

BALTIC LISTED COMPANIES' DISCLOSURE QUALITY – FAR AHEAD OR LAGGING BEHIND?

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Abstract

The objective of this paper is to determine the level of average quality of disclosures made in English by biggest companies listed on Baltic stock exchanges and to analyse it in the context of biggest companies listed on other Central and Eastern European (CEE) and three developed European (EU) stock exchanges. Content analysis reveals that the disclosure quality level of Baltic listed companies outperforms that of other CEE peers by at least 30% and in the context of stock exchange web page disclosures 50 to 80%. Compared to companies listed on developed EU stock exchanges, the disclosure quality of Baltic listed companies is slightly lower in the company home page category, however, it outperforms in the context of stock exchange web page disclosures. This result raises concerns about possibly too restrictive stock exchange web page disclosure regulations which may have a negative impact on the future outlook of Baltic stock exchanges.

Keywords: disclosure quality, stock exchanges, Baltics, regulations

JEL Classification: G10, G14, G18

1. Introduction

Companies disclose different types of information to overcome information asymmetries between investors and managers (Akerlof, 1970). The quality and language of that information determines to what extent these information asymmetries can be reduced. Namely, if an investor (especially a small private investor) wants to purchase the shares of a company listed abroad, a very important criterion for making the investment decision is the availability of financial and non-financial information on the company in a language understood by the investor. Considering that in Baltics as well as in all other Central and Eastern European (CEE) countries local official languages differ and are rarely spoken by people from other countries, CEE stock markets' attractiveness to foreign investors may amongst other factors depend on the availability and extent of companies' information provided in a global language - English. There exists no previous cross-country comparison of disclosure practices in a wider CEE region which would provide a possibility for analysing the outcomes of existing disclosure regulations. Therefore, the objective of this paper is to determine the level of average quality of disclosures

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made in English by biggest companies listed on Baltic stock exchanges and to analyse it in the context of biggest companies listed on other Central and Eastern European and three developed EU stock exchanges. In order to fulfil this objective content analysis of 57 companies' annual reports, company home pages and stock exchange web pages is conducted. Based on that seven different disclosure quality indices are calculated for each company representing one of the three biggest listed companies on any of the selected 19 stock exchanges.

This paper extends the empirical research on cross-country disclosure quality initiated in Frost et al. (2006) and contributes to the literature in several respects. First, compared to Frost et al. (2006) the content analysis methodology employed in this paper is directed from regulation-based analysis to company-based analysis. It means that the created disclosure quality indices capture the actual quality of information provided by listed companies encompassing in addition to mandatory also voluntary disclosures. Second, this paper significantly broadens the scope of CEE countries' disclosure quality research and provides possibilities for cross-country comparisons. The previous papers have mostly focused simultaneously only on a few CEE countries e.g. Poland (Grüning, 2007), Czech Republic (Patton and Zelenka, 1997; Makhija and Patton, 2004), Baltic countries (Laidroo, 2009, 2011), Russia and Hungary (Kirshnamurti et al., 2007) or Slovenia and Poland (Frost et al., 2006). This paper focuses on 16 CEE stock exchanges and 3 developed EU stock exchanges (Frankfurt, Euronext Paris and Swiss stock exchange). Third, in a global context the previous cross-country disclosure quality studies (e.g. Robb et al., 2001; Camfferman and Cooke, 2002; Vanstraelen, et al., 2003) have tended to focus on disclosures made in local official languages (with the exception of Laidroo, 2009, 2011). This paper focuses only on disclosures made in English as it captures the disclosure quality available to different foreign investors in the best possible way. Fourth, this paper considers disclosure quality also in longer-term context by measuring the number of years for which financial reports and public announcements in English are disclosed.

This paper is structured as follows. Theoretical and empirical background is discussed in section 2. The third section introduces the data and market development context. The fourth section presents the methodology. The results and discussion with policy implications are presented in section 5. Section 6 concludes.

2. Theoretical and empirical background

According to Gibbins et al. (1990) disclosure encompasses the release of numerical, qualitative, required or voluntary information through formal and informal channels. In this paper disclosure is confined to information provided by listed companies through their home page and the web page of the stock exchange where the company's shares are listed. Based on information asymmetry theory (Akerlof, 1970), firms make disclosures to reduce information asymmetry between investors and managers. The extent to which information asymmetries are reduced depends on the contracts between entrepreneurs and investors, regulation and information

intermediaries (Helay and Palepu, 2001) as well as on many different company-specific indicators (for a review see Laidroo, 2009). Compared to company and manager-specific factors, regulatory context can be more easily influenced by supervisory authorities. Regulation's impact may be either direct or indirect. Direct impact occurs in the case of accounting regulations and for example Levitt (1998) considers that the quality of accounting standards determines investor confidence. Indirect impact arises from other regulations set to protect the interests of smaller and poorly informed investors, e.g. stock exchange regulations, corporate governance codes, legal system (La Porta et al., 1998). Empirical support for the imposition of disclosure requirements has been found in Bushee and Leuz (2005). They show that firms complying with the improved disclosure regulations experience positive stock returns and permanent improvement in liquidity.

Disclosure quality can be defined and measured from different perspectives. Some disclosure quality definitions consider for example the dimensions of completeness, accuracy, reliability (Singhvi and Desai, 1971) or amount, timeliness and precision (Brown and Hillgeist, 2007). In this paper disclosure quality is approached from the amount and completeness dimensions i.e. higher quality disclosures contain more information from more diverse set of topics. Disclosure quality is usually measured through any of the three alternative approaches (Beattie et al., 2004): subjective analysis, textual analysis or disclosure index studies. Subjective analysis is based on disclosure quality ratings appointed by analysts, for example FAF/AIMR ratings¹ or Standard and Poor's Transparency and Disclosure Ratings (GAMMA score)². The main problem with these ratings is that they are available for selected developed market companies and there remain issues about whether the rating captures analyst perceptions or actual disclosure quality (Lang and Lundholm, 1993). Textual analysis involves quantitative content analysis of texts, requiring longer narrative disclosures. The most flexible of the three methods is the index study which is based on a notion that disclosure of specified topics (usually measured on a 1/0 scale) proxies for the quality of disclosure. The items disclosed are usually aggregated to an overall disclosure index (see Botosan, 1997). Disclosure indices have been created for different types of disclosures: annual financial reports (for a review see Marston and Shrivess, 1991), non-financial disclosures (e.g. Robb et al., 2001), corporate social responsibility disclosures (e.g. Scholtens, 2009) or as part of the evaluation of public announcements' disclosure quality (e.g. Laidroo, 2009). This paper employs an index-based approach described in section 4.

¹ Financial Analysts Federation (FAF) is a predecessor of CFA (Certified Financial Analyst) Institute. It combined with Association for Investment Management and Research (AIMR) in 1989. Until 1990 AIMR issued disclosure indices, however, after 1990 these were issued under the new title: Corporate Information Committee Report (CICR). <http://www.cfainstitute.org/about/governance/history/Pages/index.aspx>

² GAMMA score (previously named Standard & Poors T&D score) reflects Standard & Poor's opinion of the relative strength of a company's corporate governance practices as an investor protection against potential governance-related losses of value or failure to create value. It is measured on the scale of 1 to 10. <http://www.standardandpoors.com/about-sp/gamma/en/eu>

Previous empirical disclosure quality research tends to concentrate mainly on company level analysis and very often the determination of disclosure quality level is combined with disclosure determinants or with its impact. In the context of disclosure determinants the previous empirical research (for details see Laidroo, 2009) generally supports the notion that disclosure quality has a positive association with company size, listing status or auditor type dummy, internationalisation of company's operations or ownership. Negative association is usually supported for ownership concentration and inconclusive results have been reported for leverage, liquidity and performance. In CEE context this line of research has received modest attention. Annual reports' disclosure quality determinants in Czech Republic have been covered in Patton and Zelenka (1997) and Makhija and Patton (2004) and in Poland by Grüning (2007). Public announcements' disclosure quality determinants have been investigated in the context of three Baltic countries in Laidroo (2009).

Empirical disclosure impact studies focus on three perspectives. The first line of research based on theories proposed by Verrecchia (1983, 1990) and Skinner (1994) claims that increased disclosure leads to a reduction in misvaluation of the firm's shares. This result has been empirically supported in Healy et al. (1999). The second line of literature expects increased disclosure to reduce the firm's cost of equity capital (Klein and Bawa, 1976; Barry and Brown, 1985; Coles and Loewenstein, 1988; Coles et al., 1995). Empirical papers (e.g. Francis et al., 2005; Gietzmann and Ireland, 2005) have tended to support negative association between disclosure quality and cost of equity. The third line of literature claims that higher quality disclosure improves market liquidity by lowering the bid-ask spread, increasing the depth, increasing the trading volume, decreasing the price impact of trades, and increasing volatility of returns (Kyle, 1985; Glosten and Milgrom, 1985; Amihud and Mendelson, 1986). The empirical evidence tends to support these expectations (e.g. Healy et al., 1999; Leuz and Verrecchia, 2000; Frino and Jones, 2005). To the knowledge of the authors only two previous empirical papers have focused on disclosure quality's impacts in CEE context. Krishnamurti et al. (2007) show that emerging market companies (incl. those from Russia and Hungary) with higher disclosure quality have lower adverse selection component of spread. Laidroo (2011) indicates that public announcements' disclosure quality on three Baltic stock exchanges (Estonia, Latvia and Lithuania) has a negative association with bid-ask spread and illiquidity ratio and positive association with trading volume and volatility. These abovementioned theoretical predictions and empirical results clearly support the importance of disclosure quality in the functioning of the capital markets and companies both in the developed and developing markets' context. As the improved liquidity of shares may have a positive impact on economic growth (Levine, 1991) the disclosure quality may also indirectly affect the economic outlook of a country.

Although the company-level empirical analysis of disclosure quality has been very popular, there exist only a few studies which have focused on the same issue on the level of stock exchanges. To the knowledge of the authors the only comprehensive coverage is provided in Frost et al. (2006) which focuses on stock exchange

disclosure systems' association with market development. Three types of disclosure scores (overall disclosure, enforcement, disclosure other than enforcement) are calculated for 50 stock exchanges across the world (from CEE countries only Slovenia and Poland were covered). The results indicate that the strength of the disclosure system is positively associated with market development.

The previous review shows that there exist only 7 studies which have focused on a small set of CEE countries, different types of disclosures and have had a different focus. This paper extends the study by Forst et al. (2006) by focusing solely on the cross-stock exchange comparisons, widening the number of CEE markets included and by redirecting the focus from disclosure regulations to actual disclosure practices of listed companies. Most of the previous empirical studies focusing on multiple countries have analysed disclosures made in the local official languages (e.g. Robb et al., 2001; Camfferman and Cooke, 2002; Vanstraelen et al., 2003). This paper follows the approach employed in Laidroo (2009, 2011), by concentrating only on disclosures made in English as it enables to capture the disclosure quality which would be perceived by a foreign investor unfamiliar with local official languages.

3. Data and market development context

This paper concentrates on 16 CEE stock exchanges (covering 15 countries) for which data in English was available including 3 stock exchanges from Baltics (Tallinn, Riga and Vilnius stock exchange). In addition, the biggest 3 developed EU stock exchanges (Swiss, Frankfurt and Euronext Paris) were selected. As can be seen from the list of stock exchanges and their main characteristics from Appendix 1, the CEE stock exchanges are more than 6 times smaller in terms of market capitalisation compared to three developed market stock exchanges. The biggest CEE stock exchanges with market capitalisations over 15 billion EUR include Warsaw (PL), Prague (CZ), Bucharest (RO), Zagreb (HR) and Budapest (HU) stock exchanges. Over 300 listed companies exist on 4 CEE stock exchanges: Bucharest (RO), Banja Luka (BA), Warsaw (PL) and Bulgaria (BG) stock exchange. Baltic stock exchanges are amongst smaller stock exchanges exhibiting size indicators below median of other CEE markets.

As can be seen from Appendix 1 the CEE countries included in the sample are characterised by significantly lower market development compared to developed EU countries. The difference is especially noteworthy in the context of market capitalisation to GDP, stock market value traded to GDP and stock market turnover ratio. However, even within the CEE the indicators vary significantly. The most developed markets include Poland followed by Croatia and Romania. The least developed markets include Slovakia, Latvia and Lithuania. Although Estonia remains also in the less developed category, its stock market value traded to GDP and stock market turnover ratio rank in the upper half of CEE indicators.

The sample includes the biggest 3 listed companies (in terms of market capitalisation as on 1 Apr 2013) from each stock exchange, i.e. the final sample includes in total of 57 companies (full list of companies is available from authors upon request). The biggest companies were selected because according to theoretical predictions (Singhvi and Desai, 1971), bigger companies exhibit higher disclosure quality, meaning that the disclosure levels observed for these companies could be considered as the best practice on a respective stock exchange i.e. these could be considered as proxies for the maximum disclosure quality.

Table 1. Distribution of sample companies across industries

Industry	Baltics		CEE excl. Baltics		Developed EU	
	No. of firms	Average market cap. mil. EUR	No. of firms	Average market cap. mil. EUR	No. of firms	Average market cap. mil. EUR
Financial services			16	2,808.7		
Manufacturing	1	96.4	8	2,048.5	7	115,111.5
Energy	3	169.8	5	2,862.2		
Information & communication	1	127.0	4	991.7	1	73,365.0
Transportation & storage	2	430.8	1	149.7		
Accommodation & food service			2	217.5		
Mining & quarrying			2	6,713.2	1	85,610.0
Wholesale & retail trade	1	254.6	1	449.1		
Admin. & support services	1	304.2				
Total	9	239.2	39	2,411.9	9	107,195.0

Data source: Authors' calculations.

As can be seen from Table 1, Baltic sample is biased more towards energy companies. However, most of the companies selected from other CEE markets focus either on financial or manufacturing activities and the developed EU sample is biased towards manufacturing companies. In terms of company size, the developed EU companies are significantly bigger than Baltic and other CEE companies.

4. Methodology

Disclosure quality in this paper is measured using the disclosure index approach. The index is partly based on a checklist compiled in accordance with Standard & Poor's Transparency and Disclosure Rankings (Standard & Poors, 2002). The initial score sheet of 98 items was significantly shortened and after adding some additional items the final checklist contains 39 items (see Appendix 2 for details) covering information which could be considered important by an investor. All items are evaluated across three dimensions: company's home page, annual report and stock exchange web page. Every item 1 to 36 is evaluated on a scale of 0 (item is not disclosed) and 1 (item is disclosed) and the last three items 37 to 39 are evaluated in terms of the number of years. As some of the items cannot be evaluated in every context, such instances are marked with an "x" in Appendix 2.

The disclosure quality measurement process consists of three steps. First, for every company the following contemporaneous disclosure quality indices are calculated: annual report, company home page, stock exchange web page and total contemporaneous disclosure quality index. The first three indices are calculated as a sum of item 1 to 36 scores for a respective medium, i.e. the maximum index for annual reports is 25, for company home page 35 and for stock exchange web page 13. The total contemporaneous disclosure quality index is the sum of annual report, company web page and stock exchange web page indices, meaning that its maximum value is 73. The data for evaluating the items is gathered from companies' 2011 annual report, companies' home pages and stock exchange web pages during April 2013 and May 2013.

Secondly, historical disclosure quality measures are created for items 37 to 39 representing the number of years for which public announcements, annual reports and interim reports are available. Three different historical quality measures are calculated: company home page, stock exchange web page and total historical disclosure quality index. In case of company and stock exchange web pages the historical disclosure quality index is calculated as the sum of 3 items and total historical disclosure quality index is the sum of the two previously mentioned indices.

Thirdly, contemporaneous and historical disclosure quality indices are grouped and analysed across two dimensions: regions and stock exchanges. In case of regions three groups are distinguished: Baltics (EE, LV, LT), other CEE (BA, BG, CZ, HR, HU, MD, MK, PL, RO, RS, SI, SK) and developed EU (CH, DE, FR). In case of stock exchanges every stock exchange represents a separate group, i.e. in total of 19 groups exist.

5. Results and discussion

5.1. Contemporaneous disclosure quality

The individual performance of companies (see Table 2) indicates that the TOP3 performers in Baltics and other CEE countries exhibit rather similar contemporaneous disclosure quality indices. However, the developed EU listed companies have around 6 points higher total contemporaneous disclosure quality indices which are mainly achieved through higher quality disclosures on company home pages. This could partly relate to bigger size of these companies which requires them to provide more detailed information on companies' activities and background.

The picture somewhat changes, when the whole sample is considered (see Table 3). Contemporaneous disclosure quality indices of Baltic listed companies are on average approximately 30% higher than in companies listed on other CEE markets.

The superiority of disclosure quality in Baltics is also supported in the context of median and minimum values.

Table 2. TOP3 companies based on contemporaneous total disclosure indices by regions

Company	Country	Contemporaneous disclosure quality indexes			
		Annual report	Company home page	Stock exchange web page	Total disclosure quality
Baltics					
Tallink Group	EE	22	27	12	61
Olympic Entertainment Group	EE	20	25	12	57
Ventspils Nafta	LV	21	25	12	58
Other CEE (excl. Baltics)					
MOL Hungarian Oil and Gas	HU	23	23	12	58
Gedeon Richter	HU	22	23	12	57
OMV Petrom	RO	20	28	9	57
Developed EU					
SAP AG	DE	25	33	9	67
Siemens AG	DE	23	33	9	65
Nestle	CH	20	31	12	63

Source: Authors' calculations

Table 3. Descriptive statistics for contemporaneous disclosure quality indices across regions

Contemporaneous disclosure quality indexes	Average	Median	Minimum	Maximum	St.dev.
Baltics					
Annual report	20.3	20	18	22	1.3
Company home page	23.1	24	15	27	3.8
Stock exchange web page	11.8	12	11	12	0.4
Total disclosure quality	55.2	56	47	61	4.2
Other CEE (excl. Baltics)					
Annual report	14.8	17	0	23	7.4
Company home page	16.6	19	0	30	8.4
Stock exchange web page	5.9	6	0	12	3.1
Total disclosure quality	37.3	41	3	58	16.3
Developed EU					
Annual report	21.0	23	9	25	4.9
Company home page	29.1	29	24	33	2.9
Stock exchange web page	9.6	9	8	12	1.7
Total disclosure quality	59.7	61	45	67	6.6

Note: See Appendix 3, for details on disclosure quality item scores.

Source: Authors' calculations

What is especially noteworthy is that the contemporaneous disclosure quality index for stock exchange web pages in Baltics outperforms the other CEE countries'

numbers by 50%. These disclosures consist only of mandatory disclosures meaning that their quality captures the quality of stock exchange regulations. The fact that the quality of regulations in Baltics outperforms that of other CEE countries may relate to the integration of Baltic stock exchanges with international exchange companies already in early 2000s. Namely, Tallinn stock exchange was acquired by Finnish HEX group in 2001, Riga stock exchange in 2002 and after merger of Finnish HEX and Swedish OM in 2003 both became part of OMX group. OMX group acquired Vilnius stock exchange in 2004 and after merger of OMX and NASDAQ in 2008 all three Baltic stock exchanges became part of NASDAQ OMX¹. In case of other CEE stock exchanges only Prague (CZ), Budapest (HU) and Ljubljana (SI) stock exchanges are controlled by CEESEG AG² since 2008, 2004 and 2008 respectively. All other CEE stock exchanges are not controlled by any foreign exchange companies. The regulative similarities arising from the stock exchange ownership may also explain the low variability of Baltic companies' stock exchange results compared to those observed in other CEE countries. As can be seen from Figure 1, the web page disclosures of Prague, Budapest and Ljubljana stock exchanges are not as similar as in case of Baltics. It could indicate that the regulations have not been as harmonised.

When comparing Baltic listed companies to their developed EU peers, the contemporaneous disclosure quality indices of Baltic listed companies remain on average slightly lower and the most important development area for Baltic companies is their home page. Based on a summary provided in Appendix 3 Baltic listed companies could include more information on their home page on analyst forecasts, investor calendar, key financial indicators, background of executives and their share transactions, companies' investment plans, market share and different committees. One possible reason for Baltic listed companies' lower disclosure quality on their home page may relate to their significantly smaller size, meaning that they are willing to invest fewer resources into web page maintenance. Still, some factors like the shortage of data on committees may also relate to the fact that not all such committees have been established. Although the establishment of committees may relate to company size, it does indicate that the introduction of some corporate governance principles may have room for improvement. It also appears that one area where Baltic listed companies slightly outperform developed EU peers is the stock exchange web page category, indicating that the disclosure regulations in Baltics are stricter.

The average contemporaneous disclosure quality indices for stock exchanges (see Figure 1) confirm that Frankfurt (DE) and Swiss (CH) stock exchanges exhibit the highest disclosure quality followed closely by all three Baltic stock exchanges. Average disclosure level in Euronext Paris (FR) remains on the 7th position and its

¹ <http://www.nasdaqomxbaltic.com>

² CEESEG AG is CEE Stock Exchange Group which was initiated by Vienna Stock Exchange in 2004. Today it includes as equal partners Vienna, Ljubljana, Prague and Budapest stock exchanges. <http://www.ceeseg.com>

poorer ranking compared to other developed markets relates mainly to mining & quarrying company Total's very low annual report disclosure quality index. Amongst the TOP9 (with total quality score above 51 points) we see also Budapest (HU), Ljubljana (SI) and Prague (CZ) stock exchanges which similarly to Baltic stock exchanges are part of an international exchange company. This indicates either a positive impact of international ownership or just reflects the fact that markets with more developed disclosure practices are more willing to merge or more attractive for potential acquirers. However, the bars on the right hand side indicate that the average disclosure levels in some CEE markets are extremely low. In case of Moldova (MD) and Sarajevo (BA) stock exchanges none of the evaluated criteria could be found from the stock exchange web page and the annual report and company web page disclosure quality remained also low. What is rather surprising is the different structure of contemporaneous disclosure quality observed for two Bosnia and Herzegovina stock exchanges Banja Luka and Sarajevo. The results indicate significantly higher stock exchange disclosure regulations in Banja Luka stock exchange.

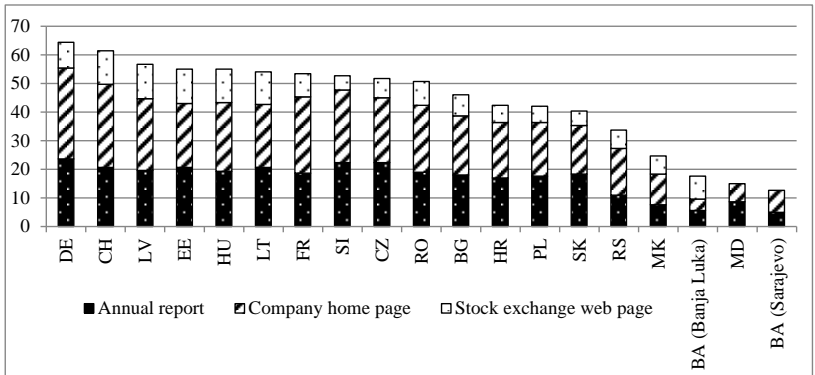


Figure 1. Average contemporaneous disclosure quality indices across stock exchanges

Data source: Authors' calculations (see Appendix 4).

As indicated on Figure 1, company home page and annual report disclosure indices together contribute to roughly 80% of the total disclosure quality. Considering that the part of these disclosures evaluated is not heavily regulated, the disclosure quality remains dependent on companies' disclosure decisions which may depend in addition to market factors on company characteristics. As the company-specific disclosure determinants remain out of the scope of this paper and have been poorly covered in cross-country context, these could deserve attention in future studies.

5.2. Historical disclosure quality

When looking at the top performers in terms of historical disclosure indices (see Table 4), 5 out of 9 companies are the same as the ones listed under TOP3 contemporaneous disclosure quality indices in Table 2. This indicates that historical quality measures are capturing quite similar aspects to contemporaneous disclosure quality. However, the behaviour of companies' scores across mediums differs. Namely, when in Baltics the historical disclosure quality scores for the company and stock exchange web page are rather similar, in other CEE companies there is a tendency that financial reports are available for significantly more years on the company home page compared to the stock exchange web page. In case of developed EU companies there also appears a similar difference for Bayer AG and SAP AG, however, in their case it is due to no public announcements in English appearing on the stock exchange web page. This clearly indicates that there exist significant differences in stock exchange regulations across stock exchanges.

Table 4. TOP3 companies based on historical total disclosure score by regions

Company	Country	Historical disclosure quality indexes								
		Company home page				Stock exchange web page				Total disclosure quality
		37	38	39	Total	37	38	39	Total	
Baltics										
Latvijas Gaze	LV	15	12	12	39	15	12	12	39	78
Ventspils Nafta	LV	15	12	11	38	16	12	11	39	77
Tallinna Kaubamaja	EE	0	14	11	25	14	14	11	39	64
Other CEE (excl. Baltics)										
MOL Hungarian Oil and Gas	HU	16	16	15	47	9	1	1	11	58
OTP Bank Plc.	HU	10	12	13	35	13	0	1	14	49
Gedeon Richter	HU	12	12	10	34	9	1	1	11	45
Developed EU										
Nestle	CH	15	12	11	38	15	12	11	38	76
Bayer AG	DE	14	15	13	42	0	11	11	22	64
SAP AG	DE	9	16	14	39	0	12	13	25	64

Note: See Appendix 2, for descriptions of items 37, 38 and 39.

Source: Authors' calculations

The average and median historical disclosure quality indices (see Table 5) indicate that similarly to contemporaneous indices Baltic companies' disclosure quality on average outperforms other CEE companies by 30% in the context of company web page. In the context of stock exchange web page historical disclosure quality indices the results are 80% higher (in case of stock exchange web page contemporaneous indices the difference was 50%). Compared to developed EU companies the average disclosure quality indices of Baltic companies outperform in the stock exchange web page category and underperform in the context of company home page. The underperformance is mainly the result of Baltic companies having annual and interim reports available for an average 3 years shorter period. It is difficult to

provide a common explanation to this observation as the indicators for individual Baltic companies differ significantly as does the length of their listing history.

In terms of historical total disclosure quality indices across stock exchanges (see Figure 2) the TOP8 contains the same stock exchanges as in case of contemporaneous indices TOP9 on Figure 1. However, the ordering of companies has slightly changed with Riga stock exchange becoming a leader, Euronext Paris (FR) retreating slightly and Ljubljana (SI) stock exchange dropping out of the TOP10. The latter two drops are a result of 0 index received for stock exchange web page quality. It does appear that the stock exchange regulations have created a situation where the companies listed on Euronext Paris (FR) and Ljubljana (SI) do not disclose their English reports or announcements on the stock exchange web page. The poorest 5 performers (Sarajevo, Moldova, Banja Luka, Macedonia, Belgrade stock exchange) remain exactly the same as in case of total contemporaneous disclosure quality index.

Table 5. Descriptive statistics for historical disclosure quality indices across regions

Disclosure quantity indexes	Average	Median	Minimum	Maximum	St.dev.
Baltics					
Company home page	26.7	25	15	39	7.6
Stock exchange web page	31.3	34	16	41	9.2
Total disclosure quantity	58.0	62	31	78	15.1
Other CEE (excl. Baltics)					
Company home page	17.9	18	0	47	13.2
Stock exchange web page	5.3	5	0	20	5.8
Total disclosure quantity	23.2	22	0	58	15.4
Developed EU					
Company home page	33.1	36	8	42	10.0
Stock exchange web page	16.7	21	0	38	14.4
Total disclosure quantity	49.8	56	20	76	19.1

Source: Authors' calculations

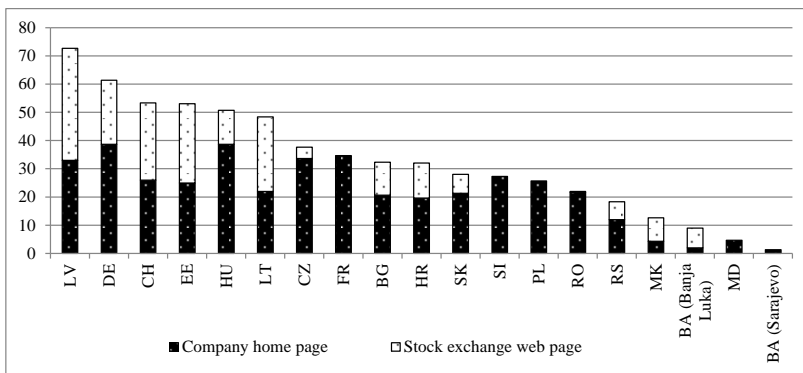


Figure 2. Average historical disclosure quality indices across stock exchanges
Data source: Authors' calculations (see Appendix 4).

The structure of the total historical disclosure quality score indicates a very versatile distribution of disclosure quality. On 5 stock exchanges (Euronext Paris - FR , Ljubljana - SI, Warsaw - PL, Moldova - MD and Sarajevo - BA) no English disclosures are made on the stock exchange web page. On 6 stock exchanges (Riga - LV, Swiss - CH, Tallinn - EE, Vilnius - LT, Macedonia – MK, Banja Luka – BA) the historical disclosure quality index for stock exchange web page exceeds that for company home page and on the remaining 8 markets the stock exchange web page disclosure quality accounts for 0 to 50% of total disclosure. Similarly to contemporaneous disclosure quality results presented on Figure 1, the regulative context of two Bosnia and Herzegovna stock exchanges differs significantly with Banja Luka exhibiting better results than Sarajevo stock exchange.

5.3. Overall disclosure quality and policy implications

The results for all companies' total disclosure quality indices are mapped on Figure 3. Similarly to previously reported stock exchange averages, the results confirm a strong positive correlation (correlation coefficient 0.77, $p < 0.05$). Companies from developed EU and Baltics clearly stand out in the right-hand corner. Only the French companies (Sanofi, Total, L'Oreal) are more in-between the other CEE companies along with the Swiss stock exchange listed Novartis and Vilnius stock exchange listed Lesto AB. The figure also indicates that companies listed on Budapest stock exchange (MOL Hungarian Oil and Gas, OTP Bank and Gedeon Richter) have disclosure quality levels comparable to other Baltic and developed EU listed companies.

investor base reduces the need to make extensive disclosures in other languages besides the local official language and to pose strict disclosure regulations.

Despite the merits of high quality disclosures, the existing evidence in Baltic context raises a few concerns. First, the fact that the quality of disclosures made in English in Baltics slightly exceeds the levels observed in developed EU markets with significantly larger listed companies indicates that the disclosure regulations in Baltics may be too restrictive. Considering that in this paper only three developed stock exchanges were included, the evidence is not sufficient for suggesting a relaxation of regulative requirements. However, it should be investigated further in a wider context of developed markets. Second, companies' costs for making disclosures in English may have an impact on the future outlook of Baltic stock exchanges. Namely, all three markets have a small number of listed companies and problems with thin trading. This indicates that becoming listed on these markets is not very attractive despite the fact that according to theory the high quality disclosure improves the liquidity of company's shares. It is due to the fact that the costs for making disclosures may be higher than perceived benefits of going public. Considering that such costs may also influence the decisions of already listed companies, this issue deserves attention in future research focusing on managers' attitudes on going public and de-listing decision determinants and their opinions on the appropriateness of existing disclosure regulation.

In terms of other CEE stock exchanges the results indicate that significant room for improvement exists especially on stock exchanges located in Moldova, FYR Macedonia and Bosnia and Herzegovina. In this regard regulative intervention seems to be in order as it would enable to improve not only the listed companies' disclosure practices, but also those of non-listed companies. The latter impact is expected to arise through within-country benchmarking. It also appears that stock exchanges' foreign ownership has been associated with higher disclosure quality, meaning that the internationalisation of stock exchanges' operations should be facilitated, not restricted.

There remains a question about whether disclosure quality affects stock market development. Results of Frost et al. (2006) indicate positive impact. Unfortunately the sample of countries used in this paper is very small, which means that regression analysis cannot be used and the correlation coefficients calculated based on market development indicators presented in Appendix 1 were insignificant. Considering that the previous study by Frost et al. (2006) did not consider the actual disclosure practices, a future study employing a wider set of countries, could investigate this issue further. However, the results presented in this paper for Poland do indicate that when trying to link the quality of disclosures made in English with market development, it would be important to use not only the ordinary market development indicators, but also consider the foreign investors role on the market.

6. Conclusion

The objective of this paper was to determine the level of average quality of disclosures made in English by biggest companies listed on Baltic stock exchanges and to analyse it in the context of biggest companies listed on other Central and Eastern European and three developed EU stock exchanges. The results indicate that on average the disclosure quality level of companies listed on Baltic stock exchanges outperforms that of CEE peers by at least 30% and in the context of stock exchange web page disclosures 50 to 80%. Compared to companies listed on developed EU stock exchanges, the disclosure quality of Baltic listed companies is slightly lower and the most important area for improvement is the company home page disclosures on analyst forecasts, investor calendar, key financial indicators, background of executives and their share transactions, companies' investment plans, market share and different committees. Still, it does appear that the disclosure quality indices for stock exchange web page in Baltics are slightly higher, indicating more stringent regulations than in developed EU markets.

It appears that in Baltics the openness of the economies, internationalisation of the stock exchange ownership and good disclosure regulations have enabled to create an attractive disclosure environment for foreign investors. Although higher disclosure quality is also observed in the context of Hungary, Slovenia and Czech Republic, the disclosure quality in Moldova, FYR Macedonia and Bosnia and Herzegovina has significant room for improvement.

The results presented in this paper suffer from the following limitations. First, the analysis remains limited to the number of markets covered. Second, the generalizability of results remains poor as the disclosure patterns of the three biggest listed companies may not coincide with smaller companies listed on the same market. Third, the analysis did not cover the disclosures made in local official languages, meaning that the disclosure quality measures presented do not reflect the overall disclosure quality of companies.

Overall, despite the high quality of disclosures made in English in Baltics, the results do raise concerns regarding the possibility that existing disclosure regulations may be too restrictive (especially in the context of stock exchange web page disclosures). This may have a negative impact on companies' willingness to become and remain listed on the stock exchanges. Therefore, for providing more reliable policy advice, additional research is needed to benchmark Baltic markets with other developed markets not covered in this paper.

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Appendix 1. Analysed stock exchanges and their main characteristics

Stock exchange	Country code	No. of listed firms	Market cap. (million EUR)	Market cap. to GDP (%)	Stock market total value traded to GDP (%)	Stock market turnover ratio (%)	No. of listed firms to 10 th population
CEE stock exchanges							
Banja Luka	BA	808	2,096	NA	NA	NA	NA
Sarajevo	BA	183	1,730	NA	NA	NA	NA
Bulgaria	BG	370	3,903	14.9	0.4	3.3	0.53
Prague	CZ	28	40,758	19.6	7.1	36.3	0.01
Tallinn	EE	16	2,016	9.1	1.3	12.1	0.11
Zagreb	HR	222	18,251	38.3	1.6	4.0	0.47
Budapest	HU	39	15,988	17.1	16.9	81.5	0.05
Vilnius	LT	33	3,285	11.9	0.7	4.8	0.10
Riga	LV	32	896	4.3	0.1	4.2	0.14
Moldova	MD	NA	NA	NA	NA	NA	NA
Macedonia	MK	15	439	26.3	0.4	1.9	0.16
Warsaw	PL	439	169,518	32.7	17.1	57.1	0.20
Bucharest	RO	1177	24,689	15.5	1.4	11.5	0.59
Belgrade	RS	49	7,283	21.1	0.7	3.4	1.82
Ljubljana	SI	21	4,792	16.5	0.8	6.3	0.32
Bratislava	SK	16	3,516	4.8	0.3	9.9	0.15
Average	CEE	280.6	24,413	20.7	4.7	21.5	0.43
Median	CEE	116.0	6,037	18.4	1.1	8.1	0.26
St. Dev.	CEE	370.7	47,246	9.6	6.8	27.7	0.53
Average	Baltic	27.0	2,065	8.4	0.7	7.0	0.12
Median	Baltic	32.0	2,016	9.1	0.7	4.8	0.11
St. Dev.	Baltic	9.5	1,195	3.8	0.6	4.4	0.02

Developed EU stock exchanges							
Swiss	CH	282	1,166,038	179.5	147.5	78.4	0.31
Frankfurt	DE	977	1,091,290	37.5	45.0	130.3	0.08
Euronext Paris	FR	586	1,197,013	65.1	54.6	81.6	0.14
Average	EU	615.0	1,151,447	94.0	82.3	96.8	0.18
Median	EU	586.0	1,166,038	65.1	54.6	81.6	0.14
St. Dev.	EU	348.4	54,351	75.3	56.6	29.1	0.12

Note: NA - data on Moldova is missing on its web page and also in Worldbank database. CEE indicators exclude Baltic stock exchanges.

Data source: stock exchanges' web pages, Worldbank Global Financial Development Database (GFDD).

Appendix 2. Disclosure quality evaluation score sheet

No.	Item	Annual report	Firm's home page	Stock exchange web page
1	Number of issued shares			
2	Par value of issued shares			
3	Market price of shares	x		
4	Analyst forecasts	x		x
5	Investor calendar	x		x
6	Key financial indicators and ratios	x		
7	Listing data			x
8	Dividend information ,dividend policy			x
9	Company's biggest shareholder			
10	Additional information on shareholders			
11	Corporate Governance Charter/Code of Best Practice			x
12	Names of key executives			x
13	Names of supervisory board members			x
14	Background of executive board members			x
15	Executive board members' shareholdings in the company			x
16	Executive board members' transactions with company's shares			x
17	Background of supervisory board members			x
18	Accounting standards followed			
19	Annual reports in English	x		
20	Interim reports in English	x		
21	Presentations	x		x
22	Name of the auditing firm			
23	Auditors' report			
24	Company's field of activity			
25	Separate investor relation's section	x		x
26	Company strategy			x
27	Investment plans for coming years			x
28	Company's market share			x
29	Transactions with related parties		x	x
30	Audit Committee exists			x
31	Remuneration/compensation committee exists			x
32	Strategy/investment/finance committee exists			x
33	Company background and history			x
34	Corporate social responsibility report	x		x
35	Press releases	x		x
36	Public (stock exchange) announcements	x		
37	For how many years the public announcements are available?	x		
38	For how many years the annual reports are available?	x		
39	For how many years the interim reports are available?	x		

Note: "x" represents instances where the respective item is not evaluated.

Source: Standard & Poors Transparency and Disclosure Rankings (Standard & Poors, 2002) modified significantly by authors.

Appendix 3. Average disclosure scores for each item across regions

Item	Average annual report disclosure scores			Average company home page disclosure scores			Average company home page disclosure scores			Average total disclosure scores		
	Baltics	CEE	EU	Baltics	CEE	EU	Baltics	CEE	EU	Baltics	CEE	EU
1	1.00	0.82	1.00	1.00	0.59	1.00	1.00	0.85	1.00	3.00	2.26	3.00
2	1.00	0.72	0.89	1.00	0.56	0.89	1.00	0.54	0.67	3.00	1.82	2.44
3	x	x	x	0.89	0.56	1.00	1.00	0.85	1.00	1.89	1.41	2.00
4	x	x	x	0.00	0.08	0.25	x	x	x	0.00	0.08	0.22
5	x	x	x	0.67	0.49	1.00	x	x	x	0.67	0.49	1.00
6	x	x	x	0.78	0.49	1.00	1.00	0.77	1.00	1.78	1.26	2.00
7	1.00	0.79	1.00	1.00	0.62	1.00	x	x	x	2.00	1.41	2.00
8	1.00	0.82	1.00	0.89	0.51	1.00	x	x	x	1.89	1.33	2.00
9	1.00	0.79	0.78	1.00	0.69	0.56	1.00	0.46	1.00	3.00	1.95	2.33
10	1.00	0.74	0.78	1.00	0.69	0.56	0.89	0.36	1.00	2.89	1.79	2.33
11	0.78	0.56	0.89	0.89	0.49	1.00	x	x	x	1.67	1.05	1.89
12	1.00	0.69	0.89	1.00	0.90	1.00	x	x	x	2.00	1.59	1.89
13	1.00	0.64	0.89	0.89	0.79	1.00	x	x	x	1.89	1.44	1.89
14	0.67	0.33	0.67	0.67	0.64	1.00	x	x	x	1.33	0.97	1.67
15	0.89	0.28	0.89	0.56	0.05	0.33	x	x	x	1.44	0.33	1.22
16	0.00	0.00	0.33	0.00	0.03	0.44	x	x	x	0.00	0.03	0.78
17	0.67	0.31	0.67	0.78	0.38	0.67	x	x	x	1.44	0.69	1.33
18	1.00	0.82	0.89	0.44	0.21	0.89	1.00	0.15	1.00	2.44	1.18	2.78
19	x	x	x	1.00	0.82	1.00	1.00	0.28	0.67	2.00	1.10	1.67
20	x	x	x	0.89	0.67	1.00	1.00	0.33	0.56	1.89	1.00	1.56
21	x	x	x	0.56	0.41	0.89	x	x	x	0.56	0.41	0.89
22	1.00	0.77	0.89	0.22	0.08	0.33	0.89	0.08	0.33	2.11	0.92	1.56
23	1.00	0.77	0.89	0.00	0.03	0.11	0.00	0.00	0.00	1.00	0.79	1.00
24	1.00	0.85	1.00	1.00	0.92	1.00	1.00	0.69	1.00	3.00	2.46	3.00
25	x	x	x	1.00	0.77	1.00	x	x	x	1.00	0.77	1.00
26	0.89	0.56	1.00	0.78	0.54	0.89	x	x	x	1.67	1.10	1.89
27	0.56	0.44	1.00	0.56	0.31	1.00	x	x	x	1.11	0.74	2.00
28	1.00	0.42	0.89	0.44	0.31	1.00	x	x	x	1.44	0.72	1.89
29	1.00	0.72	0.89	x	x	x	x	x	x	1.00	0.72	0.89
30	0.78	0.64	0.89	0.33	0.31	1.00	x	x	x	1.11	0.95	1.89
31	0.11	0.26	0.67	0.00	0.10	0.89	x	x	x	0.11	0.36	1.56
32	0.00	0.18	0.33	0.00	0.10	0.56	x	x	x	0.00	0.28	0.89
33	1.00	0.85	1.00	1.00	0.85	1.00	x	x	x	2.00	1.69	2.00
34	x	x	x	0.33	0.33	0.89	x	x	x	0.33	0.33	0.89
35	x	x	x	0.67	0.64	1.00	x	x	x	0.67	0.64	1.00
36	x	x	x	0.89	0.67	1.00	1.00	0.51	0.33	1.89	1.18	1.33
37	x	x	x	10.22	5.08	10.56	12.33	3.69	2.56	22.56	8.77	13.11
38	x	x	x	9.56	8.03	12.11	9.78	0.87	7.56	19.33	8.90	19.67
39	x	x	x	6.89	4.82	10.44	9.22	0.72	6.56	16.11	5.54	17.00

Notes: Column CEE excludes Baltic companies and EU presents the results of developed European markets. For item descriptions see Appendix 2.

Data source: Authors' calculations.

Appendix 4. Average disclosure quality indices across stock exchanges

Stock exchange	Country	Contemporaneous disclosure quality indices				Historical disclosure quality indices		
		Annual report	Company home page	Stock exchange web page	Total quality	Company home page	Stock exchange web page	Total quality
Frankfurt	DE	23.7	31.7	9.0	64.3	38.7	22.7	61.3
Swiss	CH	20.7	29.0	11.7	61.3	26.0	27.3	53.3
Riga	LV	19.7	25.0	12.0	56.7	33.0	39.7	72.7
Tallinn	EE	20.7	22.3	12.0	55.0	25.0	28.0	53.0
Budapest	HU	19.3	24.0	11.7	55.0	38.7	12.0	50.7
Vilnius	LT	20.7	22.0	11.3	54.0	22.0	26.3	48.3
Euronext Paris	FR	18.7	26.7	8.0	53.3	34.7	0.0	34.7
Ljubljana	SI	22.3	25.3	5.0	52.7	27.3	0.0	27.3
Prague	CZ	22.3	22.7	6.7	51.7	33.7	4.0	37.7
Bucharest	RO	19.0	23.3	8.3	50.7	21.7	0.3	22.0
Bulgaria	BG	18.0	20.7	7.3	46.0	20.7	11.7	32.3
Zagreb	HR	17.0	19.3	6.0	42.3	19.7	12.3	32.0
Warsaw	PL	17.7	18.7	5.7	42.0	25.7	0.0	25.7
Bratislava	SK	18.3	17.0	5.0	40.3	21.3	6.7	28.0
Belgrade	RS	11.0	16.3	6.3	33.7	12.0	6.3	18.3
Macedonia	MK	7.7	10.7	6.3	24.7	4.3	8.3	12.7
Banja Luka	BA	5.7	4.0	8.0	17.7	2.0	7.0	9.0
Moldova	MD	8.7	6.3	0.0	15.0	4.7	0.0	4.7
Sarajevo	BA	5.0	7.7	0.0	12.7	1.3	0.0	1.3

Data source: Authors' calculations.

BALTIKUMI BÖRSIETTEVÕTETE TEABE KVALITEET – KAS TEISTEST EES VÕI MAHA JÄÄNUD?

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Käesoleva artikli eesmärgiks on määratleda suurimate Balti börsidel noteeritud ettevõtete inglise keeles avaldatud teabe kvaliteedi keskmine tase ning analüüsida seda suurimate teistel Kesk- ja Ida-Euroopa (KIE) ning kolmel arenenud Euroopa börsil noteeritud ettevõtete kontekstis.

Teabe avaldamine hõlmab nii arvilise, kvalitatiivse, nõutud kui ka vabatahtliku informatsiooni avaldamist erinevate teabe kanalite kaudu (Gibbins et al., 1990) ning aitab vähendada informatsiooni asümmeetriat investorite ja juhtide vahel (Akerlof, 1970). Samas oleneb see, kui võrd informatsiooni asümmeetria väheneb, nii avaldatud teabe kvaliteedist kui ka keelest. Nimelt kui välismaine väikeinvestor soovib osta tema koduriigist väljapool noteeritud ettevõtte aktsiaid, siis on tema jaoks väga oluline see, millises keeles infot on avaldatud. Nii Baltikumi kui teiste KIE riikide puhul kasutatakse erinevaid kohalikke keeli, mistõttu sõltub nende riikide börside atraktiivsus välisinvestoritele muuhulgas ka nendel noteeritud ettevõttele puudutava inglisekeelse teabe kättesaadavusest. Seega keskendub antud artikkel inglisekeelse teabe kvaliteedile.

Teabe kvaliteet võib sõltuvalt kasutatud definitsioonist hõlmata nii teabe täielikkust, täpsust, usaldusväärsust (Singhvi ja Desai, 1971) või hulka, ajakohasust ja täpsust (Brown ja Hillgeist, 2007). Käesolevas artiklis käsitletakse teabe kvaliteeti hulga ja täielikkuse kontekstis. Seejuures tuleb arvestada, et teabe kvaliteedi tagamisel on oluline roll ettevõtte omaniku ja juhi vahelisel lepingul, teabe vahendajatel, ettevõttespetsiifilistel teguritel (suurus, noteeritus, audiitori liik, tegevuse ja omandistruktuuri rahvusvahelisus jms) ning regulatsioonidel (Helay ja Palepu, 2001). Kuna järelevalve organid saavad regulatsioone kergesti muuta, on regulatsioonide kaudu võimalik kergemini mõjutada teabe kvaliteeti nii otseselt kui kaudselt. Otsene mõju ilmneb läbi konkreetsete teabe avaldamise regulatsioonide, mis mõjutavad investorite kindlustunnet (Levitt, 1998) ning kaudne mõju avaldub läbi investorite kaitse võimaluste (La Porta et al., 1998).

Eelnevates empiirilistes uuringutes on teostatud peamiselt ettevõtte tasandi analüüse, kus teabe kvaliteedi mõõtmiseks kasutatakse kas subjektiivset analüüsi, tekstilist analüüsi või teabe avaldamise indekseid (Beattie et al., 2004). Seejuures on sageli teabe kvaliteedi taseme leidmine seotud teabe kvaliteedi mõjutegurite või sellega kaasnevate mõjude uurimisega. Teabe kvaliteedi mõjutegurite puhul keskendutakse peamiselt ettevõtte põhiste teguritele. Eelnevates uuringutes on üldjuhul leidnud

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kinnitust ettevõtte suuruse, börsil noteerituse, rahvusvahelise audiitorfirma, ettevõtte tegevuse ning omandistruktuuri rahvusvahelisuse positiivne mõju kvaliteedile ning omandikontsentratsiooni negatiivne mõju (Laidroo, 2009). Selles valdkonnas on KIE riikide kontekstis tehtud aastaaruannete kvaliteedi uuringuid Tšehhi (Patton ja Zelenka, 1997; Makhija ja Patton, 2004) ja Poola (Grüning, 2007) kohta ning börsiteadete kvaliteeti on uuritud Balti riikide baasil (Laidroo, 2009).

Teabe kvaliteediga kaasnevate mõjude uurimisel on võimalik eristada kolme erinevat uurimissuunda. Neist esimene eeldab, et kvaliteetsem teave vähendab ebatäpsusi ettevõtte aktsiahinna määramisel (Verrecchia, 1983, 1990; Skinner, 1994) ning on empiirilist kinnitust leidnud (Healy et al., 1999). Teine uurimissuund eeldab, et kvaliteetsem teave aitab alandada omakapitali hinda (Klein ja Bawa, 1976; Coles ja Loewenstein, 1988; Barry ja Brown, 1985; Coles et al., 1995) ning see hüpotees on leidnud empiirilist kinnitust näiteks Francis et al. (2005) ja Gietzmann and Ireland (2005) töödes. Kolmas uurimissuund eeldab, et kvaliteetsem teave aitab parandada turu likviidsust (Kyle, 1985; Glosten ja Milgrom, 1985; Amihud ja Mendelson, 1986). Empiirilised uuringud on seda ootust samuti kinnitanud (Healy et al., 1999; Leuz ja Verrecchia, 2000; Bushee ja Noe, 2000; Leuz ja Verrecchia, 2000; Frino ja Jones, 2005). Teabe kvaliteediga kaasnevate mõjude osas on eelnevad KIE riike puudutanud empiirilised uuringud (Kirshnamurti et al., 2007; Laidroo, 2011) kinnitanud mõju turu likviidsusele. Seega kinnitavad eelnevad uuringud, et teabe kvaliteet on oluline nii arenenud kui arenemisel börsidel. Seejuures võib teabe kvaliteet kaudselt läbi aktsiate likviidsuse parandamise avaldada positiivset mõju majanduskasvule (Levine, 1991).

Kuigi eelnevates uuringutes on teostatud ettevõtte tasandi analüüse, on vaid üksikud uuringud keskendunud börsi tasemel analüüsile. Autoritele teadaolevalt on vaid Frost et al. (2006) käsitlenud korraga 50 maailma börsi regulatsioonide kvaliteedi seoseid aktsiaturu arengu näitajatega. Käesoleva artikkel laiendab just Frost et al. (2006) poolt algatatud uurimissuunda ning artikli panus on seotud 4 olulisema aspektiga. Esiteks, võrreldes Frost et al. (2006) kasutatud meetodiga, keskendub käesolev artikkel regulatsioonide asemel ettevõtte tasandi analüüsile, mis võimaldab lisaks kohtuslikele teabe avaldamise komponentidele haarata ka vabatahtlike komponente. Teiseks, kui varasemad 7 KIE riike haaravat teabe kvaliteedi uuringut (Patton ja Zelenka, 1997; Makhija ja Patton, 2004; Frost et al., 2006; Grüning, 2007; Kirshnamurti et al., 2007; Laidroo, 2009, 2011) on keskendunud samaaegselt ühele kuni kolmele riigile, siis käesolevas töös kaetakse 16 KIE börsi 15 riigist. Kolmandaks, varasemad erinevate riikide ettevõtete teabe kvaliteedi uuringud (Robb et al., 2001; Camfferman ja Cooke, 2002; Vanstraelen, et al., 2003) on keskendunud kohalikus riigikeeles avaldatud teabele mitte inglisekeelsele teabele. Neljandaks, vaadeldakse antud töös teabe kvaliteeti ka pikemas perspektiivis, hinnates eelnevate aastate ettevõtte finantsaruannete ja börsiteadete esituse ulatust.

Artikkel tugineb kokku 19 börsi (16 KIE, 3 Balti ja 3 arenenud Euroopa) 3 suurima turukapitalisatsiooniga noteeritud ettevõtte teabe kvaliteedi hindamisele. Kokku analüüsitakse 57 ettevõtte 2011. aasta aastaaruannet, ettevõtte kodulehte ning börsi

veebilehel ettevõtte kohta avaldatud teavet perioodil aprill-mai 2013. Teabe kvaliteedi hindamisel kasutatakse sisuanalüüsil põhinevat teabe kvaliteedi indeksi meetodit. Selleks kohandatakse oluliselt Standard & Poors küsimustikku (Standard & Poors, 2002) st algse 98 hinnatava elemendi asemel hinnatakse kokku 39 elementi (vt inglisekeelne Lisa 2), seejuures elemendi 1 kuni 36 hinnatakse skaalal 0 (ei ole avaldatud) ja 1 (on avaldatud) ning elemente 37 kuni 39 vastavalt konkreetsete aastate arvule. Kvaliteedi mõõtmine koosneb kolmest etapist. Esimeses etapis arvutatakse hetkeseisu kajastavad kvaliteedi indeksid nii aastaaruande, ettevõtte kodulehe, börsi veebilehe kui kogu teabe kvaliteedi taseme jaoks. Seejuures esimesed kolm indeksit saadakse elementide 1 kuni 36 1/0 hinnangute summeerimisel ning kogu teabe kvaliteedi indeks on eelneva kolme indeksi summa. Teises etapis koostatakse ajaloolise teabe kvaliteedi indeks nii ettevõtte kodulehe, börsi veebilehe kui kogu teabe kvaliteedi kontekstis. Selleks summeeritakse esimese kahe indeksi puhul elementide 37 kuni 39 hinnangud ning kogu teabe kvaliteedi hindeks on eelneva kahe indeksi summa. Kolmandas etapis agregeeritakse indekseid nii kolme regiooni (Baltikum, ülejäänud KIE, arenenud Euroopa) kui börside lõikes (19 börsi).

Tulemused näitavad, et Baltikumi börsidel (Tallinn, Riia ja Vilnius) noteeritud ettevõtete keskmine teabe kvaliteet ületab ülejäänud KIE börside keskmist taset vähemalt 30% ulatuses ning börsi veebilehe kontekstis koguni 50 kuni 80%. Kui võrrelda Baltikumi börsidel noteeritud ettevõtete keskmist teabe kvaliteeti arenenud Euroopa kolme börsi (Swiss, Frankfurt ja Euronext Paris) näitajatega, siis jääb Baltikumi ettevõtete tase neile veidi alla ning see on tingitud peamiselt ettevõtete veebilehel avaldatud teabe madalamast kvaliteedist. Seega peaksid Baltikumi börsidel noteeritud ettevõtted pöörama suuremat tähelepanu analüütikute ennustuste, investorkalendri, olulisemate finantsnäitajate, juhtkonna taustainfo ja nende aktsiatehingute, ettevõtte investeerimisplaanide, turuosa ning erinevate komiteede kohta käiva info avaldamisele oma kodulehel. Positiivsema poole pealt on märgata, et Baltikumi börside veebilehtedel esitatakse võrreldes arenenud Euroopaga noteeritud ettevõtete kohta rohkem inglisekeelset teavet, mis viitab tugevamale teabe avaldamise reguleeritusele.

Kuigi Baltikumi börside ettevõtete näitajad eristuvad selgelt ülejäänud KIE börside ettevõtete näitajatest, esineb viimaste seas päris oluline kvaliteedinäitajate varieerumine. Kõrgem Baltikumi börsidele ligilähedane teabe kvaliteet iseloomustab Budapesti (Ungari), Ljubljana (Sloveenia) ja Praha (Tšehhi) börse, mille omanikuks on sarnaselt Baltikumi börsidele rahvusvaheline grupp (NASDAQ OMX asemel CEESEG AG). Samas äärmiselt madal teabe kvaliteet on Moldova ja Makedoonia börsil ning Bosnia ja Hertsegoviina börsidel (Banja Luka ja Sarajevo). Seejuures iseloomustab Bosnia ja Hertsegoviina kaht börsi märkimisväärne erinevus börsi veebilehe teabe kvaliteedi näitajates, mis viitab sellele, et sama riigi sees erinevad kahe börsi regulatsioonid olulisel määral. Tulemused viitavad sellele, et Moldova, Makedoonia ja Bosnia ja Hertsegoviina börside puhul tuleks rakendada täiendavaid regulatiivseid meetmeid selleks, et teabe avaldamise nõuded karmistuks. Lisaks konkreetsete börsiettevõtete teabe kvaliteedi parandamisele aitaks see kaasa ka

riigisese parima teabe avaldamise praktika edendamisele. Arvestades mõningate teiste KIE börside positiivset kogemust võiks neile börsidele kasulikuks osutada ka suurem rahvusvahelistumine, mida kindlasti peaks toetama mitte takistama.

See, et Baltikumi börsiettevõtete teabe kvaliteet on väga lähedal Euroopa börside tasemele, on seotud erinevate tegurite koosmõjuga. Esiteks viitavad börsi veebilehe kõrged teabe kvaliteedi näitajad sellele, et seatud kõrged teabe avaldamise regulatsioonid on loonud soodsa pinnase kõrge kvaliteediga inglisekeelse teabe avaldamiseks. Teiseks on Baltikumi börside rahvusvahelistumine (läbi omandistruktuuri) kiirendanud Põhja-Euroopa parima teabe avaldamise praktika rakendamist ning piisavalt pikk välisomanduse periood toonud kaasa Baltikumi sise teabe kvaliteedi taseme ühtlustumise. Kolmanda tegurina on oma mõju avaldanud väike kohalik majandus, mistõttu on ettevõtete jaoks olulisem inglisekeelse teabe avaldamine ning ka vastavate regulatsioonid kehtestamine. Näiteks Poola Varssavi börsil noteeritud ettevõtete puhul võib täheldada KIE kontekstis keskmist teabe avaldamise kvaliteeti kuigi börsi arengu indikaatorite baasil on tegemist kõige arenenuma KIE börsiga. See viitab sellele, et suur koduturg ning suur kodumaiste investorite baas võib vähendada vajadust inglisekeelse teabe edastamise järele.

Vaatamata kõrge teabe kvaliteedi taseme võimalikule positiivsele mõjule aktsiate likviidsusele ja seeläbi ka majanduskasvule, viitavad tulemused mõningatele potentsiaalsetele probleemidele. Esiteks viitab arenenud turgudest kõrgem börsi veebilehel avaldatud teabe kvaliteet sellele, et kehtestatud regulatsioonid ja nõuded võivad olla ettevõtete jaoks liialt piiravad. Arvestades seda, et antud artiklis oli vaatluse all ainult kolm arenenud Euroopa riikide börsi, ei saa otseselt anda soovitusi regulatsioonide lõdvendamiseks. Täiendavalt tuleks aga uurida teabe kvaliteeti suurema hulga arenenud riikide börside kontekstis. Teiseks peab arvestama sellega, et börsiettevõtete inglisekeelse teabe avaldamise kulud võivad mõjutada Baltikumi börside edasist arengut. Nimelt on käesoleval hetkel kõigil kolmel börsil suhteliselt vähe noteeritud ettevõtteid ning on probleeme tehinguaktiivsusega. Seetõttu ei pruugi nimetatud börsidel ettevõtte aktsiate noteerimine olla atraktiivne vaatamata sellele, et vastavalt teoreetilistele lähtekohtadele parandab kõrge teabe kvaliteet aktsiate likviidsust. See on seotud sellega, et teabe avaldamise kulud ettevõtte jaoks võivad ületada aktsiate börsil noteerimisest tulenevat kasu. Arvestades, et need kulud võivad mõjutada ka juba noteeritud ettevõtete otsuseid, peaks antud küsimust uurima edasistes uurimustes keskendudes eelkõige sellele, millised tegurid on juhtide hinnangul olulised börsile mineku ja sealt lahkumise puhul ning kuidas juhid hindavad olemasolevat inglisekeelse teabe avaldamise regulatsiooni