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Piotr Dąbrowski

Department of Banking and Financial Markets University of Economics in Katowice

THE LEVEL OF WARSAW STOCK EXCHANGE COMMISSIONS AS A SHORT-TERM TRADING IMPEDIMENT

# Abstract

Stock exchange commission is one of the most significant trading cost. It is a charge for services provided by financial institutions and paid by customers. Its level determines trading opportunities especially for short-term investors. That is the reason why proper commission policy is vital for traders, their instrument and strategy choices and, consequently contributes to market development.

In this article the level of Warsaw Stock Exchange (WSE) commissions as a short-term trading impediment is presented. It discuses historical, current, and future problems resulting from extremely expensive WSE and brokers fees. Moreover comparison to policies of world-markets is emphasized.

**Keywords**: commission, trading, stock exchange, daytrading, Warsaw Stock Exchange, WSE, FW20, FW30, WIG20, WIG30, DJIA, DAX, short-term trading.

JEL Classification: G15, G23, G24.

# Introduction

Trading commission is a charge for services provided by broker in return for handling purchase or sale of securities<sup>1</sup>. Every transaction is subject of the commission which covers costs of combining deals on the market and brings profits for financial institutions. On the one hand, it is necessary due to high costs of upkeep and maintenance of technology that operates for traders as well as employees' remunerations. But on the other hand, it is a significant burden for investors which diminishes profits and magnifies losses, especially for shortterm activity. That is the reason why the level of commission is so important for financial services providers and customers. Those are mainly individuals who altogether make large turnover, but separately are too weak to make considerable commission negotiations.

<sup>&</sup>lt;sup>1</sup> See: Investopedia.com.

### 1. Commission policies

In some circumstances the trading commission can be a crucial parameter to choose the market and instrument or not. For short-term traders, like day-traders, scalpers and high-frequency traders (HFT), the level of charges has great influence on results and very often can be the only impediment that restraint strategy implementation. For fast moving trading systems choosing the cheapest market is the best way to run them. Thus, it is worth to consider whether Warsaw Stock Exchange (WSE) is a proper place for this type of activity.

Warsaw Stock Exchange (WSE), that has already been existing for more than twenty years, has a very specific, or even peculiar, policy of commissions. Of course not only main Polish stock market is responsible for current situation. Major part of charges paid by investors are captured by stock brokers that may determine fees at any and at unrestricted level, however Warsaw Stock Exchange do not appoint proper solutions and tendency (Table 1)<sup>2</sup>.

Item WSE*		Stock broker**	
stocks, ETFs, issue rights	0.033 % (0-100k PLN) 0.024 % (100k-2M PLN) 0.010 % (above 2M PLN) max. 880.00 PLN, min. 1.00 PLN	0.37 %	
debt instruments	0.010 %	0.19 %	
index futures	1.70 PLN	9.00 PLN	
stock futures	0.34 PLN	3.00 PLN	
index options	0.60 % (min. 0.20 PLN, max. 1.20 PLN)	2.00%	
stock options	0.60 % (min.0.04 PLN, max. 0.24 PLN)	2.00% (min. 1.50 PLN, max. 9.00 PLN)	

Table 1. Commission charged by WSE and stock brokers - comparison

WSE exchange fees.

\*\* Average fees for individuals with e-accounts of: BM BPH, BDM, DM PKO BP, CDM PEKAO, BM BGZ, DI BRE, DM BZWBK, DM BOS, ING Securities, DM XTB.

Source: Based on tables of commissions from web-pages of listed stock brokers and WSE.

The level of WSE exchange fees has been pretty stable for years, but due to strong competition among brokers and from the other markets – for example West-European, American or FOREX – which are easily available for Polish investors today, prices of services are being diminished, but very slowly (Table 2).

<sup>&</sup>lt;sup>2</sup> See T. Prusek, W. Musiak, *Ile to kosztuje i dlaczego tak drogo. Zlecenie maklerskie*, "Gazeta Wyborcza" from 12.03.2012.

Broker	Stocks commission	Index futures commission	
BM BPH	0.380%	9.00 PLN	
BDM	0.390%	9.90 PLN	
DM PKO BP	0.390%	8.50 PLN	
BM BGŻ	0.350%	8.00 PLN	
CDM PEKAO	0.375%	9.90 PLN	
DI BRE	0.390%	9.00 PLN	
DM BZWBK	0.390%	9.00 PLN	
DM BOŚ	0.380%	9.90 PLN	
ING Securities	0.390%	9.00 PLN	
DM XTB	0.250%	7.50 PLN	

 Table 2. Stock brokers standard fees for e-accounts – comparison of mostly-traded instruments

Source: Based on tables of commissions from web-pages of listed stock brokers.

The fees are usually imposed on partly or fully executed orders, which actually means that placing and canceling orders without execution is free of charge. If there is a minimal fee, it is always settled after summing up daily turnover, so there is almost no risk, that trader pays more than the percentage value of orders fulfilled in many tranches. But this manner of charging is in particular specific for equities. In case of derivatives, the commission is generally fixed for individual piece of instrument, regardless of its value and price. Sometimes stock brokers offer fixed fee for a bundle of securities and it is not the total value of them that matters, but purely the number of units. Moreover there are possibilities to trade through paying flat rate for order with unlimited volume.

In comparison to foreign markets, investors in Poland have to pay higher fees than abroad. The difference is substantial (Table 3).

Market/broker	Stock commission	Index futures commission (the most popular futures contract on the market)*
Poland (WSE) – average commission	0.37 %	9.00 PLN (FW20)
Europe – Interactivebrokers	0.10 %	8.43 PLN (DAX, CAC, FTSE)
USA – Interactivebrokers	0.0159 PLN per share	2.70 PLN (DJ, SP500)

Table 3. Polish-, European-, and US-market commission comparison

\* Commodity and currency futures excl.

1 EUR = 4.2153; 1 USD = 3.1725; NBP 7.08.2013.

Source: Based on tables of commission of WSE, Polish brokers and Interactivebrokers.

Everyone can see that discrepancy is huge. Polish stakes on stocks are almost four times higher than European. US fees are usually calculated in different way. They do not impose a percentage fee, but rather stake per security. As the most popular price range of stocks is 10 to 50 USD, it turns out that commission is between 0.035% and 0.007%, so at least three times lower than European and ten times than Polish. Of course the larger volume of order, the lower proportional fee. And the most ridiculous thing is that US commissions for individuals are more attractive than only basic WSE rates (rates that do not include margins of stock brokers).

There is a possibility to lower the commission paid for trading stocks on WSE. Polish stock brokers offers special conditions for day-traders. Flatting position on the same day usually reduces fees by 50%<sup>3</sup>, but it concerns only closing orders while opening orders are paid regularly. So still Polish short-term commissions are higher than even foreign long-term charges.

It may look better on derivatives, but in fact it is not. European and Polish fees for index futures are similar (US are of course lower, because market is larger), but instruments act differently. Analyzing futures commission structure one has to take into consideration chiefly two parameters: nominal value of a contract and volatility.

Nominal value of derivative is a product of price in points or currency and multiplier. Price depends only on market conditions (buyers and sellers), but the ratio is a fixed value regulated by stock exchange on which the instrument is traded. That is why different futures can have diverse nominal values even if the price level is equal. Now, by comparing the commission to the nominal value information about fee levels is normalized (Table 4).

Specification	FW20	FDAX	DJIA futures
current price (closing 6.08.2013)	2,330 points	8,284 points	15,554 points
multiplier	10 PLN	25 EUR = 105.38 PLN*	10 USD = 31.73 PLN*
nominal value	23,300.00 PLN	872,967.90 PLN	493,528.40 PLN
commission	9.00 PLN	8.43 PLN	2.70 PLN
commission (x2)** / nominal value ratio	0.07725 %	0.00193 %	0.00109 %

Table 4. Commission to nominal value ratio comparison

\* 1EUR = 4.2153; 1 USD = 3.1725; NBP 7.08.2013.

\*\* The value of commission is doubled due to opening and closing order.

Again – commissions for investors trading on WSE are just preposterous – forty times higher in contrast to European markets (like DAX) and seventy

<sup>&</sup>lt;sup>3</sup> See: Tables of commissions of Polish Stock brokers.

times more expensive than future contract on Dow Jones. Of course, the scale of the market is different and German and US derivatives are traded more often with top liquidity and huge daily volume<sup>4</sup>, but one cannot ignore the fact that FW20 is the most popular future contract in Mid-Eastern Europe. If WSE and Polish stock brokers wanted to align the level of commissions with European standards, the total charge for opening and closing the position on FW20 would have to be not greater than 0.45 PLN. Quite hard to achieve!

Second parameter well describing commission policy is volatility or sort of daily range. The calculation is trivial – it is just a distance between daily high and daily low – but it informs pretty well about short-term trading opportunities. Moreover, if it is collated with the fees (Table 5), it clearly suggests the best market for "impatient" investors.

Specification	FW20	FDAX	DJIA futures
average daily range (12 months)	48 points = 480 PLN	128 points = = 13,488.64 PLN	172 points = = 5,457.56 PLN
commission (buy and sell)	18.00 PLN	16.86 PLN	5.40 PLN
commission / daily range ratio	3.75000 %	0.12499 %	0.09895 %

Table 5. Average daily range of last twelve months collated with commission

\* 1EUR = 4.2153; 1 USD = 3.1725; NBP 7.08.2013.

And again it shows up that the relation of commission to market volatility measured by daily range is extremely unfavorable for FW20 – the ratio is approximately thirty times higher than of DAX and DJIA futures. Being honest – one must admit that there are some better trading conditions for day-trading – usually commission for closing orders is 50% lower than typical. But even with this bonus, the commission / daily range ratio is still at irrational level of 2.81%. Obviously for midand long-term traders this ratio is not so important and is acceptable, however defining 2.81% ratio as suitable for day-traders sounds like a bad joke.

<sup>&</sup>lt;sup>4</sup> Actually FDAX and future contract on DJIA are kind of German and US analogue to Polish blue-chip derivative FW20 that is why they can be compared. Both DAX and DJIA derivatives represents top German and US companies and are based on "national" indexes. Obviously there are futures with higher liquidity and even larger turnover, like Euro Stoxx 50, but they have rather international character. See: statistics on stoxx.com and eurexchange.com.

# 2. Expensive trading

The explanation for expensive trading costs on WSE could be participation of individual investors – if it is too low, services for them can be unprofitable. But this is not the WSE case. According to statistics, individuals make 18% of total turnover on stocks (48% by foreign investors and 34% by institutional investors) and impressive 47% of total turnover on derivatives (17% by foreign investors and 36% by institutional investors)<sup>5</sup>. Share of individuals in equities turnover was higher before 2008 (35% in 2006 and 50% in 2000), but it is obvious due to up-trend 2003-2007 and IT bubble at the turn of the centuries. On derivatives the record was achieved by individuals in 2000 with 85% share in futures turnover, but today's half of turnover is also splendid. Unfortunately small investors as a group seem to be omitted by financial institutions and have no strong incentive to increase their trading activity in shorter timeframes.

Foreign markets stimulus are more powerful. International stock brokers offer for US marketplaces not only low commissions, but also premiums for giving liquidity<sup>6</sup>. It means that buying and selling securities at the same price, but with the usage of waiting orders instead of instant execution orders, can be very profitable. Hereby not only professionals with proper contracts with companies or stock exchange institutions can act as market makers, but also every investor. Commission paybacks strongly improve liquidity and turnover. They are helpful on stable markets and during horizontal trends, as catching even small movements can be lucrative.

Among other encouragements, very popular is trading on margin. It amplifies buying power and enables getting interests on capital, that is not engaged in deal, or simply applies financial leverage. For US equities brokers require usually only 25% of the value of the position and it is also available for longer-term investments<sup>7</sup>. In Poland such possibility exists and margin requirements can be merely 10%-30% (depending on institution)<sup>8</sup>, but only for day-traders. Margin trading on WSE is not a kind of debt, but results from delay in settlement with clearing house<sup>9</sup>.

<sup>&</sup>lt;sup>5</sup> See: Historical investor statistics of WSE, www.gpw.pl.

<sup>&</sup>lt;sup>6</sup> See: NYSE Arca Equities Trading Fees, nyx.com.

<sup>&</sup>lt;sup>7</sup> See: *Margin*, interactivebrokers.com.

<sup>&</sup>lt;sup>8</sup> See: Odroczony termin płatności na rynku GPW, xtb.pl.

<sup>&</sup>lt;sup>2</sup> Delay in settlement with clearing house is often called "rule D+3" or "rule T+3". All equity settlements are made three working days after transaction and concern both buying as well as selling orders. So if during one trading session investor buys and sells the same number of one listed company, the settlement of purchase and sale will take place after three days on the same day. That is way these operations will be counterbalanced.

# 3. WSE revolution

2013 was a pretty important year for Warsaw Stock Exchange. A lot of crucial changes have been introduced. Firstly in April, a new long-awaited trading system was implemented and successfully run – UTP (Universal Trading Platform). According to WSE information it offers highly enhanced performance in comparison to WARSET (for example 20 thousand orders per second in UTP vs. 850 orders per second in WARSET and latency under 1 millisecond), allows easy connection with algorithmic trading strategies and makes high-frequency trading possible. Furthermore in UTP handouts, WSE promises lower commissions and new derivatives implementation<sup>10</sup>. It all sounds like perfect conditions for day-traders, scalpers and HFT – just ideal place for short-term investments. But reality is not so glamorous.

Firstly, UTP was introduced with half-year delay. Actually, it is rather positive as it enabled better preparation, smooth and trouble-free start of the system. Secondly, new features, especially possibility of connecting trading algorithms, black-boxes and HFT modules, are virtually available for institutional traders only. It results from the fact that Polish stock brokers are not interested in enhanced services for individuals, like programmable orders or even just trailing stops. Only three institutions – DM BOŚ, DM BZWBK and DM XTB – provided extended formula of placing orders, but it has already been done for WARSET (and nothing has changed for UTP) and these solutions were pretty primitive and very unreliable. Thirdly and widely-awaited – the level of commission. Unfortunately pricelists of brokers' services are still the same. There is no incentive for traders who escaped with their investments from Poland to come back. Fees are still expensive, platforms work as before with outdated and sluggish interface.

In August 2013, WSE announced revisions and alterations within indexes and derivatives. Besides transformation of blue-chip index WIG20 into wider WIG30, WSE decided to liquidate futures on WIG20 (FW20) and introduce futures on WIG30 (FW30), but with different parameter concerning nominal value. FW30 is going to have doubled multiplier, so one point will be worth 20 PLN instead of 10 PLN. The commissions for FW30 should be the same as for FW20 and WSE explains that hereby it halves the fees<sup>11</sup>. This will be true if stock brokers remain their prices at the same level (and this is still uncertain).

<sup>&</sup>lt;sup>10</sup> See: UTP – new trading system on the Warsaw Stock Exchange, www.gpw.pl.

<sup>&</sup>lt;sup>11</sup> See: Nowy mnożnik w kontraktach terminowych, WIG30 i WIG30TR, GPW ogłasza skład WIG30, www.gpw.pl.

But the problem lays somewhere else and it is much more complex. Doubled nominal value of the most popular index derivative in Poland will induce shock in portfolios of investors. All the money management rules will have to be reconsidered. Even today 90% of traders bankrupt on derivatives during first six months of their market activity<sup>12</sup>, especially due to misunderstanding the character of future contracts and leverage. So it is very probable, that after establishing higher tick value, portfolios will be killed faster. Larger contract affects tighter stop orders, less precise position sizing and threat to calm strategies. Even if traders decide to reduce the risk by diminishing the number of instruments, it will impair liquidity and daily volume and automatically makes spreads wider causing problems with instant execution of opening or closing orders.

# Conclusions

Short-term traders need not only good technological approach, but principally low costs of trading. Of course the commissions are available for negotiation and it is possible to decrease them by more than 50%, but even after that, they are higher in comparison to European and US standards. It is understandable that Polish market still develops itself, but why majority of new concepts cause more new impediments than solving old problems? Many investors took offence to WSE and will never decide to come back. Their money is safer, easier manageable and cheaply utilized on foreign stock exchanges or forex.

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<sup>&</sup>lt;sup>12</sup> See: P. Dąbrowski, Instrumenty pochodne rynku kapitalowego [in:] Rynek finansowy, ed. I. Pyka, UE, Katowice 2010, pp. 207-210 and P. Dąbrowski: Inwestowanie w instrumenty pochodne [in:] Oszczędzanie i inwestowanie w teorii i praktyce, ed. J. Harasim, PTE, Katowice 2010, pp. 173-189.

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