Cingula, Domagoj; Vucetic, Sime; Gazic, Ivana

Conference Paper
Zagreb Stock Exchange Trends in 2017

Provided in Cooperation with:
Governance Research and Development Centre (CIRU), Zagreb

Suggested Citation: Cingula, Domagoj; Vucetic, Sime; Gazic, Ivana (2019) : Zagreb Stock Exchange Trends in 2017, In: Tipurić, Darko Hruška, Domagoj (Ed.): 7th International OFEL Conference on Governance, Management and Entrepreneurship: Embracing Diversity in Organisations. April 5th - 6th, 2019, Dubrovnik, Croatia, Governance Research and Development Centre (CIRU), Zagreb, pp. 1-10

This Version is available at:
http://hdl.handle.net/10419/196069

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.
You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.
If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
Zagreb Stock Exchange Trends in 2017
Domagoj Cingula1, Sime Vucetic2 and Ivana Gazic3,4
1Varazdin Development and Entrepreneurship Agency, Croatia
2Faculty of Economics, University of Rijeka, Croatia
3Zagreb Stock Exchange, Croatia
4University Josip Juraj Strossmayer, Osijek, Croatia
dcingula@sed-conference.com
sime.vucetic4@gmail.com
ivana.gazic@zse.hr

Abstract
Global financial crisis of 2008 had strong influence on world markets, where emerging and less developed ones were affected the most, their recovery lasted longer, and it still lasts. Zagreb Stock Exchange (ZSE) main index, CROBEX, reached its all-time high value (ATH) on January 4, 2008 with 5,292,14 points, while all-time low was reached on March 9, 2009 (1,239,17 points). Years later, CROBEX is still performing much closer to its lowest values, with the best result of 2,006,24 points in 2016 (highest value on 10.10.2016.). Just a few days of 2017 were enough for CROBEX to break the psychological 2,000 points barrier, yet economic environment in Croatia has suddenly become destabilized and it stopped one more local stock exchange recovery attempt in March. One of the biggest regional food and beverages producers, distributor and retail chain was put under procedure of compulsory administration, based on the “Law on Extraordinary Administration Procedure in Enterprises of Systematic Importance for the Republic of Croatia” («Lex Agrokor»), which affected stock prices of companies that are part of this concern, but also their suppliers and market in general. Since then, CROBEX has been moving around 1800-1900 points, and its liquidity has deteriorated. As stock market trends represent a useful tool, or better to say an indicator of the financial system and economic development level, this paper analyses recent movements on ZSE.

Keywords: CROBEX, Economic Development, Financial Market, Index, Zagreb Stock Exchange

Track: Governance
Word count: 2,132

1. Introduction
Stock market has always been playing a significant role, both in advanced economies and emerging markets (Masoud, 2013, p. 797), and one of the reason is that it “facilitates higher investments and the allocation of capital and indirectly the economic growth” (Ake and Ognalogui, 2010, p. 82). Zagreb Stock Exchange (ZSE) was founded in 1907, as the “Commodities and Valuables Division of the Chamber of Commerce”, but was only operating for four (4) years, before reopening in 1919. and another shutdown in 1945. (ZSE Website, 2017). After the proclamation of Croatian independence, it was the initiative of twenty-five banks and two insurance companies that contributed to the final establishment of the existing stock market in 1991, plus at the end of 2015 ZSE even acquired 100% of the Ljubljana Stock Exchange (ZSE Website, 2017). Main ZSE index, CROBEX analysis is presented in this paper to track the general trends, as most investors have been using this method for years (Hafer & Hein, 2007, p.57). Daily regular ZSE trading volume (turnover) and top three most
The beginning of 2017 features visible and rapid growth in terms of stock prices on ZSE, after a short stagnation period in the last quarter of 2016 (Chart 2). This growth was the most concrete positive trend in the last five years, but also an extension of the growth featured...
during the first three quarters of 2016 (Chart 3.). The rest of the last five year period was characterized by longer stagnation and occasional periods of growth, mostly followed by the equivalent correction. This year's growth was also the first relevant 2,000 points breakthrough for CROBEX, after the beginning of the global crises.


*(Short stagnation period, at the end of 2016)*

Source: Official Zagreb Stock Exchange Website, Processed by: Author

Three months of lower volatility, but with no stronger corrections, represented a sound basis for the continuation of the positive trend (Chart 2). The absence of a bigger correction is visible not only in this short period; it is also visible during whole 2016. Almost constant growth featured in 2016, happened after a long and exhausting period of correction and stagnation during 2013, 2014 and 2015. The most notable reason for favourable market conditions in 2016 is a significant economic growth of Croatian economy after six years of recession. Croatian companies have fought recession by strong orientation towards export, while tourism has continued to mark new record high numbers. All this resulted in improved financial performance of the listed companies, as well as recovery of their prices and liquidity. At certain period of 2016, Croatian stock market was one of the most fast growing among all stock market.
Index values are often used as the most relevant indicators in describing general situation on world's stock markets, or better to say they inform investors on how stocks are generally performing (Thomas, 2006, p. 152). Yet, no price, or in this case index value, can be taken under serious consideration if achieved volumes are not relevant, or in other words high enough. A bigger turnover also means a stronger price, or index value, support. Trading volumes of the CROBEX stocks in 2017 are shown in Chart 4.
The beginning of 2017 emerged with trends that can fully be described according to the Dow Theory, where bull market features an increase in volume as prices rise, during January and February, while high volumes during March and April result in price reduction, as a characteristic of the bear market (Ponsi, 2016, p. 23). These are both classical examples of the positive and negative price movements due to the mutation of the supply and demand ratio. In that sense, the bigger turnover at the beginning of 2017 happened as a result of a bigger demand, while after latest economic and political occurrences, bigger turnovers happened as a result of a «clearance sale», or sudden bid increase.

2.1. CROBEX10 analysis
Derived, or extracted, Blue chip index, CROBEX10, calculated since 31.07.2009., also revised biannually and consisting of top ten (10) CROBEX stocks, shows identical performance in the observed period as its older and more important predecessor (Chart 5.). The composition of top ten stocks is being selected, and revised, on the basis of free float market capitalization and traded volume. While total turnover, or traded volume, of certain share represents a pure result of the trading history, free float stands for the proportion of shares available to financial investors who are willing or inclined to buy or sell, depending on their sense or consideration of the market price. Free float does not include shares that are kept for any other reason than trading itself, and some exclusions are (Vernimmen et al., 2009, p. 532):
- buying with intention to control,
- buy and (long-term) hold,
- purchase based on emotional / sentimental purposes
- etc.

Since CROBEX10 represents a shortened version of ZSE main stock price index (CROBEX), both line-charts showing their value trends are performing the same way. The first quarter of 2017 features initial growth, while with March there is a visible beginning of the latest correction and stagnation period.

3. Trading volume (turnover) analysis
Among others, the volume trade represents an important indicator of the market development (Sukcharoensin and Sukcharoensin, 2013, p.343). The observed regular turnover in this chapter will exclude block transactions and Over the Counter turnover (OTC). Zagreb Stock Exchange sets criteria for minimum block transactions, currently standing at 5 mil HRK for shares, and as for the over the counter turnover, no minimum is set and most of the traded stocks are not even listed on ZSE. However, it is important to note that only marginal amount of bond trades is done via regulated market, while all other trades are executed through OTC.

*Chart 6. – Total trading volume (Regular turnover)*
02.01.2017 – 20.10.2017. (in 000.000 HRK / Croatian Kuna)

The increased turnover in the beginning of the year had followed the price rise in the same period, until the Agrokor case became public. The increased turnover in April is the result of heavy trading and strong volatility (and fall) of prices of eight shares that make part of the Agrokor group. This was followed by a period where trading of such shares was stopped due to the fact that the financial statements of these companies had not been published, which was combined with rumours that some of the previous statements could be misstated. The market regulator decided to stop the trading until full information, useful to investors in making their investment decisions, were announced. However, the exchange has not lost only trading volumes of 8 Agrokor Group members, but it seems that this event has brought strong negative sentiment on the market, wiping out all the optimism and turnovers from the first quarter of 2017.
If trading volumes on Chart 4. should be compared to ones on Chart 6., it is visible that CROBEX representatives form absolute majority of total ZSE turnover.

4. Top traded companies
The analysis of the total regular turnover and the main indices overview represent brief and general information on ZSE trends in 2017. In this chapter, the main focus is put on the issuers with the highest turnover in the observed period. This overview does not represent trading suggestions of any kind, as the authors are simply trying to show the price performance of the most relevant issuers.

4.1. Price analysis
ZSE indices show overall correction and stagnation through the majority of the observed period. Still, individual performance of some stocks is in clear and visible opposition with the rest of the market. The stock price performance of the issuers with the highest turnover is shown in Table 1.

Table 1. – ZSE Top traded issuers 02.01.2017 – 20.10.2017.
- PRICE CHANGE -

<table>
<thead>
<tr>
<th>No.</th>
<th>Symbol</th>
<th>Opening price 02.01.2017. (HRK)</th>
<th>Closing price 20.10.2017. (HRK)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>RIVP</td>
<td>34,88</td>
<td>45,14</td>
<td>29,42</td>
</tr>
<tr>
<td>2.</td>
<td>HT</td>
<td>167,70</td>
<td>170,17</td>
<td>1,47</td>
</tr>
<tr>
<td>3.</td>
<td>LEDO</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>4.</td>
<td>ADRS2</td>
<td>459,90</td>
<td>443,50</td>
<td>-3,57</td>
</tr>
<tr>
<td>5.</td>
<td>JMNC</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>6.</td>
<td>PODR</td>
<td>380,00</td>
<td>301,21</td>
<td>-20,73</td>
</tr>
<tr>
<td>7.</td>
<td>ARNT</td>
<td>474,89</td>
<td>459,39</td>
<td>-3,26</td>
</tr>
<tr>
<td>8.</td>
<td>ATGR</td>
<td>870,00</td>
<td>835,00</td>
<td>-4,02</td>
</tr>
<tr>
<td>9.</td>
<td>ZABA</td>
<td>54,00</td>
<td>53,73</td>
<td>-0,50</td>
</tr>
<tr>
<td>10.</td>
<td>DLKV</td>
<td>13,84</td>
<td>21,00</td>
<td>51,73</td>
</tr>
</tbody>
</table>

* - Trading of Ledo and Jamnica is halted since May 2, 2017
Source: Official Zagreb Stock Exchange Website, Processed by: Author
Out of 10 top traded stocks, only three of them recorded some price increases in October 2017. These companies were not affected by the Agrokor situation and are representatives of attractive industries: tourism, telecommunications, construction (engineering). All the others, besides Ledo and Jamnica for obvious reasons, to a greater or lesser extent, recorded a decline in prices, either because of their business models, or simply due to negative sentiments within the market in general.

4.2. Turnover analysis
Individual turnover analysis is the result of more different conditions and criteria, of which the most relevant would be the inclusion of the high summer season in the observed period. Since tourism stands for the sector with most influence on the Croatian GDP (18,1% of Croatian BDP in 2016)\(^1\), Valamar Riviera d.d. is taking a leading position in this segment. The telecommunication services provider, Hrvatski Telekom d.d. which is the part of Deutsche Telekom, takes the second place, and the rest of the individual turnover performance is shown in Table 2.

\(\text{Table 2. – ZSE Top traded issuers 02.01.2017 – 20.10.2017.}
\)

\(\text{- TURNOVER -}
\)

<table>
<thead>
<tr>
<th>No.</th>
<th>Symbol</th>
<th>Issuer</th>
<th>Turnover (HRK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>RIVP</td>
<td>Valamar Riviera d.d.</td>
<td>279.508.339,00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Symbol</th>
<th>Issuer</th>
<th>Turnover (HRK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>HT</td>
<td>HT d.d.</td>
<td>243,954,486,00</td>
</tr>
<tr>
<td>3.</td>
<td>LEDO</td>
<td>LEDO d.d.</td>
<td>221,641,440,00</td>
</tr>
<tr>
<td>4.</td>
<td>ADRS2</td>
<td>ADRIS GRUPA d.d.</td>
<td>193,834,287,00</td>
</tr>
<tr>
<td>5.</td>
<td>JMNC</td>
<td>JAMNICA d.d.</td>
<td>157,240,217,00</td>
</tr>
<tr>
<td>6.</td>
<td>PODR</td>
<td>PODRAVKA d.d.</td>
<td>86,041,229,00</td>
</tr>
<tr>
<td>7.</td>
<td>ARNT</td>
<td>Arena Hospitality Group d.d.</td>
<td>74,880,797,00</td>
</tr>
<tr>
<td>8.</td>
<td>ATGR</td>
<td>ATLANTIC GRUPA d.d.</td>
<td>70,851,000,00</td>
</tr>
<tr>
<td>9.</td>
<td>ZABA</td>
<td>Zagrebacka banka d.d.</td>
<td>64,740,997,00</td>
</tr>
<tr>
<td>10.</td>
<td>DLKV</td>
<td>Dalekovod d.d.</td>
<td>64,551,246,00</td>
</tr>
</tbody>
</table>

Source: Official Zagreb Stock Exchange Website, Processed by: Author

**Chart 8. – ZSE Top 10 traded issuers 02.01.2017 – 20.10.2017.**

(Turnover in 000.000 HRK / Croatian Kuna)

Disregarding the fact of earlier mentioned trading halt of Ledo and Jamnica since 02.05.2017., both companies have shown extra high total turnovers, with Ledo even reaching the third place on the market. Valamar Riviera d.d., with one of the highest positive price movement, shows that highest turnover has come as a result of a high demand.

5. **Conclusion**

Although the highest values of CROBEX still seem very hard to be reached again, some issuers have already shown serious recovery signs. The overall market has growth potential, which can be seen during past period, especially during 2016 and the first few months of
2017. The volatility of the market especially attracts speculative traders and/or short-term investors, who can also be considered as “daily turnover generators”. Strong growth potential of the market, on the other hand, can also attract long-term and big institutional investors, especially with the stabilization of the economic and political situation in Croatia. The analysis shown in this paper represent a basis for more detailed research in the upcoming period.

DISCLAIMER: This paper does not constitute in any sense recommendation to buy or sell any particular stock on the Zagreb Stock Exchange, but merely describes current situation on the market and offers the individual authors’ view of the situation.

References


Thomas, Lloyd B., Money, Banking and Financial Markets (2006), South-Western, part of the Thomson Corporation, Mason, Ohio, USA.


Zagreb Stock Exchange Website, About ZSE. (Available at: http://www.zse.hr/default.aspx?id=32877 , access :19 October 2017)