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THE INVESTIGATION OF FINANCIAL REPORTS' COMPLEXITY IN LARGE COMPANIES

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Abstract

The article presents the investigation of financial statements' complexity in large companies. In this information age the problem we met in financial valuation is the volume of obligatory and voluntary disclosed information and how it influences the complexity. The aim of research is to find out the complexity of financial statements of Lithuanian companies which are listed in the stock market exchange. Factors influencing the level of financial reports' complexity can be grouped: requirements for legal environment of information disclosure, multiple and volatile activity, volume of voluntary disclosed financial and non financial information in financial statements. And finally referring to Damodaran's adapted methodology an information based index can be used for measuring complexity. The investigation of financial reports' complexity was carried according to the financial data of fifteen Lithuanian companies listed in stock market exchange. The results showed different volume of voluntary information disclosure in the companies and disclosed little information about working capital, researches and forecasts.

Keywords: information disclosure, financial reports, complexity.

Introduction

Analyzing large companies' financial valuation problems, we should speak about information disclosure problem and the selection of necessary information. Analyzing possible choices of financial valuation methods Dagiliene distinguished information accessibility, data reliability and calculation complexity as several factors making great importance to the whole financial valuation process. The larger company is the more information it gives. Many scientists agree that information is more available in larger firms: Berglöf & Pajuste (2005), Damodaran (2007), Flöstrand & Ström (2006), Fernandez (2007), Dagilienė (2008), Legenzova (2008). The question is how the level of information disclosure influences the results of financial valuation? If several companies have similar financial ratios, profit or incomes, the attention should be paid for volume of initial data – financial reports. Without doubt it is more difficult to evaluate company which has several subsidiaries and acts in multiple businesses.

The article presents the investigation of financial reports' complexity in large companies. According to the laws a full set of financial reports consists of balance sheet, income statement, and statement of changes in equity, cash flow statement, explanatory notes and annual report. However, laws and accounting standards just show the limit, obligatory volume of information disclosure. Without doubt companies may reveal more or less information for their investors.

The ***objective of the paper*** is to summarize factors of complexity of a large company's financial reports and to investigate the complexity of financial reports of Lithuanian companies.

The object of the paper is complexity of financial reports of Lithuanian companies listed in stock market exchange.

The ***research methods*** applied in this article are the analysis of scientific literature on the subject and its logical generalization, the investigation of companies' financial reports, the examination of separate cases.

Factors influencing the complexity of financial reports

Many scientists investigate the problems of information disclosure relating to company's size and the complexity of financial statements'. Berglöf & Pajuste (2005) investigated the cases of information disclosure in 370 companies listed on stock exchanges in Central and Eastern Europe. The results showed that the disclosed information level depends on legal framework and practice in given country but it is not related with firms' financial performance. Information is more available to the public in larger firms with lower leverage, higher market-to-book ratios and more concentrated ownership.

Analyzing the scientific literature factors that have a great influence on complexity of financial reports can be grouped like this:

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Requirements for legal environment of information disclosure. Therefore by changing economic conditions, the greater attention must be paid to company's information disclosure. Legal requirements for the disclosure of information become increasingly strict after the collapse of Enron in December 2001. In the year 2002, by the Sarbanes-Oxley law enacted in the USA the requirement for directorship of companies to confirm financial accountability and declare that it reflects actual financial situation of the company, and all important facts are disclosed, was implemented. More and more rules of law in the European Union require disclosure of more detail information, especially about listed companies. Analogous changes are happening in Lithuania also. Requirements for information disclosure in financial statements and importance of it are given in the Law on financial statements of entities, the 1st standard of Business accounting „Financial statements" and other. The law on securities enacted in Lithuania in 2007 extended the amount of information bound to be disclosed publicly for issuers and determined more strict requirements for disclosure of regulated information. The aim of these changes is the opportunity to make right decisions, by referring to the reliable financial and other disclosed information of the valuated company.

Most of Business accounting standards (first versions) is applied since 2004-02-07. But in the face of changing business conditions more and more new standards have appeared or have been changed describing more complicated areas of firm's activity. The question is what number of changes in accounting standards appears every year? (Table 1)

Table 1. National accounting standards (NAS)

Year/ National accounting standards	Number of accepted	Number of changed
2004	24	4
2005	1	7
2006	6	15
2007	1	22
2008	4	8
The total number of accepted for 08-12-31	34	
The number of accepted but not published for 08-12-31	1	
The number of projects for 08-12-31	2	

From one side the larger level of disclosed information makes accounting more transparent. But from the other side the financial statements may become very complicated and large because of requirements to disclosure various issues.

Multiple and volatile activity (Damodaran, 2007). Accounting of large companies with various activities is much more difficult. When company acts in multiple businesses it is much more difficult to evaluate operating income, expected growth level and costs of capital. The forecasting of future income becomes more difficult. Also too complex financial reports may create the illusion that the company is worth more than really it is.

Volume of voluntary disclosed financial and non financial information (Damodaran, 2007)**.** Flöstrand & Ström (2006) investigated the disclosure of firms' non-financial information as this information is very important in valuation processes. The authors determined that the larger firms have higher analyst report information content, a higher degree of annual report disclosure, a higher book-to-market ratio, and higher levels of intangible. Hail (2002) investigated the impact of voluntary information disclosure of companies. The author proved the negative and highly significant association between disclosure quality and cost of equity capital in Switzerland companies.

Lithuanian laws determine what information should be disclosed at the minimum level. Referring to the Law on financial statements of entities, the annual report must include main issues given in the Figure 1.

Analyzing the first issue - the important events in the reporting year, - there should be disclosed:

1) a fair review of a firm's position, the performance and development, a description of the principal risks and uncertainties that it faces;
2) analysis of financial and non-financial performance, information relating to environmental and employee matters;
3) references to and additional explanations of the data presented in annual financial report.

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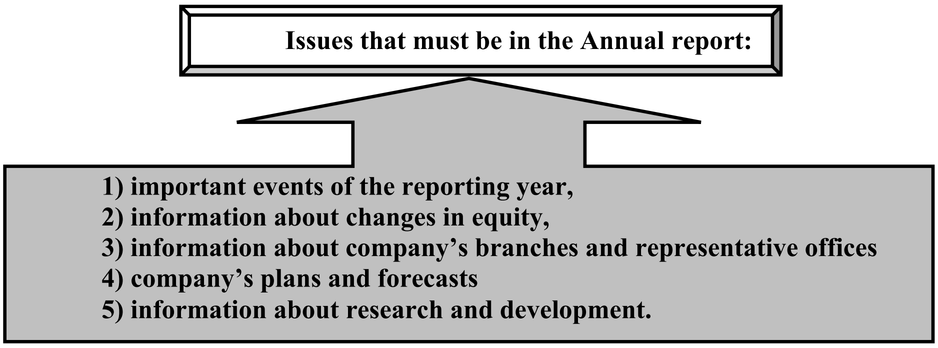

Figure 1. The general structure of Annual report (according to the Law on Financial Statements of Entities)

A lot of attention is shared to the information related to acquired and transferred shares and etc. The reason is that shareholders of public limited companies and private limited companies "risk" only by the amount of invested capital. So the control of movements in equity must be stricter.

The last two requirements (about company's plans and researches) may be of very different volume. It depends on company's voluntary information disclosure. Companies whose securities are admitted on a regulated market must disclosure even more information in the annual report.

Legenzova (2008) investigated voluntary financial information disclosure of Lithuanian listed companies and its interactions with company's ownership structure in the period 2002-2005. The investigation results showed that high ownership concentration explains low voluntary financial disclosure of Lithuanian companies. Vaškelienė & Šelepen prepared methodology for disclosing information about intellectual capital in large companies. The investigation showed that companies disclosed more information about intellectual capital by 26% in 2006 year comparing with 2003. Different investigations show that companies have a tendency to reveal the larger level of voluntary information disclosure but this also have the influence to its complexity.

Methodology to measure the complexity of financial reports

The problem of measuring the complexity of financial statements because of discussed above reasons is very important. Because the more company has complicated financial statements the more is difficult to apply financial valuation methods. Referring to adapted Damodaran methodology (2007) these factors are distinguished influencing the complexity of financial statements:

- *Volume of data in financial statements*: the calculation of different reports' pages.
- *An information based index*. This index contains main components that determine complexity: operating income, tax rate, capital expenditure, working capital, expected growth rate, cost of capital, cross holdings.

As operating income and expected growth rate are the indicators for forecasting future results it becomes very complicated when a firm acts in multiple business (Fernandez, 2007). Also the complexity is increased by one-time income, income from unspecified sources, off-balance sheet assets and liabilities.

Different profit tax levels and volatile effective tax rate make the forecasting of value more complicated.

Financial reports become more complex when capital expenditure is volatile, large and frequent, companies enter to multiples businesses or emerging markets.

When the company has holdings in other firms, it is necessary to valuate subsidiaries additionally.

Fifteen companies listed in Vilnius stock market exchange for 2008-12-31 were included into the investigation. In the investigation these reports that were accessible in Internet are valued:

- Financial reports, including explanatory notes.
- Annual report.

Results of investigation: Lithuanian case

Using the measure volume of data in financial statement for Lithuanian companies, results of investigation are showed in Table 2. All investigated companies presented a usual set of financial reports that consists of balance sheet, income statement, statement of changes in equity, cash flow statement, explanatory notes.

Table 2. The volume of companies' financial reports in2007, pages

Companies	Yearly report	Explanatory notes to financial statements	Annual report	incl. Appendix about information disclosure
AB "Pieno žvaigždės"	85	32	44	28
AB "Rokiškio sūris"	103	34	61	25
AB "Vilkyškių pieninė"	82	27	46	26
APB "Apranga"	65	28	29	18
AB "Utenos trikotažas"	91	48	32	20
AB "Sanitas"	87	44	31	19
AB "Snaigė"	101	33	55	23
AB "Vilniaus baldai"	69	38	28	18
AB "Panevėžio statybos trestas"	75	19	47	27
AB "TEO LT"	100	42	49	29
AB "Lietuvos dujos"	96	30	57	27
AB "Rytų skirstomieji tinklai"	81	36	36	24
AB "Invalda"	149	68	69	19
AB "Šiaulių bankas"	103	66	28	14
AB "Ūkio bankas"	113	66	38	26

The data reveal that the volume of financial reports is different. For example, AB "Snaigė" yearly report consists of 101 pages and AB "Vilniaus baldai" – only 69 pages. The content of explanatory notes to financial statements is similar because the obligatory structure of it is detalized in Business accounting standards.

The volume of annual reports is quite different in all companies because the content of this document is more abstract. Here are only general recommended requirements to disclose information.

Three companies (AB "Pieno žvaigždės", AB "Rokiškio sūris" and AB "Vilkyškių pieninė") that belong to the same branch of milk industry were analyzed more detailed in the aspect of complexity. The investigation was carried according to the disclosed information in mentioned companies' explanatory notes and annual reports. Indicators showed in the Table 3 can be included into the calculation of information based index. The weight of each factor belongs to whether it makes valuation more difficult or impossible. It should be noted that the list of factors that determine complexity is incomplete.

Table 3. Indicators that influence the complexity of financial statements

Indicators/Companies	AB "Pieno žvaigždės"	AB "Rokiškio sūris"	AB "Vilkyškių pieninė"
Operating income			
Multiple income	no	no	no
One time income and expenses	n/d	yes	n/d
Other	n/d	n/d	n/d
Tax rate			
Different profit tax levels (over several periods):	19%/18%	19%/18%	19%/18%
Volatile effective tax rate	18,6%	n/d	n/d
Capital expenditure			
Volatile capital expenditure	yes	yes	yes
Frequent and large acquisitions	yes	yes	yes
Stocks acquisition	yes	yes	yes
Working capital			
Unspecified current assets and liabilities	n/d	n/d	n/d
Volatile working capital	n/d	n/d	n/d
Expected growth level			
Off-balance sheet assets	yes*	yes*	n/d
Changing return on capital (ROE)	no	yes	n/d
Expected net profit growth	4%	3%	n/d

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Costs of capital			
Multiple business	no	no	no
Operation in emerging markets	no	no	no
Off-balance sheet debt	n/d	yes	n/d
Cross holdings (subsidiaries and etc.)	yes	yes	yes

n/d – not disclosed in the reports
** - the company has operating leases contracts that create off'-balance sheet assets. The amount of this assets is not defined in the explanatory notes.*

According to the received results all companies disclosed much information about changes in equity (shares acquisition and transfer, their nominal value, shareholders, payments for own shares), cross holdings and subsidiaries, investments, structure of income according to segments and products. AB "Rokiškio sūris" apart from other investigated companies presented more information about new products, production structure by quantity and value, production analysis by affiliated companies, investment projects.

All investigated companies showed little information about working capital (only the average number and average monthly salary, education).

AB "Pieno žvaigždės", AB "Vilkyškių pieninė" presented little information about the field of research and development, forecasted results and plans for future.

Conclusions

Factors influencing the level of financial reports' complexity are requirements for legal environment of information disclosure, multiple and volatile activity, volume of voluntary disclosed financial and non financial information. Investigated companies reveal quite different volume of information in their financial reports. Different amount of disclosed information, large capital expenditures, cross holdings increase the complexity of investigated companies' reports.

The results also showed that some complexity factors that are important in valuating the company, although they are not obligated to disclose them according to the laws. These factors are: detalization of one time and other income, more information about cost of capital, working capital, expected growth level.

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