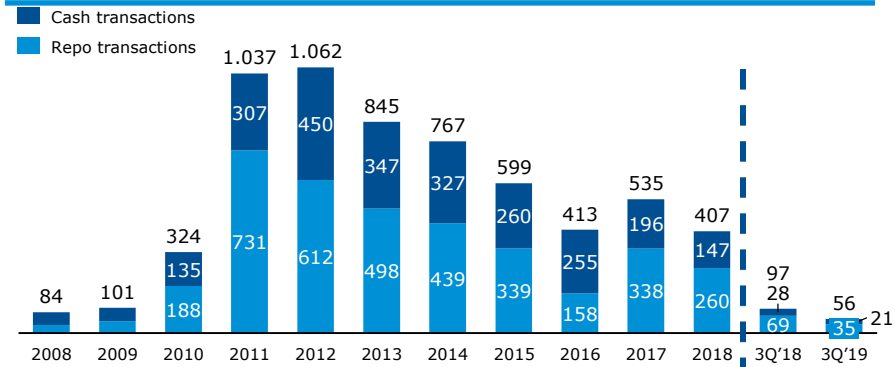


2.9%²

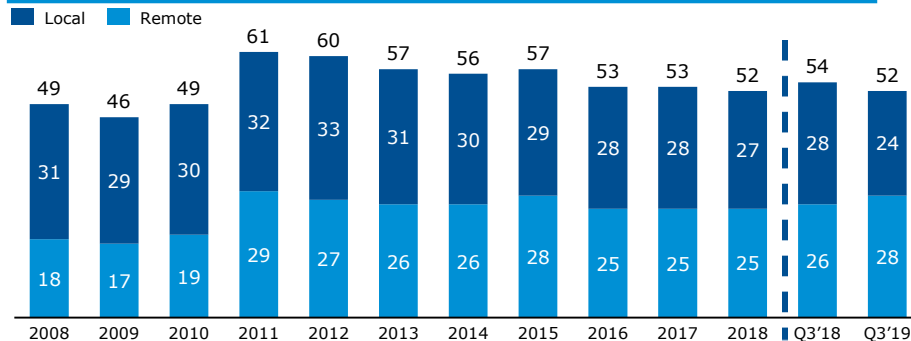
◆ Revenue drivers:

- ✓ Value of trade in Treasury bonds
- ✓ Number of exchange members

Value of trade on Treasury BondSpot Poland, PLN bn



Number of exchange members



¹ Share in GPW Group's revenue in Q3 2019, trade in debt instruments

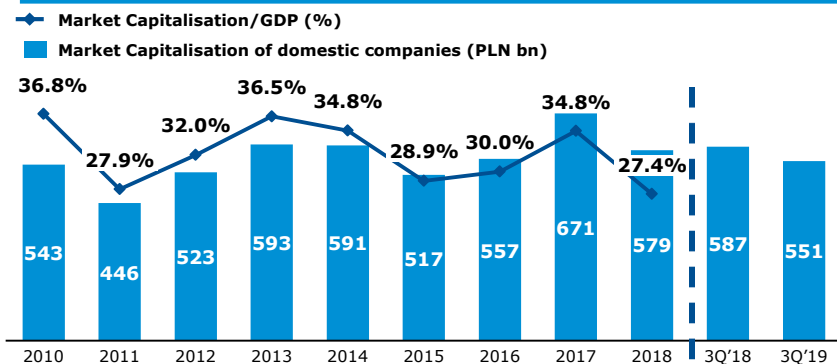
² Share in GPW Group's revenue in Q3 2019, other trading fees paid by market participants

6.1%¹

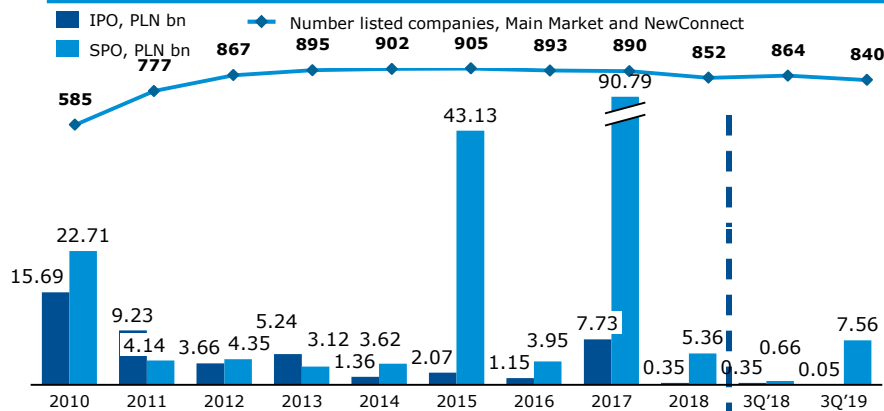
◆ Revenue drivers:

- ✓ Capitalisation at YE
- ✓ Value of new issue shares and bonds
- ✓ Number of issuers

Capitalisation of domestic companies



IPO/SPO value and number of companies



¹ Share in GPW Group's revenue in Q3 2019

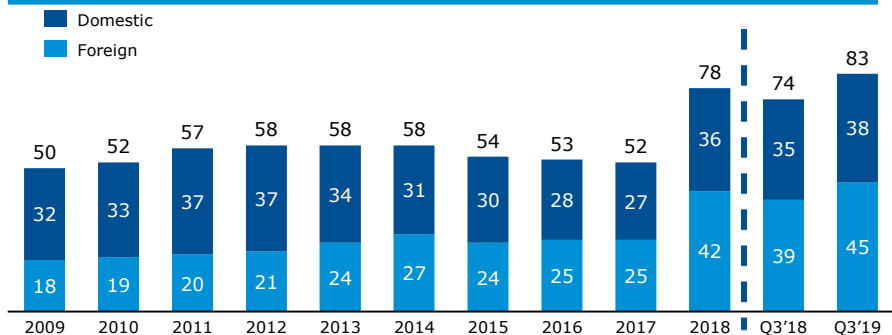


14.2%¹

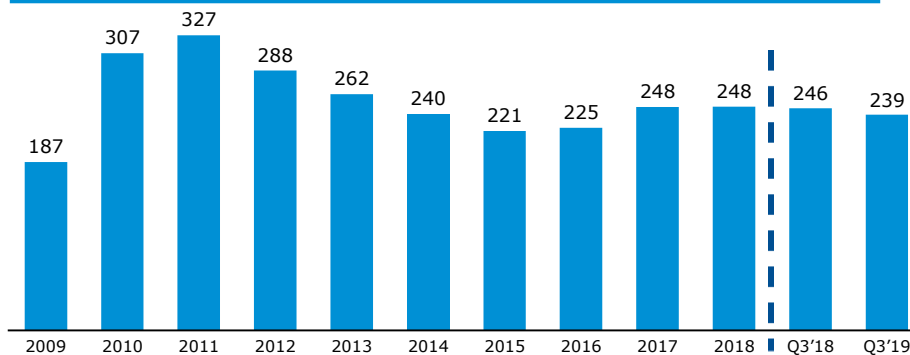
◆ Revenue drivers:

- ✓ Number of data vendors
- ✓ Number of subscribers

Number of data vendors



Number of subscribers (thou.)



¹ Share in GPW Group's revenue in Q3 2019

Commodity market: Trade in electricity and gas

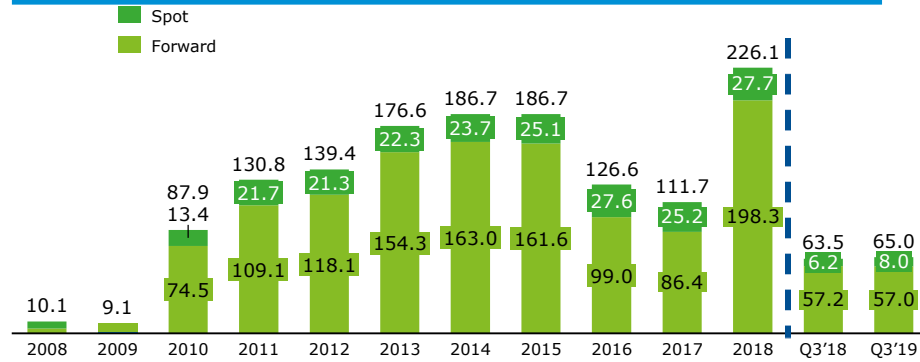


9.7%²

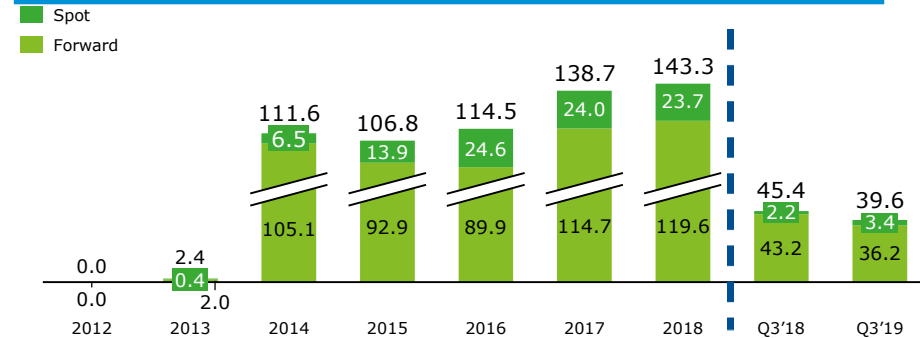
◆ Revenue drivers:

- ✓ Volume of trade in electricity
- ✓ Volume of trade in gas
- ✓ Share of spot and forward trade

Volume of trade in electricity (TWh)¹



Volume of trade in gas (TWh)



¹ Data for 2006-2013 include trade on the GPW Energy Market poee

² Share in GPW Group's revenue in Q3 2019

Commodity market: Trade in property rights

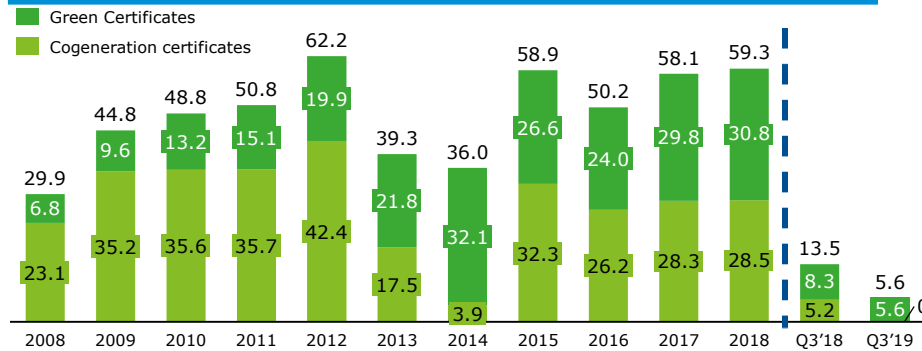


9.2%¹

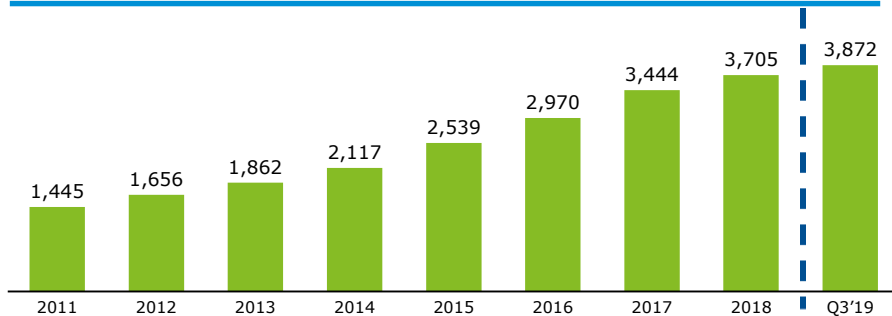
◆ Revenue drivers:

- ✓ Volume of trade in property rights
- ✓ Share of certificate categories in trade
- ✓ Number of register participants

Spot trade in property rights (TWh)



Number of participants of the Register of Certificates of Origin



¹ Share in GPW Group's revenue in Q3 2019

Commodity market: Register of Certificates of Origin

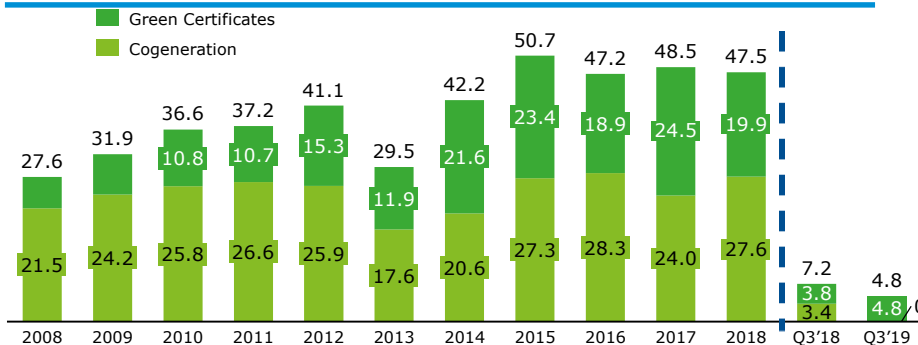


7.5%¹

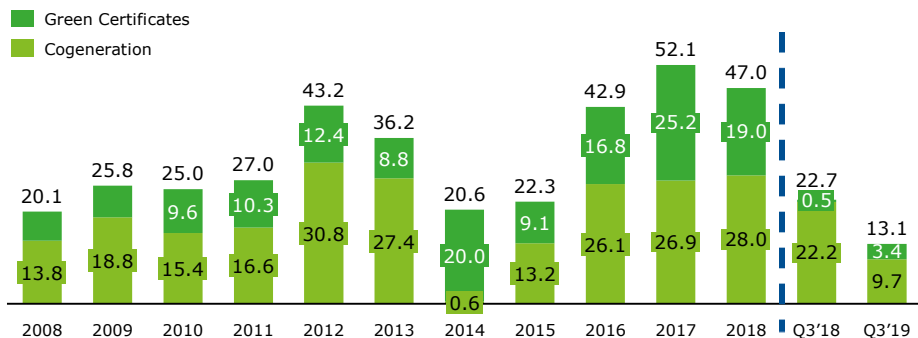
◆ Revenue drivers:

- ✓ Volume of issued property rights
- ✓ Volume of cancelled property rights

Volume of issued certificates of origin (TWh)



Volume of cancelled certificates of origin (TWh)



¹ Share in GPW Group's revenue in Q3 2019

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
COR	Certificates of Origin Register, register maintained by the Polish Power Exchange responsible for registration and record-keeping of certificates of origin
ECM	Equity Capital Market, value of equity raised on the financial market
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. ETF can daily create and cancel ETF units. ETF units are exchange traded on the same terms as shares.
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
Green certificates	Certificate of origin is a document certifying that the Energy was produced from the renewable Energy resources
HVF	High Volume Funds, a promotion programme addressed to investment funds actively trading in shares on GPW

Glossary (2)

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 presentation, PwC IPOwatch 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
MCO	Market Coupling operator
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.
NEMO	Nominated Electricity Market Operator is a market operator designated by the competent authority of the European Union Member State to participate in single day-ahead or single intraday coupling
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
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

Glossary (3)

RGO	Register of Guarantees of Origin, register of instruments supporting renewable energy sources, which aim to provide disclosure for the end customer as to the amount of electricity generated in a renewable source and supplied to the power distribution or transmission network
SPO	Second Public Offering
Post-trade services	depository, clearing and settlement services
UTP	Universal Trading Platform, the trading system of the Warsaw Stock Exchange supplied by NYSE Technologies
White certificates	Certificates of origin of energy efficiency
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

IR events

- ◆ **3–6 December 2019**
Winter Wonderland Emerging Europe Conference,
Wood&Company, Prague

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