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**COMPARISON OF TRADITIONAL AND CASH FLOW
STATEMENT ANALYSIS: CASE STUDY OF LINAS AGRO
GROUP AND AUGA GROUP**

Bachelor's thesis

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ABSTRACT

This Bachelor's thesis serves the aim of providing an overview of the two financial methods, the traditional financial statement analysis, and the cash flow ratio analysis, and showing their application to the actual business practice on the example of two Lithuanian companies, Linas Agro and Auga Group. The author describes the two financial analysis methods, applies them to the case of the chosen companies to find out their financial situation, and compares the methods giving the valuable outcomes for the application of the methods to practice and for the further research. Analysis showed that Linas Agro has stronger financial health and better results of solvency and liquidity ratios, while Auga Group is stronger in profitability indicators. Linas Agro needs to improve the cost management, while Auga Group is suggested to work on its liquidity and solvency, as it is closer to bankruptcy. As a result of the study, the author concludes that the cash flow statement analysis shows the clearer picture of the financial state of the companies. However, the combination of both methods of analysis enables to see the financial situation from the different perspective. The conduction of Bachelor's thesis has shown that the field of cash flow statement analysis requires further investigation.

Keywords: cash flow statement ratio analysis, financial ratio analysis, trend analysis, profitability analysis, solvency analysis

INTRODUCTION

The financial analysis is an essential tool for auditors, investors, and financial clerks, which helps to gather, analyze the financial data and make conclusions regarding the financial situation of the companies. However, there are several different ways of analysis, highlighting the companies' position from the different perspectives. The approaches to financial analysis have gone through the evolution throughout the decades, and it was inevitable, because the business opportunities have been growing, the new industries appeared, as well as the understanding of accounting and finance has been strengthening with the new theories and the luminaries of accounting and finance sciences. The traditional financial analysis described further in this work, which was studied the Bachelor's programme, provides a good overview of company's financial state, but the cash flow analysis goes beyond that data and gives another perspective. Therefore, it is interesting to investigate and compare both types of financial analysis.

In this Bachelor's thesis, the author defines, analyzes and compares the two approaches to the company analysis: the traditional financial statement analysis and the cash flow statement analysis applied to the Lithuanian companies "Linus Agro Group" and "Auga Group".

The purpose of this study is to contribute to the solution of the following questions:

1. Which method of analysis provides the better picture of the actual state of the firm?
2. What is the current financial situation of the companies analyzed? Which of them is closer to bankruptcy? What measures could be taken to strengthen the companies' positions?
3. What method of analysis should be preferred and prioritized? Should they be combined?

Hence, the purpose of this study is to provide an overview of the methods and to show their application on the practical example. This Bachelor's thesis will help auditors, financial analysts, investors and financial managers to choose the preferred method of financial analysis for them.

Since the study belongs to the finance and accounting field, the author used quantitative methods of analysis for this research, to provide clear conclusions. Quantitative data is based on the financial reports of the company for the last five operational years. The author uses two methods

of the analysis. The first is traditional financial analysis, represented by trend analysis technique and the traditional ratios. The second method is cash flow ratio analysis. Companies are analyzed with the use of these methods and the methods are compared to each other.

The first part of this thesis defines both approaches to financial analysis and uncovers their characteristics. This part is aimed to provide a solid theoretical background for further analysis and conclusions. The theoretical material was carefully selected by the author, so this chapter is based on the solid master thesis papers, doctoral dissertations, as well as scientific articles from the Journal of Accounting and the well-known accounting and finance books.

The second part of this paper represents the cases of “Linas Agro Group” and “Auga Group”, as well as the application of both methods to the companies’ analysis. Both companies are operating in Lithuania and represented at Nasdaq Baltics. However, Linas Agro Group is older than Auga Group and they have different financial situations, what makes it more interesting to research. Also, the companies have different managerial approaches, what is reflected in their financial performance.

In the third part of this Bachelor’s thesis, conclusions are derived and discussed by the author. The outcomes clarify the answers to the questions stated above. The author explains the difference in the application of traditional and cash flow ratio analysis. Thus, the best and preferred method will be indicated and argued.

However, the field of finance and accounting is immense and will always leave the areas for investigation. Therefore, this topic of the cash flow statement analysis will definitely require further investigation.

1.THEORETICAL PART

In this part of the Bachelor's thesis, the most relevant theoretical grounds are brought out regarding both the traditional statement analysis and the cash flow statement analysis. This theory is intended to provide the solid foundation for the analysis of the case study and for making the conforming conclusions further on.

The importance of the accurate analysis of financial statements is indisputable, since this analysis can be used for prediction of the future financial state of the companies, warning against possible problems, as well as for making the correct managerial decisions. Therefore, the output of the analysis should not only precisely show the companies' financial situation, but also highlight the specific areas, that are vital for companies' financial health. Hence, one cannot help but admit, that choosing the correct method of analysis is the key to the unmistakable understanding of the companies' weaknesses and strength. Financial statements analysis and the cash flow statement analysis can provide to the internal and external users the most important information regarding profitability, liquidity, solvency and even the forecasts of future earnings and efficiency of the company (Tuvadaratragool 2013).

1.1. Defining traditional financial statement analysis

First of all, it is necessary to clarify what financial statements are involved in this traditional analysis. These statements represent a set of formal records that are the main source of company-related data used for the financial analysis. There are three primary financial statements: balance sheet, income statement and the statement of cash flows.

The balance sheet is a summary of company's financial condition on a specific date. It consists of three parts: assets, liabilities and owners' equity. Balance sheet represents what the organization owns and owes to its external and internal users.

The income statement reports how profitable the firm has been over a certain accounting period through revenues and expenses incurred. A result of the income statement is a net profit or net loss. Traditionally, most of the analysts, creditors, and investors look at the income statement to judge the financial health level of the company.

Statement of cash flows traces company's inflows and outflows of funds during the accounting period of time. Statement of cash flows includes three parts: cash flows from operating activities, cash flows from investing activities and cash flows from financing activities (Fridson et al. 2002).

If one takes a look at the financial statement analysis as a process, it will be visible that the raw financial data is taken from these financial statements and transforming it into the clear and usable information in a convenient format to make financial decisions. A good definition is given by John Nicolas Myer, who stated that financial statement analysis is largely a study of relationship among various financial factors in a business as disclosed by a single set of statements and a study of the trend of these factors as shown in a series of statements (Myer 1969).

To the author's opinion, this definition describes the most important points of the financial analysis: it has to be not only reliable, understandable and relevant, but also comparable. Thus, one can conclude that it is crucial to use the comparative techniques because each of the financial statement shows the company's financial position only within the particular time frame. For this reason, it is required to compare one financial statement's data with another financial statement's data for several periods, in order to see the better picture and the possible trend.

1.1.1. Techniques and tools of financial analysis

Throughout the years of existence of financial analysis, professionals of finance and accounting spheres developed different techniques and tools that significantly help in the analysis of the company's performance as well as in prediction of future trends (Tuvadaratragool 2013).

There is a wide choice the tools and techniques available for financial analysis, as described by Ravinder (Ravinder et al. 2013): 1) horizontal analysis, 2) vertical, 3) trend, 4) fund flow analysis 5) cash flow analysis, 6) net working capital analysis 7) cost volume profit analysis. However, in this part of the paper the author considers trend analysis, because it clearly indicates the change in the companies' financial situations compared to the base years, and it will show either the increase or the decrease of the values.

1.1.2. Trend analysis

Trend analysis technique is the presentation of figures as a percentage amounts over a base year. In this technique, the base year (usually, the earliest) is agreed to constitute 100% and the other years (the subsequent years) are represented as a percentage relative to the base year. This is one of the best methods to visualize the change that happened from the base year till now because the comparison is very clear (Ganbataar 2010).

Trend analysis of the income statement can clearly indicate how revenues or net sales has changed throughout the years comparing to the chosen base year, how different kinds of expenses raised or failed and how these and other lines affected the net income. Trend analysis is a clear indicator of how efficient and effective the company has been comparing to the base year (Ravinder et al 2013).

Trend analysis of the balance sheet shows how the number of assets and liabilities change in percentage terms comparing to the base year. It can help investors to identify the dangerous trend of growing liabilities amount or a good trend of decreasing debts and increasing assets. Trend analysis of the balance sheet can be very helpful in clarifying the changes in assets/liability policy of the company, especially, being complementary to the vertical analysis (Palepu et al. 2013).

1.1.3. Limitations of financial statement analysis

Financial statements analysis is widely used by accountants, investors, analysts and financial managers to create the understanding of company's financial situation, efficiency and also for making decisions. Therefore, it is important to bring out the limitations of the financial statement analysis, so the users of the techniques discussed above will stay conscious.

First, the accuracy of the financial statements analysis depends on the accuracy of the figures in the financial statements. If the financial statements are prepared wrong, the analysis might lead users to the incorrect financial decisions (Weyegandt et al 2003). It is especially relevant if two companies are compared and their financial managers used different or non-standard calculations in preparation of financial statements. For example, if managers of the company A use 365 days year basis, while the managers of a company B use 360 days in their calculations.

Second, the financial statements only provide the quantitative information, so it fails to provide the qualitative information regarding the management-labor relation, satisfaction, and loyalty of the customers as well as the management skills level. For sure, it serves the purpose of providing

a ground for management decisions, but such details as customer attitude or workers level of dedication to the company can never be shown via financial statements.

Third, financial statements focus on the past performance of the company, they are not forward-looking. Past performance cannot guarantee future results of an analyzed company. (Ganbaatar 2010). Hence, the users of the financial statements analysis should not solely count on the financial statements during decision making.

Traditional financial statement analysis is a useful and trustworthy tool, however, each user of this kind of analysis should be aware of its limitations. Inevitably, another way of the company's financial analysis was developed – the cash flow statement analysis. There are many supporters and opponents of the cash flow statement analysis, but it definitely provides many advantages to the users and is even considered more trustworthy by some analysts. The next section brings out some theory of the cash flow analysis.

1.2. Defining the cash flow statement analysis

The statement of cash flows has been a required part of annual financial statements for many years already. The cash flow statement shows the inflows and the outflows of cash at the company's accounts over a certain period of time, and where this cash was generated and how it was used (Walter et al. 2013). Another good definition given by McGraw-Hill states that a cash flow statement is a reconciliation of the differences between the accrual basis and income statement and cash flow (Cash flow analysis 2013). The cash flow statement uses historical data to show not only the inflows and outflows of cash but also the reasons for these transactions, excluding the transactions that do not directly affect cash receipts and payments.

It is important to bring out the differences between the income statement and the statement of cash flow, although they might seem to be substituted, in fact, they have different objectives. The income statement reflects company's economic performance for a period. It provides details on how the retained earnings account changes during a period and bonds the net income with the owner's equity section in the balance sheet. On the other hand, statement of cash flow reports the period's transactions and events in terms of their impact on cash, it provides information from cash-basis perspective that complements the income statement and balance sheet, but which is not

reflected in these statements, thus providing complete picture of the company's operations and financial position (Dorel et al. 2007).

The cash flow statement has been included in the list of standard financial reports and widely used because it eliminates some of the problems that usually occur to analysts trying to compare accounts that have been prepared using different financial methods, for example, various time frames for depreciating fixed assets (Cash flow analysis 2013).

To distinguish the cash flow statement even more, specialists state, that in case of liquidity analysis, cash flow information is more reliable than the information from income statement or balance sheet. Balance sheet data reflects only a single point in time and therefore is more static, the income statement contains many arbitrary non-cash allocations, such as depreciation and amortization, while the cash flow statement reflects the actual financially vital information – the movements of funds (Mills et al. 1998).

1.2.1. The purpose of cash flow statement

In order to analyze the companies properly, it is needed to understand the purpose of the cash flow statement. For the main users of financial statements, particularly investors, creditors, financial management and stakeholders the cash flow statement itself, as well as its analysis, provides the valuable evaluation regarding the company's ability to generate positive net cash flows in the future to meet its obligations and to pay dividends. What is more important, the analysis of the cash flow can even provide an early warning of the possible financial unhealthiness of an enterprise (Dorel et al. 2007).

The Financial Accounting Standards Board (FASB) describes the primary purpose of the cash flow statement as providing relevant information about the company's cash receipts and payments during a particular period (Carslaw et al. 1991). Specialists state that “the cash flow statement provides a complete characterization of those aspects of the business which are not exposed in the basic financial statements, namely the cash efficiency of operating, investing and financing activities, liquidity and solvency” (Brycz et al. 2012). Additionally, cash flow statement provides beneficial information for management, which plays a key role in organization's decision making. Statement of cash flow contributes to (Cash flow analysis 2013):

- Providing information on organization's liquidity and solvency, as well as its flexibility in changing cash flows in future circumstances;

- Providing additional data for evaluating changes in assets, liabilities, and equity;
- The increase of comparability of organizations to each other by eliminating the effects of different accounting methods;
- Indicating the amount, timing and probability of future cash flows.

Another category of users that highly benefit from cash flow statement analysis could be auditors, to whom the proper liquidity analysis can help to avoid gross mistakes in assessment and approval of company's financial situation (Mills et al. 1998). The financial accounting standards board (FASB), as the primary use of cash flow statement to investors, creditors, auditors and others suggests to assess (Carslaw et al. 1991):

- Company's ability to generate future positive net cash flows;
- Enterprise's ability to meet its obligations and pay dividends, as well as its needs for external financing;
- The effects of the company's financial position of both its cash and noncash investing and financial transactions during the period;
- The reasons for differences between net income and associated cash receipts and payments.

As one can see from the above-mentioned facts, the cash flow statement provides a wide variety of useful information that can be utilized by specialists for the in-depth understanding of company's financial situation, prediction of future possible scenarios and even warning against future financial problems of the company.

1.2.2. Contents of the cash flow statements

According to the International Accounting Standards Board, the inflows and outflows of cash in the cash flow statement must be divided into three categories: operating activities, investing activities and financing activities (International Accounting Standard 2010). Each of these activities is discussed in this Bachelor's thesis to understand where the cash can come from and where it can go to.

It is also important to mention on the structure of cash flow statement that it reconciles the beginning and ending balances of cash and cash equivalents, where cash equivalents are short-term, highly liquid investments that can easily be converted to cash, such as financial instruments

with a maturity date less than 3 months (Nobes et al. 2008). Below the classifications of activities of the cash flow statement is described.

Cash flows from operating activities represent the amount received from the main operating activities and spent for the main operating activities of the company during the whole year (Kusuma 1999). To be more precise, cash flows from operating activities are primarily derived from the key revenue-producing activities of the company (International Accounting Standard 2010). They include the transactions and events that are involved in the determination of net income. The examples of inflows and outflows for the majority of the businesses are following (Dorel et al. 2007):

- the cash receipts from the sale of goods or services;
- payments to suppliers of goods and services;
- payment of wages and other employee benefits;
- purchase of inventory;
- payment of taxes and tax receivables;
- payments for utilities, rent, office supplies, etc.

Referring to the international accounting standards board, “the amount of cash flows arising from operating activities is a key indicator of the extent to which the operations of the entity have generated sufficient cash flows to repay loans, maintain the operating capability of the entity, pay dividends and make new investments without the recourse to external sources of financing” (International Accounting Standard 2010). This means that cash from operating activities shows the efficiency of company’s operations as well as the extent of self-financing capability.

An important point which analysts must consider is that cash flow from operations can include the diverse mix of transactions representing a variety of unusual events, what could make the analysis too difficult and less accurate. Therefore, it is suggested to include cash provided my normal operating activities only. (Carslaw et al. 1991)

Cash flows from investing activities reflect the company’s ability to obtain funds from the existing investments and to invest the existing funds into the new investments (Kusuma 1999). The good examples of such activities are (Dorel et al. 2007):

- the purchase and sale of securities;
- purchase of property, plant, and equipment;

- purchase of intangibles and other long-term assets;
- transactions from purchase and sale of debt instruments;
- receivables from the interests in joint ventures.

Important to note that cash advance payments for loans made to other parties and the receipts from these loans are included in the list of investing activities. Cash payments for and receipts from futures contracts, forward contracts, option contracts and swap contracts do belong to the investment transactions as well (International Accounting Standard 2010).

It is important to disclose these transactions in the investing activities, separating them from the operating activities because they are related only indirectly to the company's main operations. However, this topic is as much deep as it is important and requires further research.

Cash flows from financing activities are the third class of transactions in the statement. This component reflects the resources and uses of a firm's capital structure. It is important to disclose these cash flows separately in order to predict the future claims to cash flows that will arise from capital providers – the owners (if financed through equity), or the creditors in case of debt financing (International Accounting Standard 2010). The main examples of transactions belonging to financing activities are following (Dorel et al. 2008):

- cash receivables from the issuance of shares or other equity instruments;
- cash payments to the owners to acquire or redeem the company's shares;
- cash proceeds from getting long-term or short-term debts;
- cash repayments of amounts borrowed.

In order to analyze the financing activities, one should first identify the accounts related to financing and then explain how changes in those accounts affect company's cash flows. It is important to admit, that some of the activities do not affect cash, for example, equipment may be purchased with a note payable or land may be acquired by exchanging it to shares. Such transactions are non-cash and not reported in the statement of cash flows (International Accounting Standard 2010). As suggested by Dorel, the non-cash transactions should be disclosed separately, for example in notes to financial statements (Dorel et al. 2008).

The analysis helps to find out the following, as suggested by Palepu (Palepu et al. 1999):

- How strong is company's internal cash flow generation? What could be the reason for negative cash flow from the operation: growth, unprofitability, issues with working capital management?
- Is there any the ability of the company to meet its short-term obligations from the operating cash flow or should the operating potential be reduced?
- How big is the portion of cash invested in company's growth? Does the company rely on the internal or external financing of its growth?
- Is the payment of dividends financed from its internal cash flow or using the borrowed funds?

Thus, it is clearly seen how important is the proper cash flow statement analysis and how much information it provides to the professionals of the financial sphere.

1.2.3. Assessing solvency and liquidity

As it is evident from the theoretical background, one of the main objectives of cash flow analysis is the assessment of company's ability to meet its obligations towards investors, owners, and creditors, in other words, to be able to pay dividends and repay debts. Thus, the analysis must show if the company is able to generate enough cash to be solvent. In figure 1 author shows the cash flow ratios for assessment of solvency and liquidity of the companies.

$$\text{Cash Interest Coverage} = \frac{\text{CFFO} + \text{Interest Paid} + \text{Tax}}{\text{Interest Paid}}$$
$$\text{CashDebt Coverage (CDC)} = \frac{\text{CFFO} - \text{Total Dividends}}{\text{Debt}}$$
$$\text{Cash Dividend Coverage (CDiC)} = \frac{\text{CFFO}}{\text{Total Dividends}}$$

Figure 1. Cash flow ratios formulas for solvency and liquidity assessment

Source: Carslaw et al. (1991)

As per Carslaw, it is recommended to use these ratios to analyze company's ability to meet its obligations (Carslaw et al. 1991): cash interest coverage ratio, cash debt coverage and cash dividend coverage as shown in the formulas at Figure 1. As visible, the most important element is

cash flow from operating activities (CFFO), as it occurs in all three formulas. If the CFFO has the low value, then the company will not meet its obligations high debts and interest are high.

1.2.4. Quality of income

Another benefit that is drawn from the statement of cash flows is because it helps users to evaluate the quality of income by determination of reasons for distinctions between net income and associated cash receipts and payments (Carslaw et al. 1991). If one compares the income statement to the statement of cash flows, then the latter provides us more detailed information for analysis on the kind of inflows and their sources. One of the approaches suggested for analysis of quality of income is to use ratio which compares cash flows from operations to the operating income. This comparison will indicate the divergence between the reported earnings and the cash flows (Billah et al. 2015). Sometimes the discrepancy can be substantial between cash flows and earnings. It is so because the reported earnings very often include income or expenses without the current effect on cash, such as installment sales or depreciation. Therefore, there is an alternative measurement which excludes major non-cash items and results in a closer approximation of cash to income from operations. It is suggested to divide cash flow from operations before interest and taxes by income before interest, taxes, and depreciation. In the Figure 2 author shows the ratios proposed for use (Carslaw et al. 1991):

$$\text{Quality of Sales (QoS)} = \frac{\text{Cash from sales}}{\text{Sales}}$$
$$\text{Quality of Income (QoIn)} = \frac{\text{CFFO}}{\text{Operating Income}}$$

Figure 2. Cash flow ratios formulas for quality of income assessment

Source: Carslaw et al. (1991)

These ratios, shown in Figure 2 are used further in this paper for the analysis of the quality of sales and the quality of income of the chosen companies.

1.2.5. Cash flow returns

In order to see a clearer picture for the return of assets, analysts can use the ratios for the cash flow statement to segregate a specific data from it. Return is important to assess for all users of financial

statements because it shows how efficient assets are used by the enterprise to generate profit and potential return for the investors (Hossan et al. 2010). Also, based on the evidence from historical cash flows one can presume the future cash flows. The following ratios from the Figure 3 are suggested for calculations of returns (Carslaw et al. 1991):

$$\text{Cash flow per share (CFpS)} = \frac{\text{CFFO} - \text{preferred dividends}}{\text{Weighted common stock}}$$

$$\text{Cash return on assets (CRA)} = \frac{\text{CFFO before interest and tax}}{\text{Total assets}}$$

$$\text{Cash return on Debt on Equity (CRDA)} = \frac{\text{CFFO}}{\text{Stockholders Equity} + \text{Debt}}$$

$$\text{Cash return on Stockholders' Equity (CRSE)} = \frac{\text{CFFO}}{\text{Stockholders' Equity}}$$

Figure 3. Cash flow ratios formulas

Source: Carslaw et al. (1991)

Cash flow per share indicates cash amount available to common stockholders divided by the total number of common shares outstanding. It is important to note, that FASB does not allow to report cash flow per share in any financial statements, while this ratio is most frequently used by analysts (Carslaw et al. 1991).

Cash return on assets, cash return on debt and equity and cash return on stockholder's equity are the other valuable ratios that can be even more beneficial for analysis. As stated by Charles Carslaw and John Mills, these cash return measures provide guidance on the company's ability to generate superior future cash flows from invested funds, they must be taken over a period of time and compared to industry norms (Carslaw et al. 1991).

Thus, by this chapter, a solid theoretical basis was provided by the author for the further case analysis that helps in deriving valuable conclusions. However, this theoretical overview is only a small drop in the ocean of financial knowledge and further research will be much appreciated.

2.CASE STUDY „LINAS AGRO GROUP“ AND „AUGA GROUP“ COMPARISON OF THE TRADITIONAL STATEMENT ANALYSIS TO CASH FLOW RATIO ANALYSIS

2.1. The analysis of the companies Linas Agro and Auga Group

In this part of the work, the analysis of the companies Linas Agro Group and Auga Group is conducted with the use of different methods. First, the companies are briefly analyzed and compared with the use of trend analysis of the income statements, balance sheets and the statements of cash flow. Secondly, for more profound information, several selected traditional and cash flow ratios are brought up and compared. The purpose is to determine, describe and compare the financial situation and financial health of these two companies and also to find out which of the two approaches, either traditional ratio analysis or the cash flow ratio analysis, provides a better overview and insight of the financial state of the companies.

The companies chosen for the research are both located in Lithuania and are acting in the agriculture sector, being the competitors. They both are represented at Nasdaq Baltics. Auga Group was registered in the year 2003, while Linas Agro Group was started in the year 1995. Companies have different auditors: Auga Group is audited by “PricewaterhouseCoopers”, while Linas Agro Group is audited by “Ernst & Young Baltic”. It is important to note, that the financial year for Linas Agro Group ends on the 30th of June, while for Auga Group the year-end is on the 31st of December. However, this difference did not influence the financial analysis conducted. As it is visible from the first glance at the financial statements of the companies (Appendix 1 – Appendix 3), Linas Agro Group has bigger scale than Auga Group, if judged by the number of assets and liabilities. These two companies were chosen for comparison because among all other Lithuanian companies acting in the agriculture sector, these two are the closest to each other by the time of acting at the market and the market activity.

The trend analysis of the income statements of the companies is presented in Appendix 4 and is based on the data from the Appendix 1. In Table 1 the author shows the calculations sales, cost of sales and the gross profit with the use of trend analysis.

Table 1. Income statement trend analysis of Linas Agro Group

-	year 2017	year 2016	year 2015	year 2014	year 2013
Sales	110,48%	105,52%	98,29%	100,14%	100%
Cost of sales	111,17%	106,98%	99,04%	100,52%	100%
Gross profit	102,35%	88,13%	89,36%	95,55%	100%

Source: author's calculations based on data from Appendix 4

For Linas Agro trend analysis has shown that sales have gradually increased from 100% in 2013 to 110% in the year 2017, as visible from the Table 1 below. Cost of goods sold increased in the same proportion with sales from 100% to 111%. Gross Profit increased slightly by only 2% over the whole period from 2013 to 2017.

As it is visible from the Table 2 below, operating expense increased from 100% in the year 2013 to 150% in the year 2017, and also other expenses increased quite high from 100% in 2013 to 162% in 2017 what lead to the decrease in operating profit from 100% in 2013 to 40% in 2017, what is explicitly shown in profitability analysis further in this paper. Profit before tax decreased from 100% in 2013 to 34% in 2017. Net profit decreased from 100% in 2013 to 32% in 2017. Non-controlling interest decreased rapidly changing values from 100% in 2013 to the 3356% in 2014, then down to negative -212% in 2016 and then raised to 124% in 2017.

Table 2. Income statement trend analysis of Linas Agro Group

-	year 2017	year 2016	year 2015	year 2014	year 2013
Operating (expenses)	149,91%	147,70%	136,61%	130,61%	100%
Other income	19,80%	0,00%	31,06%	162,59%	100%
Other (expence)	162,45%	53,79%	66,16%	73,29%	100%
Operating profit	40,54%	24,21%	37,72%	88,42%	100%
Net gain or loss of cash flow hedges	-296,30%	566,67%	-81,48%	14,81%	100%
Net profit attributable	32,86%	14,38%	30,95%	91,51%	100%

Source: author's calculations based on data from Appendix 4

Similarly, there was a great increase in „net loss or gain of cash flow hedges“ from 100% in 2013 to 566% in 2016 and then it surprisingly went down to -296% in 2017. Total net profit attributable

decreased from 100% in 2013 to 32% in 2017. Generally, the analysis of Linas Agro Group trend analysis of income statement has shown the increase of all expenses and as a result the decrease of all profits.

In Table 3 the author shows calculations for sales, cost of sales and gross profit for the whole researched period.

Table 3. Income statement trend analysis of Auga Group

-	year 2017	year 2016	year 2015	year 2014	year 2013
Sales	207%	168%	201%	178%	100%
Cost of sales	227%	167%	219%	200%	100%
Gross profit	269%	190%	183%	134%	100%

Source: author's calculations based on data from Appendix 4

As seen from Table 3, The trend analysis of income statement of Auga Group showed that sales increased twice from 100% in 2013 to 207% in the year 2017, as shown in table 3. Costs of goods sold increased from 100% in 2013 to 227% in 2017. Gross profit increased from 100% in 2013 to 269% in 2017. As illustrated in the Table 4 below, operating expense increased from 100% in 2013 to 160% in 2017. Operating profit increased from 100% in 2013 to 290% in 2017. Profit before tax increased from 100% in 2013 to 784% in 2014 and 368% in 2017. Net profit increased from 100% in 2013 to 847% in 2014 and then dropped to 396% in 2017. Equity holders of the parent increased from 100% in 2013 to 1000% in 2014 and 460% in 2017. Net profit attributable increased from 100% in 2013 to 780% in 2015 and 559% in 2017.

Table 4. Income statement trend analysis of Auga Group

-	year 2017	year 2016	year 2015	year 2014	year 2013
Operating expenses	160%	125%	108%	98%	100%
Operating profit	290%	172%	359%	551%	100%
Profit before taxes	368%	142%	484%	784%	100%
Net profit	396%	179%	464%	847%	100%
Equity holders of the parent	460%	215%	555%	1000%	100%
Net profit attributable	559%	185%	780%	599%	100%

Source: author's calculations based on data from Appendix 4

Generally, the trend analysis of income statement for Auga Group has shown that the company controls its expenses well, and thus increasing its profits. All the expenses increased only by 1,5 in average for all the researched period, while the profits increased by 5 times in average, what is proving a good managerial approach to the expenses control.

The trend analysis of the statements of financial positions of the companies Linas Agro and Auga Group can be found in Appendix 5 and is based on the data from the Appendix 2. Starting with Linas Agro, the full analysis is presented in Appendix 5, The main points are illustrated in the Table 5 below. Total non-current assets are steadily growing from 100% in 2013 to 188% in 2017. However, if intangible assets are considered separately, then in 2016 one can see the rapid increase to 866%, as the company invested in patents and licenses. Also, in 2016 the non-current receivable has grown to 502%, what is actually a good sign for the company. The current assets indicators are steadily growing as well from 100% in 2013 to 134% in 2016. It is also visible from the table 5 that within the current assets section the prepayments have grown dramatically in 2015 to 332%. It is interesting to admit, that income tax receivable is moving towards the decrease with fluctuations and sharp picks of 1137% in the year 2014 and 503% in the year 2016. From the line “foreign currency translation reserve” it is visible a slight pick of 110% in the year 2014 and then strong decrease to 55% in the years 2015, 2016 and 2017. The total equity for Linas Agro Group has steadily increased from 100% in 2013 to 135% in the year 2017. Within the equity section, the line reserve from own share has shown the rapid growths to 399% in 2014, and 398% in 2015 with the later fall to 0% in the years 2016 and 2017.

Table 5. The trend analysis of the balance sheet of Linas Agro

-	year 2017	year 2016	year 2015	year 2014	year 2013
Intangible assets	465%	866%	302%	128%	100%
Non-current receivables	192%	502%	114%	204%	100%
Prepayments	207%	255%	332%	195%	100%
Income tax receivable	193%	503%	361%	1137%	100%
Reserve from own share	0%	0%	398%	399%	100%
Trade payables	0%	839%	4%	176%	100%

Source: author’s calculations based on data from Appendix 5

Coming to non-current liabilities, the indicators has grown from 100% in 2013 to 184% in 2017 with the pick of 240% in the year 2015. In the trade payables line, there was a rapid growth to

839% in 2016 with the further drop to 0% in 2017 what could mean that the company got rid of its trade payables. Current liability experienced a steady growth from 100% in 2013 to 165% in 2017. The current portion of non-current borrowing there was a pick of 350% in 2016, what means that the company borrowed additional funds that year. Total equity and liability line fully equals to total assets.

Coming to the trend analysis of balance sheet for Auga Group, it is fully represented in the Appendix 5, and Table 6 below illustrates the most important points.

Table 6. The trend analysis of the balance sheet of Auga Group

-	year 2017	year 2016	year 2015	year 2014	year 2013
Investments in subsidiaries	68600,00%	28600,00%	26700,00%	11100,00%	100%
Total current assets	372,40%	263,65%	211,57%	194,50%	100%
Retained earning	-249,40%	-75,89%	21,08%	103,66%	100%
Total equity	244,03%	215,79%	206,51%	167,24%	100%
Deferred income tax liabilities	36,88%	19,69%	175,17%	71,85%	100%
Total current liabilities	231,37%	138,89%	205,60%	200,06%	100%

Source: author's calculations based on data from Appendix 5

The non-current assets increased from 100% in the year 2013 to 155,07% in 2015 and dropped to 146% in 2017. The line investment and subsidiaries dramatically increase from 100% in 2013 to 68 600% in 2017. The reason is that in 2013 the number of investment in subsidiaries was only 1000 euro, as it was the collapse year, and then it raised to 686 000 euros respectively, as visible from the Appendix 2. Current assets show the increase from 100% in 2013 to 372% in 2017, what is a quite steep increase in fact. The total assets increased from 100% in 2013 to 183% in 2017. Total equity of Auga Group increased from 100% in 2013 to 244% in 2017. Retained earnings line increased from 100% in 2013 has dramatically dropped to -249% in 2017. Non-current liability section decreased from 100% in 2013 to 87% in 2017, what is a good sign for the company. However, the deferred income tax liability increased from 100% in 2013 to 175% in 2015 and then dropped to 36% in 2017 as a sigh of strengthening of the company. Current liability increased from 100% in 2013 to 231% in 2017. The current portion of restructured liability decreased from 100% in 2013 to 0% in 2015, 2016 and 2017 years. The total equity and liability line is exactly the same as total assets.

With the trend analysis of the cash flow statement which is based on the data from Appendix 3, it was more difficult, due to fact that the year 2013 was the year of collapse for Auga Group. The company was on the verge of bankruptcy and the cash flow statement showed it well. Therefore, if the year 2013 would be taken as a base year, as shown in Appendix 6, then the analysis could be less informative, as most of the indicators are absent or negative due to the cash flows less or equal to zero. For this reason, the year 2014 was chosen as a base year for Auga Group, and its full analysis is shown in Appendix 7 and will be described further.

Coming to the analysis of Linas Agro, the cash flow statement trend analysis for is represented in Appendix 6, with the base year 2013. Table 7 below shows the most important points.

Table 7. The trend analysis of the cash flow statement of Linas Agro Group

-	year 2017	year 2016	year 2015	year 2014	year 2013
Net cash from (to) operating activities	19%	74%	26%	9,72%	100%
Net cash flows from (to) investing activities	-427%	-398%	-397%	-486,93%	100%
Net cash flows from (to) financing activities	-439%	399%	-145%	-511,12%	100%
Net (decrease) increase in cash and cash equivalents	15%	2%	-14%	-9,54%	100%
Cash and cash equivalents at the beginning of the year	317%	307%	396%	455,33%	100%
Cash and cash equivalents at the end of the year	57%	44%	43%	55,16%	100%

Source: author's calculations based on data from Appendix 6

In the cash flow from operating activity section, the net profit line shows the decrease from the 100% in 2013 to the 33% in 2017. In the line "inventories write down to net releasable value" there is a huge drop from 100% in 2013 to -105% in 2017. Net cash flow from operating activity decreased from 100% in 2013 to 19% in 2017. Net cash flow from investing activity decreased from 100% in 2013 to -427% in 2017. Net cash flow from financing activity dropped from 100% in 2013 to -439% in 2017. The line "net decrease/increase in cash and cash equivalents" experienced the decrease in indications from 100% in 2013 to the 15% in 2017. The line "cash and cash equivalents at the beginning of the year" has raised from 100% in 2013 to 317% in 2017. The line "cash and cash equivalents at the year-end" decreased from 100% in 2013 to 57% in 2017.

Coming to the trend analysis of cash flow statement for Auga Group, the base year chosen was 2014, as the collapse year 2013 could not be that informative. The main points are illustrated in Table 8, while the whole analysis can be found in Appendix 7.

Table 8. The trend analysis of the cash flow statement of Auga Group

-	year 2017	year 2016	year 2015	year 2014	year 2013
Net cash from (to) operating activities	80,0%	15,8%	157,9%	100,0%	6,6%
Net cash flows from (to) investing activities	-177,1%	22,6%	-24,4%	100,0%	-644,8%
Net cash flows from (to) financing activities	-57,9%	44,2%	33,3%	100,0%	-108,9%
Net (decrease) increase in cash and cash equivalents	-114,0%	-268,4%	334,5%	100,0%	16,8%
Cash and cash equivalents at the beginning of the year	1078,4%	2658,8%	688,9%	100,0%	0,0%
Cash and cash equivalents at the end of the year	59,1%	156,5%	386,0%	100,0%	14,3%

Source: author's calculations based on data from Appendix 7

In the section cash flow from operating activity, the net profit line shows the decrease from 100% in 2014 to the 47% in 2017. The line “profit or loss on sales of current assets” there was a decrease from 100% in the year 2014 to -60% in 2017. The line change in the value of biological assets showed the drop from 100% in 2014 to -546% in 2017. The line net cash flow decreased from 100% in 2014 to 80% in 2017. The section net cash flow from investing activities also dropped from 100% in 2014 to -177% in 2017. Net cash flow from financing decreased from 100% in 2014 to -57% in 2017. Net increase or decrease in cash and cash equivalents line also experienced a slide down from 100% in 2014 to -114% in 2017. “Cash and cash equivalents at the beginning of the year” line surprisingly increased from 100% in 2014 to 1078% in 2017. However, the line “cash and cash equivalents at the end of the year” decreased from 100% in 2014 to 59% in 2017.

To get more profound information, it is needed to compare traditional ratios and the cash flow ratios in a single analysis. In the present paper let us call it the ratios ongoing viability analysis. Its outcomes are presented in Appendix 10 and the essence is described further. This analysis consists of two parts. The first part, solvency and liquidity analysis is aimed at determination of companies' financial health and ability to strongly stay away from the bankruptcy state. Solvency ratios show

companies' ability to pay their long-term obligations, while liquidity ratios indicate the ability to pay short-term obligations as well as selling its assets quickly to raise cash. This part includes five traditional ratios and five cash flow ratios, as shown in Table 9 below. The second part of the analysis is profitability analysis, which is aimed to reveal the companies' abilities to generate profits and also point out their ability to manage the costs. Profitability analysis includes five traditional ratios and five cash flow ratios as described on the right side of Table 9.

Table 9. List of traditional and cash flow ratios used for the analysis in this Bachelor's thesis

Solvency and liquidity analysis		Profitability analysis	
Traditional ratios	Cash flow ratios	Traditional ratios	Cash flow ratios
Current ratio	Operating cash flow	Return on equity	Cash return on assets
Quick ratio	Cash interest coverage	Return on assets	Cash return on debt and equity
Interest coverage	Capital expenditure	Return on capital	Cash return on stockholder's equity
Equity to assets	Investment to finance	Operating margin	Quality of sales
Debt to equity	Total debt	Profit margin	Quality of income

Source: author's calculations based on data from Appendix 7

For the traditional ratios listed in Table 9, all formulas and calculations are explicitly shown in Appendix 8. One can notice that activity ratios are also mentioned and calculated there. However, the author does not use them in ratios ongoing viability analysis because he is interested to compare only the cash flow ratios for solvency, liquidity, and profitability to the traditional ratios with the same features, to see the financial health and profitability of the companies. The listed in Table 9 cash flow ratios, their formulas and calculations are presented in Appendix 9. All these ratios are calculated based on the financial statements of the companies. The figures cover the period from the year 2013 to 2017. It is important to mention that Linas Agro Group has the fiscal year end 31st of June, while Auga Group uses the fiscal year end 31st of December.

Starting with the first part of the analysis, which indicates solvency and liquidity, let us take a look at the line of the current ratio from Table 10 for Linas Agro and Auga Group.

Table 10. Current ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	1,43	1,42	1,67	1,63	1,75
Auga Group	1,16	1,37	0,74	0,7	0,72

Source: author's calculations based on data from Appendix 10

The current ratio of Linas Agro was strongly over the 1.00, and in the year 2013, it reached the mark of 1,75. However, Auga Group's current ratio has been at the maximum 1,37 in the year 2016 and for the periods from 2013 till 2015 it was below 1.00, is equal to 0,72 in 2013, 0,70 in 2014, 0,74 in 2015.

Coming to quick ratio, Table 11 below shows that the indicators of Linas Agro are stronger than the ones of Auga Group. Linas Agro reached the maximum level in 2013 which equals 1,24. In the years 2014 and 2015 the indicator was over 1.00. However, in the period from 2016 to 2017, it has fallen down and was equal to 0,91 in 2016 and 0,96 in 2017.

Table 11. Quick ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	0,96	0,91	1,19	1,07	1,24
Auga Group	0,55	0,79	0,51	0,43	0,51

Source: author's calculations based on data from Appendix 10

For the whole period from 2013 to 2017 Auga Group had the indicators less than 1.00, reaching the maximum level in the year 2016 which equals to 0,79, and it has reached its minimum value in the year 2013 which was 0,43. This signaling not very good financial situation of the company because the ratio is far below the healthy level of 1.00 for the whole period.

As for interest coverage ratio, for Linas Agro Group it shows the good financial situation of the company, as it can be seen from Table 12. For all considered period indicators were over 3 points reaching its maximum of 12,6 in the year 2013 and with 3,2 minimum value in 2016.

Table 12. Interest coverage ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	4,5	3,2	4,6	9,3	12,6
Auga Group	3,4	1,9	4,7	9,3	-0,4

Source: author's calculations based on data from Appendix 10

On the other hand, the indicators of Auga Group are very unstable and volatile for all period researched. The company is at the collapse with negative interest coverage ratio – 0,4 in the year 2013 and the maximum value it managed to reach was 9,3 in the year 2014. For the period from 2015 to 2017 the indicators were fluctuating from 1,9 to 4,7. Generally, a good average interest

coverage most investors are looking for is at least 1,5 times. So, both companies can actually cover the interest, besides Auga Group in 2013. In that year the company was on its way to bankruptcy, however, it managed to increase its ability to pay out dramatically so that it was able to pay out not only interest but also the face value of the debt.

Equity to assets for both companies is stable and similar over the researched period. This means that there were no sufficient stakeholder investments in the companies. The Table 13 shows equity to assets calculations for both companies.

Table 13. Equity to assets ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	0,48	0,49	0,5	0,49	0,53
Auga Group	0,54	0,59	0,51	0,46	0,41

Source: author's calculations based on data from Appendix 10

As it is visible from Table 13, for Linas Agro Group the value was fluctuating from 0,53 in 2013 to 0,48 in 2017. Similarly to Auga Group, the minimum of 0,41 was in 2013 and the maximum value was 0,59 in 2016. These results are keeping the golden middle, with the average ratio around 0,5, what speaks for the rationality of assets policy of the companies, as the quantity of assets is strongly supported by the quantity of equity.

Coming to debt to equity ratio, as shown in Table 14, Linas Agro was generally stable throughout the years with maximum of 0,6 in 2015 and minimum indicator of 0,49 in 2016. For Auga Group it was vice versa. The indicators were highly unstable from the maximum 0,96 in 2013 to the minimum 0,4 in 2016.

Table 14. Debt to equity ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	0,48	0,49	0,5	0,49	0,53
Auga Group	0,54	0,59	0,51	0,46	0,41

Source: author's calculations based on data from Appendix 10

This means that the company has the unclear debt strategy, and also as it can be seen from the maximum value of 0.96 in the collapse year 2013, the company was mainly financed by equity

rather than debt, because due to the poor performance and the negative interest coverage the majority of the credit lines were closed for the company as creditors considered it as risky.

The next ratios to be analyzed are the cash flow ratios. The traditional measures do not address operating cash flows or cash interest coverage directly, but the cash flow ratios can be used to answer the questions about the companies' liquidity (Mills 1998). The solvency and liquidity cash flow ratios show if the companies are generating enough cash to cover their current liabilities, and how many times does cash flow from operations cover the interest expense.

The first from solvency and liquidity cash flow ratios as listed in Table 9 is operating cash flow ratio. As it is visible from the Table 15 below, operating cash flow line shows very bad results for both of the companies. Linas Agro had a maximum value of 0,316 in the year 2013 and the minimum value of 0,122 in 2016. Auga Group had a maximum value of 0,211 in 2015 and the minimum value 0,031 in 2016.

Table 15. Operating cash flow ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	0,131	0,122	0,146	0,208	0,316
Auga Group	0,095	0,031	0,211	0,138	0,048

Source: author's calculations based on data from Appendix 10

None of the companies managed to reach the value of 1 for the operating cash flow ratio and even were far below. This means that the companies were not generating enough cash to meet its current obligations and they had to find other sources to finance even normal daily operations.

Cash interest coverage of Linas Agro was strong for all the period and cash was in 8 times in excess of debt, reaching its maximum value of 13,986 in the year 2013, as visible from the Table 16 below.

Table 16. Cash interest coverage ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	8,743	8,775	8,123	9,822	13,986
Auga Group	3,01	1,41	6,25	5,43	1,44

Source: author's calculations based on data from Appendix 10

Auga Group was very unstable during the whole period, with the maximum value of 6,25 in 2015 and minimum value of 1,41 in 2016, what speaks for the weak and unstable ability of the company to cover the debt.

Turning to the capital expenditure ratio, Table 17 below shows that Linas Agro reached the maximum of 0,4 in the year 2013 and the minimum of 0,161 in the year 2016. Auga Group had a maximum value of 0,465 in the year 2015 and the minimum value of 0,033 in 2016.

Table 17. Capital expenditure ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	0,301	0,161	1,96	0,292	0,4
Auga Group	0,216	0,033	0,465	0,408	0,057

Source: author's calculations based on data from Appendix 10

Both of the companies showed bad results in this ratio, which means that they were not able to generate enough cash internally to even maintain plant and equipment. One of the reasons could be the growing investments in the acquisition of property throughout the years combined with either a small positive or, instead, a negative shift in cash for the years considered.

Comming to the investment to finance cash flow ratio, as visible from Table 18, Linas Agro had a good indicators from 2014 till 2017 years reaching the maximum of 3,898 in the year 2015, which means that the company invested much in PPE, what increased its investing cash flow, and at the same time had a big spending on repayment of loans what decreased the financing cash flow. Only one year was unfavorable for the company when the indicator felt below 1.00 reaching the minimum of 0,44 in the year 2013.

Table 18. Investment to finance ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	1,386	1,423	3,898	1,356	0,44
Auga Group	1,84	0,31	0,44	0,6	0,114

Source: author's calculations based on data from Appendix 10

Auga Group showed different results for this ratio being below 1.00 for the period from 2013 till 2016 years reaching the bottom mark of 0,114 in the year 2013, that means that the financing cash

flow was bigger than investing cash flow because Auga Group received quite big amounts of proceeds from loans. Only in 2017, the company went over 1.00 reaching its maximum of 1,84, that year the company acquired a bigger amount of PPE.

Total debt ratio to which credit-rating agencies and loan officers pay close attention was quite stable for Linas Agro Group. Table 19 shows that Linas Agro is reaching the maximum value of 0,577 in 2013 and the minimum value of 0,183 in 2015.

Table 19. Total debt ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	0,21	0,232	0,183	0,28	0,577
Auga Group	0,0121	0,031	0,191	0,133	0,02

Source: author's calculations based on data from Appendix 10

On the other hand, Auga Group was quite unstable for all periods, having the maximum of 0,191 in 2015 and the minimum of 0,0121 in 2017. For all the period it was fluctuating without any pattern, in the last years 2016-2017 the company was close to collapse.

Going concern analysis, which is also called profitability analysis is another important part of the financial scrutiny (Mills 1998). As listed in the right side of Table 9, profitability ratios are starting with five traditional ratios and being accompanied by the five cash flow ratios, they indicate the efficiency and profitability of the company.

The first ratio in the table is the return on equity. Both companies show vulnerability through the researched period. As visible from Table 20 below, Linas Agro shows the maximum value of 22,8% in the year 2013 and minimum value of 2,4% in the year 2016. Auga Group indications were also very unstable with the minimum value of -3,5% in 2013 and maximum of 22,7% in 2014.

Table 20. Return on equity ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	5,1%	2,4%	5,1%	17,1%	22,8%
Auga Group	6,2%	3,0%	8,9%	22,7%	-3,5%

Source: author's calculations based on data from Appendix 10

Return on equity shows how efficient the company uses the money of stakeholders to grow and generate profit. Thus, it is visible that for Auga Group in the year 2013 the money invested by stakeholders were bigger than the profits generated by the company and the company was in the collapse. However, the next year 2014 the company showed a dramatic increase in this ratio, which was caused by the increase in net profit almost by more than 10 times from -1197 thousands of euro in the year 2013 to 10134 thousands of euro in the year 2014, as the Income Statement in Appendix 1 shows. Equity in 2014 also grown what diminished a little bit the growth of this ratio, which could have shown even higher indication if equity level stayed the same. Linas Agro had a different situation. Its net profit was fluctuating throughout the years with the tendency to decrease from the year 2013 to 2016 and a growth in 2017. The ratio shows us the picks and troughs accordingly, additionally affected by the company's equity that was steadily growing throughout the years.

Return on assets ratio for Linas Agro shown instability for the whole period with the minimum 1,2% in the year 2016 and the maximum 12% in 2013, as shown in Table 21. As it is visible, there is a 10 times difference between indications.

Table 21. Return on assets ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	2,5%	1,2%	2,5%	8,7%	12,0%
Auga Group	3,5%	1,7%	4,3%	9,9%	-1,6%

Source: author's calculations based on data from Appendix 10

As the Income Statement in Appendix 1 shows, Linas Agro had a decrease in net profit combined with the stable growth of total assets throughout the researched period what affected the ratio. As for Auga Group, it was also unstable for the whole period from -1,6% in 2013 to 9,9% in the year 2014. This means that in the year 2013 during the collapse, the company's net profit did not cover its investments in assets at all.

Return on capital ratio for Linas Agro was showing the good results for all period with the maximum value of 18,5% in 2013 and the minimum value of 3,2% in 2016, according to author's calculations shown in Table 22.

Table 22. Return on capital ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linus Agro	5,1%	3,2%	4,8%	12,8%	18,5%
Auga Group	6,2%	3,6%	7,6%	15,4%	-0,7%

Source: author's calculations based on data from Appendix 10

Auga Group in its collapse year 2013 showed the minimum value of -0,7% and the maximum of 15,4% in the next year 2014. For the period from 2015 to 2017 the company's average return on capital was 5,5% what speaks for the leveling of the financial situation of the company. This ratio shows the ability of the company to transform investor's capital into profits and the value of the ratio decided by the investors yearly is 15-20%, which is considered to be excellent. None of the companies researched showed this result, so for both of them it can be concluded, that their results for this ratio are below average.

Operating margin ratio for the researched companies shows interesting results for the comparison, as visible from Table 23.

Table 23. Operating margin ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linus Agro	1,9%	1,2%	2,0%	4,5%	5,1%
Auga Group	13,5%	9,8%	17,1%	29,8%	9,6%

Source: author's calculations based on data from Appendix 10

The indicators of Linas Agro were from the maximum of 5,1% in 2013 to the minimum 1,2% in 2016. On the other hand, operating margin of Auga Group was on the pretty high level for all period researched. Even in the collapse year 2013 the value of the ratio was 9,6%, being the minimum for the period, and at the same time twice exceeding the maximum value of Linas Agro. In 2014 the indicators of Auga Group reached the maximum level of 29,8%. As the Income Statement shows, in the year 2014 Auga Group had the highest operating profit for all the researched period. And for the years from 2015 to 2017 the average operating margin constituted 13,5%, what speaks for the good and stable ratio. The ratio shows how much money from the net sales are left after all operating expenses are covered. The bigger the ratio, the better. So, this means that after all operating expenses paid, for every euro of income almost 30 cents are left for Auga Group, and only 5 cents are left for Linas Agro, as their maximum ratio values show. For

the whole period researched Linas Agro gives in to Auga Group only by the few indicators and operating margin ratio is one of them. And for Auga Group the strong operating margin means a lot because only due to its high indicators the company managed to avoid the collapse.

Profit margin ratio for Linas Agro was at maximum value of 4,4% in 2013 and at minimum 0,6% 2016. For the rest of the researched period, it was also at the low level. Auga Group only in the collapse 2013 year had a negative result of -5,1% and the maximum of 24,2% was reached in the next 2014 year. To compare the mediums, for the rest of the researched period Auga Group had an average 9%, which was four times higher than the 2,2% of the average for Linas Agro for the years 2014, 2015, 2017 having the medium results, according to the Table 24 calculations.

Table 24. Profit margin ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	1,3%	0,6%	1,4%	4,0%	4,4%
Auga Group	9,7%	5,4%	11,7%	24,2%	-5,1%

Source: author's calculations based on data from Appendix 10

This ratio directly measures how much profits are produced at a certain level of sales. And indirectly is shows how well the company manages its expenses relative to its net sales. So, the higher the ratio, the more successful the company is in decreasing its expenses or increasing its revenues. The extreme maximum 24,2% of Auga Group in 2014 can be explained by the good growth in net profit, which was the highest for the researched period, while the expenses were kept reasonable and at quite a medium level compared to other years, which speaks for good cost management. On the other hand, Linas Agro low profit margin ratio is determined by very high costs of sales, that are very close to the net sales amount, although the net sales of the company are high and steadily growing. This indicates that Linas Agro definitely needs to decrease the costs. This is the second ratio by which Auga Group shows the better result than Linas Agro.

Coming to cash flow ratios, cash return on assets for Linas Agro was quite stable for the researched period, as by Table 25 below.

Table 25. Cash return on assets ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linus Agro	0,047	0,044	0,044	0,075	0,103
Auga Group	0,04	0,022	0,077	0,085	0,088

Source: author's calculations based on data from Appendix 10

The ratio shows the maximum of 0,103 in the year 2013 and the minimum of 0,044 both in 2015 and 2016 years. For Auga Group the picture is a bit different. The company had maximum of 0,088 in 2013 and minimum of 0,022 in 2016. The average indicator for both companies for the researched period was 0,06, which shows the equality of both companies in this ratio.

The next cash flow ratio is called "cash return on debt and equity" and the author's calculations are represented in Table 26.

Table 26. Cash return on debt and equity ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linus Agro	0,124	0,121	0,105	0,156	0,247
Auga Group	0,045	0,09	0,077	0,05	0,007

Source: author's calculations based on data from Appendix 10

For Linus Agro it shows good and stable results for the whole period with the maximum of 0,247 in the year 2013 and minimum of 0,105 in the year 2015 and, as it is shown in Table 26. For Auga Group the situation is unstable and not good. The minimum of 0,007 is reached in the collapse year 2013 and the maximum of 0,077 is reached in 2015.

Cash return on stakeholders' equity ratio is shown in Table 27 for the both companies for the whole period researched.

Table 27. Cash return on stockholder's equity ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linus Agro	0,299	0,253	0,243	0,351	0,432
Auga Group	0,072	0,013	0,129	0,082	0,01

Source: author's calculations based on data from Appendix 10

Linus Agro shows stably high results for the whole period with the maximum of 0,432 in 2013 and the minimum of 0,243 in the year 2015. Auga Group shows vulnerability with the minimum of 0,01 in 2013 and the maximum of 0,129 in 2015.

Quality of sales ratio for Linas Agro shows unexpectedly low results for the whole period reaching the maximum of 0,044 in 2013 and the minimum of 0,06 in 2016. As for Auga Group, it vice versa, with the maximum of 0,236 in 2014 and minimum of 0,045 in 2016, as per the Table 28, what five times exceeds the maximum of Linas Agro.

Table 28. Quality of sales ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	0,013	0,006	0,014	0,042	0,044
Auga Group	0,097	0,045	0,129	0,236	0,054

Source: author's calculations based on data from Appendix 10

This ratio shows the ability of the company to generate cash from its sales, to be more precise, to turn its sales into cash. The higher the ratio, the better it is for the company. Thus, both of the researched companies experience problems with turning sales into cash. This could mean the inefficient or ineffective management of trade receivables.

Quality of income ratio, is described by the Table 29 below. For Linas Agro it shows stability for the period researched reaching the maximum of 0,05 in 2013 and the minimum of 0,028 in 2016. Auga Group is volatile from 0,013 minimum in 2013 to 0,168 in 2015. Nevertheless, the average results of Linas Agro are 0,126 what is bigger than average results for Auga Group 0,08.

Table 29. Quality of income ratio calculations

-	year 2017	year 2016	year 2015	year 2014	year 2013
Linas Agro	0,032	0,028	0,029	0,042	0,5
Auga Group	0,083	0,02	0,168	0,117	0,013

Source: author's calculations based on data from Appendix 10

The quality of income ratio higher than 1.00 usually indicates the high quality of earnings, so everything below this number shows the low quality of income. Both our companies are below this benchmark, and their income is of low quality. Namely, even for the maximum indicator of Linas Agro in 2013, each one euro of income was supported by only 50 cents of cash flow from operations.

2.2. Outcomes of analysis and recommendations

First, the solvency and liquidity analysis showed the following. In the current ratio, the indicators of Linas Agro were higher than the indicators of Auga Group. In the quick ratio, the indicators of Linas Agro was exceeding the indicators of Auga Group. In the interest coverage ratio the Linas Agro indicators were exceeding the indicators of Auga Group. However, speaking about equity to assets ratio, the picture was different. Auga Group indicators were exceeding the indicators of Linas Agro. In the debt to equity ratio Auga Group indicators were exceeding those of Linas Agro. Concluding from the solvency and liquidity analysis using the traditional ratios only we can see that Linas Agro is exceeding Auga Group by 3 indicators out of 5. As for the cash flow ratios for solvency and liquidity, for all five ratios Linas Agro was exceeding Auga Group.

To summarize solvency and liquidity part of the analysis, it can be concluded that according to 8 indicators out of 10 Linas Agro is stronger than Auga Group. This speaks for the financial health of Linas Agro and also proves financial unhealthiness of Auga Group. It can be concluded that Auga Group is on the verge of bankruptcy and if it will not change its solvency and liquidity indicators for better values then the problems with the financial health of the company will proceed and the company will occur in the pre-bankrupt state.

Second, the profitability analysis showed the following. According to traditional ratios, Auga Group was stronger than Linas Agro. Especially strongly, the indicators of Auga Group were exceeding those of Linas Agro in Operating Margin and Profit Margin. Average Profit Margin for Auga Group was 15,36% for all the researched period, while the average of Linas Agro was 2,94%, what is more than five times better for Auga Group than for Linas Agro.

Average Profit Margin for Auga Group for all researched period was 9,18% against 2,34% average for Linas Agro, what is approximately 4 times higher for Auga Group. Such indicators of profit margin and operating margin speak for the fact that management of Auga Group is working better at the increase of profitability and company's efficiency than the one of Linas Agro. Management of Auga Group better controls costs and expenses leading them to reduction, while Linas Agro experiences high costs regardless of its high sales, what decreases its cost efficiency. Linas Agro could work more on the decrease of costs and expenses what would bring the company even better results and make it more attractive to investors.

The profitability cash flow ratios give different results comparing to traditional ratios. In three indicators out of five, namely, cash return on assets, cash return on debt and equity and cash return on stakeholders' equity, the indicators of Linas Agro were better than those of Auga Group. Only by the quality of sales indicator, Auga Group was better than Linas Agro. Regarding the quality of income ratio, the interesting results occur. If to compare the average indicators of the companies for all the researched period, then Linas Agro having the average 0,126 will exceed the average 0,08 of Auga Group. However, if to analyze the indicators yearly, then Auga Group was exceeding Linas Agro in 3 years out of five.

Summing up the profitability analysis, it is visible that Auga Group is stronger than Linas Agro in 7 out of 10 ratios, what speaks for the better profitability of Auga Group than the one of Linas Agro. On the other hand, there is the difference in traditional ratios indications and the indications of cash flow ratios. In all 5 traditional ratios, Auga Group was stronger than Linas Agro, especially in profit margin and operating margin. However, in cash flow ratio calculations, there is the different picture. Only in quality of sales Auga Group was exceeding the indicators of Linas Agro, in the quality of income the companies were more or less equal, but for the indicators of cash return on assets, cash return on debt and equity and cash return on stakeholders equity the results, of Linas Agro were better than those of Auga Group.

Generally, concluding from the researched 10 indicators for the profitability analysis, in 7 out of 10 indicators the results of Auga Group are better than results of Linas Agro, what speaks for better management of Auga Group, especially from operating margin, profit margin and quality of sales perspective. It can be presumed that after the collapse year of 2013 the company either changed management or reconsidered strategy so that it stated to control the costs better and increase the profitability of the business.

As it can be concluded for both solvency and profitability analysis, from 20 indicators analyzed, it was found out that Linas Agro is exceeding Auga Group by 11 indicators out of 20. Especially it is visible in the solvency and liquidity part of the analysis. However, Auga Group is dominating in profitability analysis.

Thus, the analysis showed that Auga Group is closer to bankruptcy. Linas Agro instead, has good indicators of financial health. This research also found the problems in cost management of Linas Agro, this area can be further improved by the company. As for Auga Group, regardless of the fact that the company managed to avoid bankruptcy in 2013, it still has the problems with the financial

health according to ratios. It is vulnerable and is continuously balancing on the verge of collapse throughout the whole period researched. This research has shown that management was more concentrated on the cost and expenses control, but put less attention on the solvency and liquidity indicators' strengthening. Their current focus on cost management does not solve the problem of pre-bankruptcy state what can lead to bankruptcy in case of unfavourable market conditions, because the company will not be able to pay its debts and as a result will lose reputation, spoil its credit history and lose any opportunities of external financing, as it has already been in 2013.

SUMMARY

This Bachelor's thesis has completed its aim to provide an overview of the methods and show their application on the practical example. The author believes, that the importance of such study is high, as it describes the methods, applies them and shows the outcomes.

Both methods: the traditional financial analysis and the cash flow ratios analysis were introduced, described and represented in the theoretical part of the study. Then, they were applied to the analysis of two Lithuanian companies: Linas Agro and Auga Group, and showed their financial situations from the perspective of both methods.

The author used the following financial statements of the companies for the period from the year 2013 to the year 2017: income statements, statements of financial position, cash flow statements. The traditional financial analysis was represented by trend analysis and ratio analysis applied to the data from the income statements and the balance sheets. The cash flow ratio analysis was represented by the selection of ratios and applied to the data from the cash flow statements of the companies. The analysis was divided on solvency and liquidity part, consisting of 5 traditional ratios and 5 cash flow ratios, and the profitability part including 5 traditional ratios and 5 cash flow ratios.

In this Bachelor's thesis the author found the answers on the important questions stated in the introduction of this study. And the findings are following.

1. Based on the case study analysis of Linas Agro and Auga Group, the author concluded that the cash flow statement ratio analysis provides a better overview of the companies' financial situation, especially of the financial health of the companies, because in the cash flow analysis there is less room for manipulation of the ratio indicators (as it is based on cash inflows and outflows), while in the traditional ratio analysis one can manipulate the final indicators (for example changing the volume of one of the components of the ratio).

2. The analysis methods applied to the cases of Linas Agro and Auga Group have shown that Linas Agro has stronger financial health than Auga Group, it has stronger liquidity and solvency. On the other hand, Auga Group is stronger in profitability. Auga Group is closer to bankruptcy, because the liquidity is low and it did not improve much from the collapse year 2013 till the year 2017. To improve Linas Agro further, the author concluded that the company should work on cost management. As for Auga Group, which has a good cost management approach and for this reason high profitability, this company should work more on the improvement of its ability to fulfill its short-term and long-term financial obligations in towards creditors and investors.
3. As the author concluded from the study performed, the cash flow ratio analysis should be preferred and prioritized. However, it is much better to combine it with traditional financial analysis, because then the picture of companies' financial state can be considered from different perspectives. However, each finance and accounting professional is free to choose, which method of analysis to use and how to combine them.

These conclusions can be applied by researchers for the further investigation of the cash flow statement analysis. Also, the author suggests the application of these outcomes for auditors, investors and financial management to the analysis of the companies as prospective investments. It will also be helpful to investigate the possible fields of improvement for the company.

Conducting this thesis, the author found out that the field of cash flow statement analysis is less investigated than the traditional financial analysis field. There is just a few information regarding the cash flow ratios interpretation, as well as on the application of this analysis to business practice. Therefore, the author decided to continue to investigate this topic. This Bachelor's thesis is a beginning of series of empirical works focusing on the investigation of the cash flow statement analysis.

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APPENDICES

Appendix 1. Income statements Linas Agro and Auga Group

	Linas Agro Group				
Thouthands of Eur	2017	2016	2015	2014	2013
SALES	644952	615959	573770	584557	583754
Cost of sales	-598676	-576112	-533366	-541358	-538541
Gain (loss) on changes fair values of biological assets					
GROSS PROFIT	46276	39847	40404	43199	45213
Operating (expenses)	-34077	-33574	-31053	-29688	-22731
Negative goodwill					
Revaluation of investment property					
Other income	1655	0	2596	13588	8357
Other (expenche)	-1800	-596	-733	-812	-1108
OPERATING PROFIT	12054	7198	11214	26287	29731
Income from financing activities	902	529	598	606	483
(Expenses) from financing activities	-2911	-2445	-2568	-2888	-2501
Share of profit of joint ventures					1153
Share of profit of associates					21
PROFIT BEFORE TAXES	10045	5282	9244	24005	28887
Income taxes	-1637	-1364	-1272	-365	-3031
NET PROFIT	8408	3918	7972	23640	25857
NET PROFIT ATTRIBUTABLE TO					
Equity holders of the parent	8320	4069	7513	21257	25786
Non-controlling interest	88	-151	459	2383	71
	8408	3918	7972	23640	25857
Basic and diluted earning per share	0,05	0,03	0,05	0,13	0,16
Other comprehensive income					
Net (loss) gain on cash flow hedges	80	-153	22	-4	-27
Net other comprehensive income (loss) to be reclassified	80	-153	22	-4	
Remeasurement gain (losses) on defined benefit plans		-51			
Net other comprehensive income (loss) not to be reclassified		-51			
Other comprehensive income	80	-204			
Total comprehensive income, after tax	8488	3714	7994	23636	25830
Total comprehensive income attributable to					
The shareholders of the Company	8400	3865	7535	21253	25759
Non-controlling interest	88	-151	459	2383	71
	8488	3714	7994	23636	25830

Appendix 1 continued

	Auga Group				
Thouthands of Eur	2017	2016	2015	2014	2013
SALES	48784	39630	47425	41950	23592
Cost of sales	-38012	-27985	-36735	-33555	-16779
Gain (loss) on changes fair values of biological assets	4477	-868	-289	-820	-1142
GROSS PROFIT	15249	10777	10401	7575	5671
Operating (expenses)	-8989	-7014	-6069	-5539	-5628
Negative goodwill				8866	
Revaluation of investment property			3339		1440
Other income	306	127	458	1586	784
Other (expen)ce)					
OPERATING PROFIT	6566	3890	8129	12488	2267
Income from financing activities					
(Expenses) from financing activities	-1908	-2098	-2001	-2573	-3531
Share of profit of joint ventures					
Share of profit of associates					
PROFIT BEFORE TAXES	4658	1792	6128	9915	-1265
Income taxes	83	353	-569	219	68
NET PROFIT	4741	2145	5559	10134	-1197
NET PROFIT ATTRIBUTABLE TO					
Equity holders of the parent	4652	2173	5618	10120	-1012
Non-controlling interest	89	-28	-59	14	-185
	4741	2145	5559	10134	1197
Basic and diluted earning per share			0,03	0,06	-0,01
Other comprehensive income					
Net (loss) gain on cash flow hedges	52	49	-174	-92	
Net other comprehensive income (loss) to be reclassified	4808	962	8468		-1675
Remeasurement gain (losses) on defined benefit plans					
Net other comprehensive income (loss) not to be reclassified					
Other comprehensive income					
Total comprehensive income, after tax	-240	-48	-779		
Total comprehensive income attributable to					
The shareholders of the Company	9272	3136	13133	10028	-1491
Non-controlling interest	89	-28	-59	14	-185
	9361	3108	13074	10042	-1676

Source: the financial statements of Linas Agro and Auga Group for the years 2013-2017

Appendix 2. Balance Sheet Linas Agro and Auga Group

	LNA Group				
Thothands of EUR	30.06.2017	30.06.2016	30.06.2015	30.06.2014	30.06.2013
Non-current assets					
Intangible assets	1331	2478	865	366	286
PPE	117946	112215	103975	101882	56134
Investment property	1408	1359	1523	1559	3408
Long term receivables					
Animals and livestock	8010	7578	8127	7303	5551
Biological assets					
Investments in subsidiaries					
Investment into joint ventures					
Other investments	0	0	0	0	67
Prepayments for financial assets	17	17	17	17	2535
Non-current receivables	1524	3987	903	1624	795
Non-current receivables from rel. parties		800	1175	347	726
Total non-current financial assets	1541	4804	2095	1988	4123
Non-current prepayment	1784	0	0	0	0
Deferred income tax assets	1982	2137	1952	2185	1814
TOTAL NON-CURRENT ASSETS	134002	130571	118537	115283	71315
CURRENT ASSETS					
Crops	14836	13813	14525	14219	11546
Livestock	0	0	1997	1953	0
Poultry	2164	1758	0	0	0
Biological assets					
Inventories	72026	71952	56378	67644	47918
Prepayments	5358	6616	8593	5064	2592
Account receivable					
Trade receivable	101928	93420	96718	89094	78170
Receivables from related parties	470	18	0	265	4433
Income tax receivable	255	664	477	1501	132
Other account receivable	12086	5144	10066	6822	8152
Total account receivable	114739	99246	107261	97682	90886
Derivative financial instruments	28	711	0	0	0
Other current assets	772	905	519	627	616
Cash and cash equivalent	8897	6901	6680	8632	9783
TOTAL CURRENT ASSETS	218847	201902	195953	195821	163341
TOTAL ASSETS	352849	332473	314490	311104	234656

Appendix 2 continued

EQUITY AND LIABILITIES					
Equity attributable to Eq. holders of parent					
Share capital	46093	46093	46032	46032	45411
Share premium	23038	23038	23038	23038	79545
Legal reserve	3186	2936	2704	2360	2243
Reserve from own share	0	0	1819	1825	457
Own share	-453	-455	-457	-457	-451
Foreined curency translation reserve	-22	-22	-22	-44	-40
Cash flow hedge reserve	-73	-153			
Retained earning	95177	88310	83336	76549	53606
Total Eq. attributable to Eq. holders of parent	166946	159747	156450	149303	123953
Non- controllling interest	2271	2214	1817	2790	1075
TOTAL EQUITY	169217	161961	158267	152093	125028
LIABILITIES					
NON-CURRENT LIABILITIES					
Grants and subsidies	6236	6289	6889	6950	4100
Non-current borrowings	20401	16741	28917	28033	9110
Finanance lease obligations	1076	1228	1817	1682	1540
Trade payables	0	1553	8	325	185
Deferred income tax liabilities	1906	1555	1256	1529	1223
Other non-current liabilities	453	353	266	194	167
Derivative financial instruments	25	120	0	0	0
TOTAL NON-CURRENT LIABILITIES	30097	27839	39153	38713	16325
CURRENT LIABILITIES					
Current portion of non-current borrowing	11061	19943	7125	6283	5695
Current portion of finance lease obligations	559	933	774	810	699
Current borrowings	77494	58092	64256	63058	41895
Curent portion deferred grant income					
Trade payables	44152	43239	27789	32203	27404
Payables to related parties	0	1514	130	2160	915
Income tax payable	937	340	306	472	2039
Derivative financial instruments	1395	60	581	252	797
Other current liabilities	17937	18552	16109	15060	13859
Current portion of restructured liabilities					
TOTAL CURENT LIABILITIES	153535	142673	117070	120298	93303
TOTAL EQUITY AND LIABILITIES	352849	332473	314490	311104	234656

Appendix 2 continued

	Auga Group				
Thothands of EUR	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013
Non-current assets					
Intangible assets	871	19	55	206	503
PPE	87345	76262	89634	80784	41536
Investment property			9636	8940	20247
Long term receivables	3497	2599	377	0	0
Animals and livestock					
Biological assets	8029	6858	6637	6730	5758
Investments in subsidiaries	686	286	267	111	1
Investment into joint ventures					
Other investments					
Prepayments for financial assets					
Non-current receivables					
Non-current receivables from rel. parties					
Total non-current financial assets					
Non-current prepayment					
Deferred income tax assets	683	669	255	147	555
TOTAL NON-CURRENT ASSETS	101111	86693	106861	96918	68912
CURRENT ASSETS					
Crops					
Livestock					
Poultry					
Biological assets	11447	5223	4067	5920	4475
Inventories	26369	15157	8856	10300	4005
Prepayments					
Account receivable					
Trade receivable	11560	13367	11414	8839	3170
Receivables from related parties					
Income tax receivable					
Other account receivable					
Total account receivable					
Derivative financial instruments					
Other current assets					
Cash and cash equivalent	623	1650	4068	1054	1776
TOTAL CURRENT ASSETS	49999	35397	28405	26113	13426
TOTAL ASSETS	151110	122090	135266	123031	82338

Appendix 2 continued

EQUITY AND LIABILITIES					
Equity attributable to Eq. holders of parent					
Share capital	54351	54351	54351	54279	24235
Share premium	738	7890	7890	7890	7040
Legal reserve	579	579	579	579	571
Reserve from own share	8839	4179	7689	0	8187
Own share					
Foreined curenry translation reserve	-165	-217	-266	-92	0
Cash flow hedge reserve					
Retained earning	16967	5163	-1434	-7052	-6803
Total Eq. attributable to Eq. holders of parent	81309	71945	68809	55604	33230
Non- controllling interest	382	293	321	380	246
TOTAL EQUITY	81691	72238	69130	55984	33476
LIABILITIES					
NON-CURRENT LIABILITIES					
Grants and subsidies	2708	3286	3852	3824	4003
Non-current borrowings	15655	16938	18804	21354	11230
Finanance lease obligations	7319	3427	2515	3171	3232
Trade payables					
Non-current payables to related parties					
Deferred income tax liabilities	811	433	3852	1580	2199
Other non-current liabilities	0	0	0	0	9645
Derivative financial instruments					
TOTAL NON-CURRENT LIABILITIES	26493	24084	27991	29929	30309
CURRENT LIABILITIES					
Current portion of non-current borrowing	4445	3585	17291	14578	4827
Current portion of finance lease obligations	2503	2690	1991	1586	1343
Current borrowings	13633	5350	6077	2317	325
Curent portion deferred grant income	550	566	663	0	0
Trade payables	15494	8796	8473	10375	3388
Payables to related parties					
Income tax payable	0	0	0	520	0
Derivative financial instruments					
Other current liabilities	6301	4781	3650	3221	2706
Curent portion of restructured liabilities	0	0	0	4521	5964
TOTAL CURENT LIABILITIES	42926	25768	38145	37118	18553
TOTAL EQUITY AND LIABILITIES	151110	122090	135266	123031	82338

Source: the financial statements of Linas Agro and Auga Group for the years 2013-2017

APPENDIX 3. Statements of Cash Flow Linas Agro and Auga Group

Thothands of EUR	LNA Group				
	30.06.2017	30.06.2016	30.06.2015	30.06.2014	30.06.2013
Cash flow from operating activities					
Net profit	8408	3918	7972	23640	25857
Adjustment for non-cash items:					
Depreciation and amortisation	10709	10537	9598	8364	5478
Share of profit of associates and joint ventures					-1174
Subsidies amortisation	-922	-856	-1003	-854	-515
(Gain) on disposal of PPE	-310	-321	-116	-282	-670
Change in impairment of PPE and investment property		-7	-25	25	-28
(Profit) loss on saless of non-current assets					
(Gain) on disposal of subsidiary				-1618	
(Gain) on disposal of other investment		-3	-359		-10
(Gain) from acquisition of subsidiary				-6407	-7276
Change in allowance and write-offs for receivables and prepayments	-600	-251	753	2678	1063
Revaluation of investment property					
Inventories write down to net realisable value	-64	976	20	283	61
Change in allowance for goodwill	1121				
Change in accrued income and expenses	550	486	343	1121	2272
Change in fair value of biological assets	-2484	160	-3464	479	-1423
Liabilities write off		-4	-24	-4096	
Change in deferred income tax	506	-180	-39	-1449	11
Current income tax expenses	1145	1546	1272	1815	3019
Expenses (income) from change in fair value of financial instruments	540	-543	272	-1159	313
Change in provision for onerous contracts				-16	16
Divident (income)			-48	-126	-44
Interest (income)	-868	-529	-598	-606	-483
Interest expenses	-2872	2445	2567	2888	2501
Net finance cost					
Impairment of accounts receivable					
Grants related to assets, recognized as income					
	20603	17372	17121	24680	29448
Change in working capital:					
Decrease in biological assets	1061	3096	2950	-144	2897
(Increase) decrease in inventories	1511	-15098	11617	-10245	7007
Decrease (increase) in prepayments	-553	2147	-3733	-1489	2705
(Increase) decrease in trade and other account receivable	-13366	4057	-6540	1761	-20521
(Increase) decrease in restricted cash	199	-449	-2	9	546
Increase (decrease) in trade and other accounts payable	-2444	13020	-11887	-8714	-1508
Interest received, gross					

Appendix 3 continued

Interest paid, gross					
Income tax (paid)	-1037	-1251	-1612	-2866	-4461
Net cash from (to) operating activities	5974	22894	7914	2992	30771
Cash flows from (to) investing activities					
Cash acquired together with subsidiaries					
(Acquisition) of intangible assets, PPE and investment property	-17281	-14055	-12338	-8039	-6603
Proceeds from sale of intangible assets, PPE and investment property	1574	2144	497	1618	235
Acquisition of subsidiaries, including payments for subsidiaries	-1545	-3491	-200	-10685	-249
Disposal of assets held for dsale					571
Purchase of investment (KTG Group)					
Purchase of account receivable (KTG Group)					
Acquisition of other investment				-26	
Proceeds from disposals of other investments			434		-10852
Disposal of subsidiaries			201	1313	19931
Increase in share capital of subsidiaries					
Loans (granted)	-154	-1293	-3911	-5257	-606
Repayment of granted loans	2255	3106	1653	4214	408
Interest received	868	273	348	458	480
Divident received			48	126	28
Net cash flows from (to) investing activities	-14283	-13316	-13268	-16278	3343
Cash flows from (to) financing activities					
Disposal (acquisition) of available for sale investments					
Proceeds from loans	63771	59943	83718	94071	37528
(Repayment) of loans	-49591	-65465	-74806	-76490	-36123
Finance lease (payments)	-629	-1028	-1017	-1097	-339
Grant received	858	620			
Interest (paid)	-2872	-2169	-2588	-2651	-3158
Dividents (paid) to non-controlling shareholders	-26	-15	-10	-37	-6
Dividents (paid)	-1202	-1202	-1448	-1736	
Acquisition of non-controlling interest	-4	-41	-447	-59	-249
Net cash flows from (to) financing activities	10305	-9357	3402	12001	-2348
Net (decrease) increase in cash and cash equivalents	1996	221	-1952	-1285	13470
Cash and cash equivalents at the beginning of the year	6901	6680	8632	9917	2178
Cash and cash equivalents at the end of the year	8897	6901	6680	8632	15648

Source: the financial statements of Linas Agro and Auga Group for the years 2013-2017

APPENDIX 4. Trend analysis of Income Statements of Linas Agro and Auga Group

ITEM	LNA Group				
	TREND ANALYSIS				
	2017	2016	2015	2014	2013
SALES	110,48%	105,52%	98,29%	100,14%	100%
Cost of sales	111,17%	106,98%	99,04%	100,52%	100%
Gain (loss) on changes fair values of biological assets					
GROSS PROFIT	102,35%	88,13%	89,36%	95,55%	100%
Operating (expenses)	149,91%	147,70%	136,61%	130,61%	100%
Negative goodwill					
Revaluation of investment property					
Other income	19,80%	0,00%	31,06%	162,59%	100%
Other (expense)	162,45%	53,79%	66,16%	73,29%	100%
OPERATING PROFIT	40,54%	24,21%	37,72%	88,42%	100%
Income from financing activities	186,75%	109,52%	123,81%	125,47%	100%
(Expenses) from financing activities	116,39%	97,76%	102,68%	115,47%	100%
Share of profit of joint ventures	0,00%	0,00%	0,00%	0,00%	100%
Share of profit of associates	0,00%	0,00%	0,00%	0,00%	100%
PROFIT BEFORE TAXES	34,77%	18,29%	32,00%	83,10%	100%
Income taxes	54,01%	45,00%	41,97%	12,04%	100%
NET PROFIT	32,52%	15,15%	30,83%	91,43%	100%
NET PROFIT ATTRIBUTABLE TO					
Equity holders of the parent	32,27%	15,78%	29,14%	82,44%	100%
Non-controlling interest	123,94%	212,68%	646,48%	3356,34%	100%
	32,52%	15,15%	30,83%	91,43%	100%
Basic and diluted earning per share	31,25%	18,75%	31,25%	81,25%	100%
Other comprehensive income					
Net (loss) gain on cash flow hedges	296,30%	566,67%	-81,48%	14,81%	100%
Net other comprehensive income (loss) to be reclassified					
Remeasurement gain (losses) on defined benefit plans					
Net other comprehensive income (loss) not to be reclassified					
Other comprehensive income					
Total comprehensive income, after tax	32,86%	14,38%	30,95%	91,51%	100%
Total comprehensive income attributable to					
The shareholders of the Company	32,61%	15,00%	29,25%	82,51%	100%
Non-controlling interest	123,94%	212,68%	646,48%	3356,34%	100%
	32,86%	14,38%	30,95%	91,51%	100%

Appendix 4 continued

ITEM	Auga Group				
	TREND ANALYSIS				
	2017	2016	2015	2014	2013
SALES	207%	168%	201%	178%	100%
Cost of sales	227%	167%	219%	200%	100%
Gain (loss) on changes fair values of biological assets	-392%	76%	25%	72%	100%
GROSS PROFIT	269%	190%	183%	134%	100%
Operating (expenses)	160%	125%	108%	98%	100%
Negative goodwill					
Revaluation of investment property	0%	0%	232%	0%	100%
Other income	39%	16%	58%	202%	100%
Other (expen)ce					
OPERATING PROFIT	290%	172%	359%	551%	100%
Income from financing activities					
(Expenses) from financing activities	54%	59%	57%	73%	100%
Share of profit of joint ventures					
Share of profit of associates					
PROFIT BEFORE TAXES	368%	142%	484%	784%	100%
Income taxes	122%	519%	-837%	322%	100%
NET PROFIT	396%	179%	464%	847%	100%
NET PROFIT ATTRIBUTABLE TO					
Equity holders of the parent	460%	215%	555%	1000%	100%
Non-controlling interest	-48%	15%	32%	-8%	100%
	396%	179%	464%	847%	100%
Basic and diluted earning per share	0%	0%	300%	600%	100%
Other comprehensive income					
Net (loss) gain on cash flow hedges					
Net other comprehensive income (loss) to be reclassified	287%	57%	506%	0%	100%
Remeasurement gain (losses) on defined benefit plans					
Net other comprehensive income (loss) not to be reclassified					
Other comprehensive income					
Total comprehensive income, after tax					
Total comprehensive income attributable to					
The shareholders of the Company	622%	210%	881%	673%	100%
Non-controlling interest	48%	15%	32%	8%	100%
	559%	185%	780%	599%	100%

Source: author's calculations

APPENDIX 5. Trend analysis of Statements of Financial Position of Linas Agro and Auga Group

ITEM	LNA Group				
	TREND ANALYSIS				
	30.06.17	30.06.16	30.06.15	30.06.14	30.06.13
Non-current assets					
Intangible assets	465%	866%	302%	128%	100%
PPE	210%	200%	185%	181%	100%
Investment property	41%	40%	45%	46%	100%
Long term receivables					100%
Animals and livestock	144%	137%	146%	132%	100%
Biological assets					
Investments in subsidiaries					
Investment into joint ventures					
Other investments	0%	0%	0%	0%	100%
Prepayments for financial assets	1%	1%	1%	1%	100%
Non-current receivables	192%	502%	114%	204%	100%
Non-current receivables from rel. parties	0%	110%	162%	48%	100%
Total non-current financial assets	37%	117%	51%	48%	100%
Non-current prepayment					
Deferred income tax assets	109%	118%	108%	120%	100%
TOTAL NON-CURRENT ASSETS	188%	183%	166%	162%	100%
CURRENT ASSETS					
Crops	128%	120%	126%	123%	100%
Livestock					
Poultry					
Biological assets					
Inventories	150%	150%	118%	141%	100%
Prepayments	207%	255%	332%	195%	100%
Account receivable					
Trade receivable	130%	120%	124%	114%	100%
Receivables from related parties	11%	0%	0%	6%	100%
Income tax receivable	193%	503%	361%	1137%	100%
Other account receivable	148%	63%	123%	84%	100%
Total account receivable	126%	109%	118%	107%	100%
Derivative financial instruments					
Other current assets	125%	147%	84%	102%	100%
Cash and cash equivalent	91%	71%	68%	88%	100%
TOTAL CURRENT ASSETS	134%	124%	120%	120%	100%
TOTAL ASSETS	150%	142%	134%	133%	100%

Appendix 5 continued

EQUITY AND LIABILITIES					
Equity attributable to Eq. holders of parent					
Share capital	102%	102%	101%	101%	100%
Share premium	29%	29%	29%	29%	100%
Legal reserve	142%	131%	121%	105%	100%
Reserve from own share	0%	0%	398%	399%	100%
Own share	100%	101%	101%	101%	100%
Foreined curency translation reserve	55%	55%	55%	110%	100%
Cash flow hedge reserve					
Retained earning	178%	165%	155%	143%	100%
Total Eq. attributable to Eq. holders of parent	135%	129%	126%	120%	100%
Non- controllling interest	211%	206%	169%	260%	100%
TOTAL EQUITY	135%	130%	127%	122%	100%
LIABILITIES					
NON-CURRENT LIABILITIES					
Grants and subsidies	152%	153%	168%	170%	100%
Non-current borrowings	224%	184%	317%	308%	100%
Finanance lease obligations	70%	80%	118%	109%	100%
Trade payables	0%	839%	4%	176%	100%
Non-current payables to related parties					
Deferred income tax liabilities	156%	127%	103%	125%	100%
Other non-current liabilities	271%	211%	159%	116%	100%
Derivative financial instruments					
TOTAL NON-CURRENT LIABILITIES	184%	171%	240%	237%	100%
CURRENT LIABILITIES					
Current portion of non-current borrowing	194%	350%	125%	110%	100%
Current portion of finance lease obligations	80%	133%	111%	116%	100%
Current borrowings	185%	139%	153%	151%	100%
Curent portion deferred grant income					
Trade payables	161%	158%	101%	118%	100%
Payables to related parties	0%	165%	14%	236%	100%
Income tax payable	46%	17%	15%	23%	100%
Derivative financial instruments	175%	8%	73%	32%	100%
Other current liabilities	129%	134%	116%	109%	100%
Curent portion of restructured liabilities					
TOTAL CURENT LIABILITIES	165%	153%	125%	129%	100%
TOTAL EQUITY AND LIABILITIES	150%	142%	134%	133%	100%

Appendix 5 continued

ITEM	Auga Group				
	TREND ANALYSIS				
	31.12.17	31.12.16	31.12.15	31.12.14	31.12.13
Non-current assets					
Intangible assets	173,16%	3,78%	10,93%	40,95%	100%
PPE	210,29%	183,60%	215,80%	194,49%	100%
Investment property	0,00%	0,00%	47,59%	44,15%	100%
Long term receivables					
Animals and livestock					
Biological assets	139,44%	119,10%	115,27%	116,88%	100%
Investments in subsidiaries	68600,00%	28600,00%	26700,00%	11100,00%	100%
Investment into joint ventures					
Other investments					
Prepayments for financial assets					
Non-current receivables					
Non-current receivables from rel. parties					
Total non-current financial assets					
Non-current prepayment					
Deferred income tax assets	123,06%	120,54%	45,95%	26,49%	100%
TOTAL NON-CURRENT ASSETS	146,72%	125,80%	155,07%	140,64%	100%
CURRENT ASSETS					
Crops					
Livestock					
Poultry					
Biological assets	255,80%	116,72%	90,88%	132,29%	100%
Inventories	658,40%	378,45%	221,12%	257,18%	100%
Prepayments					
Account receivable					
Trade receivable	364,67%	421,67%	360,06%	278,83%	100%
Receivables from related parties					
Income tax receivable					
Other account receivable					
Total account receivable					
Derivative financial instruments					
Other current assets					
Cash and cash equivalent	35,08%	92,91%	229,05%	59,35%	100%
TOTAL CURRENT ASSETS	372,40%	263,65%	211,57%	194,50%	100%
TOTAL ASSETS	183,52%	148,28%	164,28%	149,42%	100%

Appendix 5 continued

EQUITY AND LIABILITIES					
Equity attributable to Eq. holders of parent					
Share capital	224,27%	224,27%	224,27%	223,97%	100%
Share premium	10,48%	112,07%	112,07%	112,07%	100%
Legal reserve	101,40%	101,40%	101,40%	101,40%	100%
Reserve from own share	107,96%	51,04%	93,92%	0,00%	100%
Own share					
Foreined curency translation reserve					
Cash flow hedge reserve					
Retained earning	-249,40%	-75,89%	21,08%	103,66%	100%
Total Eq. attributable to Eq. holders of parent	244,69%	216,51%	207,07%	167,33%	100%
Non- controllling interest	155,28%	119,11%	130,49%	154,47%	100%
TOTAL EQUITY	244,03%	215,79%	206,51%	167,24%	100%
LIABILITIES					
NON-CURRENT LIABILITIES					
Grants and subsidies	67,65%	82,09%	96,23%	95,53%	100%
Non-current borrowings	139,40%	150,83%	167,44%	190,15%	100%
Finanance lease obligations	226,45%	106,03%	77,82%	98,11%	100%
Trade payables					
Non-current payables to related parties					
Deferred income tax liabilities	36,88%	19,69%	175,17%	71,85%	100%
Other non-current liabilities	0,00%	0,00%	0,00%	0,00%	100%
Derivative financial instruments					
TOTAL NON-CURRENT LIABILITIES	87,41%	79,46%	92,35%	98,75%	100%
CURRENT LIABILITIES					
Current portion of non-current borrowing	92,09%	74,27%	358,21%	302,01%	100%
Current portion of finance lease obligations	186,37%	200,30%	148,25%	118,09%	100%
Current borrowings	4194,77%	1646,15%	1869,85%	712,92%	100%
Curent portion deferred grant income					
Trade payables	457,32%	259,62%	250,09%	306,23%	100%
Payables to related parties					
Income tax payable					
Derivative financial instruments					
Other current liabilities	232,85%	176,68%	134,89%	119,03%	100%
Curent portion of restructured liabilities	0,00%	0,00%	0,00%	75,80%	100%
TOTAL CURENT LIABILITIES	231,37%	138,89%	205,60%	200,06%	100%
TOTAL EQUITY AND LIABILITIES	183,52%	148,28%	164,28%	149,42%	100%

Source: author's calculations

APPENDIX 6. Trend analysis of Cash Flow statements of Linas Agro and Auga Group, base year 2013

ITEM	LNA Group				
	TREND ANALYSIS				
	30.06.17	30.06.16	30.06.15	30.06.14	30.06.13
Cash flow from operating activities					
Net profit	33%	15%	31%	91,43%	100%
Adjustment for non-cash items:					
Depreciation and amortisation	195%	192%	175%	152,68%	100%
Share of profit of associates and join ventures	0%	0%	0%	0,00%	100%
Subsidies amortisation	179%	166%	195%	165,83%	100%
(Gain) on disposal of PPE	46%	48%	17%	42,09%	100%
Change in impairment of PPE and investment property	0%	25%	89%	-89,29%	100%
(Profit) loss on sales of non-current assets					
(Gain) on disposal of subsidiary					
(Gain) on disposal of other investment	0%	30%	3590%	0,00%	100%
(Gain) from acquisition of subsidiary	0%	0%	0%	88,06%	100%
Change in allowance and write-offs for receivables and prepayments	-56%	-24%	71%	251,93%	100%
Revaluation of investment property					
Inventories write down to net realisable value	-105%	1600%	33%	463,93%	100%
Change in allowance for goodwill					
Change in accrued income and expenses	24%	21%	15%	49,34%	100%
Change in fair value of biological assets	175%	-11%	243%	-33,66%	100%
Liabilities write off					
Change in deferred income tax	4600%	-1636%	-355%	13172,73%	100%
Current income tax expenses	38%	51%	42%	60,12%	100%
Expenses (income) from change in fair value of financial instruments	173%	-173%	87%	-370,29%	100%
Change in provision for onerous contracts	0%	0%	0%	-100,00%	100%
Divident (income)	0%	0%	109%	286,36%	100%
Interest (income)	180%	110%	124%	125,47%	100%
Interest expenses	-115%	98%	103%	115,47%	100%
Net finance cost					
Impairment of accounts receivable					
Grants related to assets, recognized as income					
	70%	59%	58%	83,81%	100%
Change in working capital:					
Decrease in biological assets	37%	107%	102%	-4,97%	100%
(Increase) decrease in inventories	22%	-215%	166%	-146,21%	100%
Decrease (increase) in prepayments	-20%	79%	-138%	-55,05%	100%
(Increase) decrease in trade and other account receivable	65%	-20%	32%	-8,58%	100%
(Increase) decrease in restricted cash	36%	-82%	0%	1,65%	100%
Increase (decrease) in trade and other accounts payable	162%	-863%	788%	577,85%	100%
Interest received, gross					

Appendix 6 continued

Interest paid, gross					
Income tax (paid)	23%	28%	36%	64,25%	100%
Net cash from (to) operating activities	19%	74%	26%	9,72%	100%
Cash flows from (to) investing activities					
Cash acquired together with subsidiaries					
(Acquisition) of intangible assets, PPE and investment property	262%	213%	187%	121,75%	100%
Proceeds from sale of intangible assets, PPE and investment property	670%	912%	211%	688,51%	100%
Acquisition of subsidiaries, including payments for subsidiaries	620%	1402%	80%	4291,16%	100%
Disposal of assets held for dsale	0%	0%	0%	0,00%	100%
Purchase of investment (KTG Group)					
Purchase of account receivable (KTG Group)					
Acquisition of other investment					
Proceeds from disposals of other investments	0%	0%	-4%	0,00%	100%
Disposal of subsidiaries	0%	0%	1%	6,59%	100%
Increase in share capital of subsidiaries					
Loans (granted)	25%	213%	645%	867,49%	100%
Repayment of granted loans	553%	761%	405%	1032,84%	100%
Interest received	181%	57%	73%	95,42%	100%
Divident received	0%	0%	171%	450,00%	100%
Net cash flows from (to) investing activities	-427%	-398%	-397%	-486,93%	100%
Cash flows from (to) financing activities					
Disposal (acquisition) of available for sale investments					
Proceeds from loans	170%	160%	223%	250,67%	100%
(Repayment) of loans	137%	181%	207%	211,75%	100%
Finance lease (payments)	186%	303%	300%	323,60%	100%
Grant received					
Interest (paid)	91%	69%	82%	83,95%	100%
Dividends (paid) to non-controlling shareholders	433%	250%	167%	616,67%	100%
Dividends (paid)					
Acquisition of non-controlling interest	2%	16%	180%	23,69%	100%
Net cash flows from (to) financing activities	-439%	399%	-145%	-511,12%	100%
Net (decrease) increase in cash and cash equivalents	15%	2%	-14%	-9,54%	100%
Cash and cash equivalents at the beginning of the year	317%	307%	396%	455,33%	100%
Cash and cash equivalents at the end of the year	57%	44%	43%	55,16%	100%

Appendix 6 continued

	Auga Group				
ITEM	TREND ANALYSIS				
	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013
Cash flow from operating activities					
Net profit	309%	117%	400%	647%	100%
Adjustment for non-cash items:					
Depreciation and amortisation	2812%	2524%	2615%	1926%	100%
Share of profit of associates and joint ventures					
Subsidies amortisation					
(Gain) on disposal of PPE					
Change in impairment of PPE and investment property					
(Profit) loss on sales of non-current assets					
(Gain) on disposal of subsidiary					
(Gain) on disposal of other investment					
(Gain) from acquisition of subsidiary					
Change in allowance and write-offs for receivables and prepayments					
Revaluation of investment property					
Inventories write down to net realisable value					
Change in allowance for goodwill					
Change in accrued income and expenses					
Change in fair value of biological assets					
Liabilities write off					
Change in deferred income tax					
Current income tax expenses					
Expenses (income) from change in fair value of financial instruments					
Change in provision for onerous contracts					
Dividend (income)					
Interest (income)					
Interest expenses					
Net finance cost	667%	734%	700%	900%	100%
Impairment of accounts receivable					
Grants related to assets, recognized as income					
	466%	586%	642%	495%	100%
Change in working capital:					
Decrease in biological assets					
(Increase) decrease in inventories	446%	299%	3%	46%	100%
Decrease (increase) in prepayments					
(Increase) decrease in trade and other account receivable	-202%	43%	91%	66%	100%
(Increase) decrease in restricted cash					
Increase (decrease) in trade and other accounts payable	90%	42%	-36%	8%	100%
Interest received, gross					
Interest paid, gross	2327%	2372%	2044%	1451%	100%
Income tax (paid)					

Appendix 6 continued

Net cash from (to) operating activities	1204%	238%	2377%	1506%	100%
Cash flows from (to) investing activities					
Cash acquired together with subsidiaries					
(Acquisition) of intangible assets, PPE and investment property	22%	11%	10%	6%	100%
Proceeds from sale of intangible assets, PPE and investment property					
Acquisition of subsidiaries, including payments for subsidiaries					
Disposal of assets held for dsale					
Purchase of investment (KTG Group)					
Purchase of account receivable (KTG Group)					
Acquisition of other investment					
Proceeds from disposals of other investments					
Disposalof subsidiaries					
Increase in share capital of subsidiaries					
Loans (granted)					
Repayment of granted loans					
Interest received					
Divident received					
Net cash flows from (to) investing activities	27%	-4%	4%	-16%	100%
Cash flows from (to) financing activities					
Disposal (acquisition) of available for sale investments					
Proceeds from loans	104%	149%	127%	26%	100%
(Repayment) of loans	4420%	11438%	7646%	5126%	100%
Finance lease (payments)	-6524%	4890%	2026%	402%	100%
Grant received					
Interest (paid)					
Dividends (paid) to non-controlling shareholders					
Dividends (paid)					
Acquisition of non-controlling interest					
Net cash flows from (to) financing activities	53%	-41%	-31%	-92%	100%
Net (decrease) increase in cash and cash equivalents	-680%	-1601%	1996%	597%	100%
Cash and cash equivalents at the beginning of the year					
Cash and cash equivalents at the end of the year	413%	1093%	2694%	698%	100%

Source: author's calculations

APPENDIX 7. Trend analysis of Cash Flow statements of Linas Agro and Auga Group, base year 2014

ITEM	LNA Group				
	TREND ANALYSIS				
	30.06.2017	30.06.2016	30.06.2015	30.06.2014	30.06.2013
Cash flow from operating activities					
Net profit	35,6%	16,6%	33,7%	100,0%	109,4%
Adjustment for non-cash items:					
Depreciation and amortisation	128,0%	126,0%	114,8%	100,0%	65,5%
Share of profit of associates and joint ventures					
Subsidies amortisation	108,0%	100,2%	117,4%	100,0%	60,3%
(Gain) on disposal of PPE	109,9%	113,8%	41,1%	100,0%	237,6%
Change in impairment of PPE and investment property	0,0%	-28,0%	-100,0%	100,0%	-112,0%
(Profit) loss on sales of non-current assets					
(Gain) on disposal of subsidiary	0,0%	0,0%	0,0%	100,0%	0,0%
(Gain) on disposal of other investment					
(Gain) from acquisition of subsidiary	0,0%	0,0%	0,0%	100,0%	113,6%
Change in allowance and write-offs for receivables and prepayments	-22,4%	-9,4%	28,1%	100,0%	39,7%
Revaluation of investment property					
Inventories write down to net realisable value	-22,6%	344,9%	7,1%	100,0%	21,6%
Change in allowance for goodwill					
Change in accrued income and expenses	49,1%	43,4%	30,6%	100,0%	202,7%
Change in fair value of biological assets	-518,6%	33,4%	-723,2%	100,0%	-297,1%
Liabilities write off	0,0%	0,1%	0,6%	100,0%	0,0%
Change in deferred income tax	-34,9%	12,4%	2,7%	100,0%	-0,8%
Current income tax expenses	63,1%	85,2%	70,1%	100,0%	166,3%
Expenses (income) from change in fair value of financial instruments	-46,6%	46,9%	-23,5%	100,0%	-27,0%
Change in provision for onerous contracts	0,0%	0,0%	0,0%	100,0%	-100,0%
Divident (income)	0,0%	0,0%	38,1%	100,0%	34,9%
Interest (income)	143,2%	87,3%	98,7%	100,0%	79,7%
Interest expenses	-99,4%	84,7%	88,9%	100,0%	86,6%
Net finance cost					
Impairment of accounts receivable					
Grants related to assets, recognized as income					
	83,5%	70,4%	69,4%	100,0%	119,3%
Change in working capital:					
Decrease in biological assets	-736,8%	-2150,0%	-2048,6%	100,0%	-2011,8%
(Increase) decrease in inventories	-14,7%	147,4%	-113,4%	100,0%	-68,4%
Decrease (increase) in prepayments	37,1%	-144,2%	250,7%	100,0%	-181,7%
(Increase) decrease in trade and other account receivable	-759,0%	230,4%	-371,4%	100,0%	-1165,3%
(Increase) decrease in restricted cash	2211,1%	-4988,9%	-22,2%	100,0%	6066,7%
Increase (decrease) in trade and other accounts payable	28,0%	-149,4%	136,4%	100,0%	17,3%
Interest received, gross					
Interest paid, gross					
Income tax (paid)	36,2%	43,6%	56,2%	100,0%	155,7%

Appendix 7 continued

Net cash from (to) operating activities	199,7%	765,2%	264,5%	100,0%	1028,4%
Cash flows from (to) investing activities					
Cash acquired together with subsidiaries					
(Acquisition) of intangible assets, PPE and investment property	215,0%	174,8%	153,5%	100,0%	82,1%
Proceeds from sale of intangible assets, PPE and investment property	97,3%	132,5%	30,7%	100,0%	14,5%
Acquisition of subsidiaries, including payments for subsidiaries	14,5%	32,7%	1,9%	100,0%	2,3%
Disposal of assets held for dsale					
Purchase of investment (KTG Group)					
Purchase of account receivable (KTG Group)					
Acquisition of other investment	0,0%	0,0%	0,0%	100,0%	0,0%
Proceeds from disposals of other investments					
Disposalof subsidiaries	0,0%	0,0%	15,3%	100,0%	1518,0%
Increase in share capital of subsidiaries					
Loans (granted)	2,9%	24,6%	74,4%	100,0%	11,5%
Repayment of granted loans	53,5%	73,7%	39,2%	100,0%	9,7%
Interest received	189,5%	59,6%	76,0%	100,0%	104,8%
Divident received	0,0%	0,0%	38,1%	100,0%	22,2%
Net cash flows from (to) investing activities	87,7%	81,8%	81,5%	100,0%	-20,5%
Cash flows from (to) financing activities					
Disposal (acquisition) of available for sale investments					
Proceeds from loans	67,8%	63,7%	89,0%	100,0%	39,9%
(Repayment) of loans	64,8%	85,6%	97,8%	100,0%	47,2%
Finance lease (payments)	57,3%	93,7%	92,7%	100,0%	30,9%
Grant received					
Interest (paid)	108,3%	81,8%	97,6%	100,0%	119,1%
Dividends (paid) to non-controlling shareholders	70,3%	40,5%	27,0%	100,0%	16,2%
Dividends (paid)	69,2%	69,2%	83,4%	100,0%	0,0%
Acquisition of non-controlling interest	6,8%	69,5%	757,6%	100,0%	422,0%
Net cash flows from (to) financing activities	85,9%	-78,0%	28,3%	100,0%	-19,6%
Net (decrease) increase in cash and cash equivalents	-155,3%	-17,2%	151,9%	100,0%	-1048,2%
Cash and cash equivalents at the beginning of the year	69,6%	67,4%	87,0%	100,0%	22,0%
Cash and cash equivalents at the end of the year	103,1%	79,9%	77,4%	100,0%	181,3%

Appendix 7 continued

	Auga Group				
	TREND ANALYSIS				
ITEM	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013
Cash flow from operating activities					
Net profit	47,8%	18,1%	61,8%	100,0%	15,5%
Adjustment for non-cash items:					
Depreciation and amortisation	146,0%	131,1%	135,8%	100,0%	5,2%
Share of profit of associates and joint ventures					
Subsidies amortisation					
(Gain) on disposal of PPE					
Change in impairment of PPE and investment property	0,0%	94,6%	108,3%	100,0%	0,0%
(Profit) loss on sales of non-current assets	-60,1%	83,2%	0,0%	100,0%	0,0%
(Gain) on disposal of subsidiary					
(Gain) on disposal of other investment	0,0%	0,0%	15,1%	100,0%	0,0%
(Gain) from acquisition of subsidiary					
Change in allowance and write-offs for receivables and prepayments					
Revaluation of investment property					
Inventories write down to net realisable value	141,1%	162,1%	193,2%	100,0%	0,0%
Change in allowance for goodwill	0,0%	0,0%	0,0%	100,0%	0,0%
Change in accrued income and expenses					
Change in fair value of biological assets	-546,0%	105,9%	64,3%	100,0%	0,0%
Liabilities write off	0,0%	105,7%	5,7%	100,0%	0,0%
Change in deferred income tax					
Current income tax expenses					
Expenses (income) from change in fair value of financial instruments					
Change in provision for onerous contracts					
Dividend (income)					
Interest (income)					
Interest expenses					
Net finance cost	74,2%	81,5%	77,8%	100,0%	11,1%
Impairment of accounts receivable	0,0%	5,1%	33,3%	100,0%	0,0%
Grants related to assets, recognized as income	102,1%	172,7%	116,1%	100,0%	0,0%
	94,1%	118,4%	129,7%	100,0%	20,2%
Change in working capital:					
Decrease in biological assets	-8016,0%	-8980,0%	5676,0%	100,0%	0,0%
(Increase) decrease in inventories	959,4%	644,0%	5,5%	100,0%	215,3%
Decrease (increase) in prepayments					
(Increase) decrease in trade and other account receivable	-307,9%	66,0%	137,7%	100,0%	152,1%
(Increase) decrease in restricted cash					
Increase (decrease) in trade and other accounts payable	1112,5%	525,3%	-449,1%	100,0%	1238,7%
Interest received, gross					
Interest paid, gross	160,3%	163,4%	140,8%	100,0%	6,9%
Income tax (paid)	0,0%	0,0%	448,2%	100,0%	0,0%
Net cash from (to) operating activities	80,0%	15,8%	157,9%	100,0%	6,6%

Appendix 7 continued

Cash flows from (to) investing activities					
Cash acquired together with subsidiaries	0,0%	0,0%	0,0%	100,0%	0,0%
(Acquisition) of intangible assets, PPE and investment property	346,9%	166,4%	161,3%	100,0%	1566,6%
Proceeds from sale of intangible assets, PPE and investment property	4,1%	6,4%	25,5%	100,0%	0,0%
Acquisition of subsidiaries, including payments for subsidiaries					
Disposal of assets held for dsale					
Purchase of investment (KTG Group)					
Purchase of account receivable (KTG Group)					
Acquisition of other investment					
Proceeds from disposals of other investments					
Disposalof subsidiaries					
Increase in share capital of subsidiaries					
Loans (granted)	-86,2%	0,0%	381,5%	100,0%	0,0%
Repayment of granted loans					
Interest received					
Divident received					
Net cash flows from (to) investing activities	-177,1%	22,6%	-24,4%	100,0%	-644,8%
Cash flows from (to) financing activities					
Disposal (acquisition) of available for sale investments	0,0%	0,0%	140,5%	100,0%	0,0%
Proceeds from loans	399,9%	572,1%	487,8%	100,0%	384,7%
(Repayment) of loans	86,2%	223,1%	149,2%	100,0%	2,0%
Finance lease (payments)	-1621,3%	1215,4%	503,6%	100,0%	24,9%
Grant received					
Interest (paid)	29,6%	18,0%	95,8%	100,0%	0,0%
Dividents (paid) to non-controlling shareholders					
Dividents (paid)					
Acquisition of non-controlling interest					
Net cash flows from (to) financing activities	-57,9%	44,2%	33,3%	100,0%	-108,9%
Net (decrease) increase in cash and cash equivalents	-114,0%	-268,4%	334,5%	100,0%	16,8%
Cash and cash equivalents at the beginning of the year	1078,4%	2658,8%	688,9%	100,0%	0,0%
Cash and cash equivalents at the end of the year	59,1%	156,5%	386,0%	100,0%	14,3%

Source: author's calculations

APPENDIX 8. Traditional Analysis Ratios Calculations

Financial ratio	LNA Group					Auga Group				
	2017	2016	2015	2014	2013	2017	2017	2015	2014	2013
Net sales (thouthands euros)	644 952	615 959	573 770	584 557	583 754	48 784	39 630	47 425	41 950	23 592
Total assets (thouthands euros)	352 849	332 473	314 490	311 104	234 656	151110	122090	135266	123031	82338
Return on equity (%)	5,1%	2,4%	5,1%	17,1%	22,8%	6,2%	3,0%	8,9%	22,7%	-3,5%
Return on assets (%)	2,5%	1,2%	2,5%	8,7%	12,0%	3,5%	1,7%	4,3%	9,9%	-1,6%
Return on capital (%)	5,1%	3,2%	4,8%	12,8%	18,5%	6,2%	3,6%	7,6%	15,4%	-0,7%
Operating margin (%)	1,9%	1,2%	2,0%	4,5%	5,1%	13,5%	9,8%	17,1%	29,8%	9,6%
Profit Margin (%)	1,3%	0,6%	1,4%	4,0%	4,4%	9,7%	5,4%	11,7%	24,2%	-5,1%
Assets turnover (times)	1,88	1,90	1,83	2,14	2,70	0,36	0,31	0,37	0,41	0,31
Inventory turnover (times)	9,0	9,6	9,3	10,1	13,4	1,91	3,95	4,38	3,30	0,00
Receivables turnover (times)	6,0	6,0	5,6	6,2	7,7	3,91	3,20	4,68	6,99	5,67
Capital turnover (times)	2,56	2,52	2,32	2,79	3,44	0,46	0,38	0,46	0,58	0,46
Working capital turnover (times)	10,36	8,92	7,43	8,03	8,78	-38,2	4,1	75,0	-14,3	-2,7
Cash turnover (times)	81,6	90,7	74,9	63,5	45,9	42,92	13,86	18,52	29,65	26,57
Current ratio (times)	1,43	1,42	1,67	1,63	1,75	1,16	1,37	0,74	0,70	0,72
Quick ratio (times)	0,96	0,91	1,19	1,07	1,24	0,55	0,79	0,51	0,43	0,51
Interest coverage ratio (times)	4,5	3,2	4,6	9,3	12,6	3,4	1,9	4,7	9,3	-0,4
Equity multiplier (times)	2,07	2,02	2,02	1,97	1,91	1,77	1,82	2,06	2,30	2,23
Equity to assets (times)	0,48	0,49	0,50	0,49	0,53	0,54	0,59	0,51	0,46	0,41
Debt to equity (times)	0,53	0,49	0,60	0,58	0,49	0,46	0,40	0,63	0,86	0,96
Net working capital to assets (%)	18,5%	17,8%	25,1%	24,3%	29,8%	4,7%	7,9%	-7,2%	-8,9%	-6,2%
Growth rate of assets (%)	6%	6%	1%	33%	19%	24%	-10%	10%	49%	-2%
Growth rate of equity (%)	4%	2%	4%	22%	23%	13%	4%	23%	67%	-5%

Source: author's calculations

Appendix 8 continued

Additional information LNA GROUP						Additional information AUGA GROUP					
total equity 2012, eur	101703					total equity 2012, eur	35151				
total assets 2012, eur	197397					total assets 2012, eur	84351				
total loan, 2012 eur	61775,4					total loan, 2012 eur	18326				
inventories 2012	39128					inventories 2012	5241				
receivables 2012	60890					receivables 2012	5149				
total current assets 2012	143202					total current assets 2012	14749				
total current liabilities 2012	80333					total current liabilities 2012	27345				
cash 2012	15648					cash 2012	891				
total equity 2012, eur	101730					total equity 2012, eur	35151				
current borrowings 2012	51275					current borrowings 2012	16839				
	2017	2016	2015	2014	2013		2017	2016	2015	2014	2013
interest expence	2872	2445	2567	2888	2501	interest expence	1945	1945	1676	1190	913
average capital	251953	244117	247312	209609	169755,7	average capital	106768	104707	102768	72046	51668
average assets	342661	323482	312797	272880	216027	average assets	136600	128678	129149	102685	76632
average inventory	71989	64165	62011	57781	43523	average inventory	20763	12007	9578	7153	4623
average receivables	106993	103254	102472	94284	75888	average receivables	12464	12391	10127	6005	4160
average working capital	62271	69056	77203	72781	66454	average working capital	-1278	9685	633	-2939	-8862
average cash	7899	6790,5	7656	9207,5	12716	average cash	1137	2859	2561	1415	888

Source: financial statements of Linas Agro and Auga Group for the years 2012-2017

APPENDIX 9. Cash Flow ratios calculations

Linus Agro Group cash flow ratios author's calculations

Note!

The currency rates used for the calculations for 2013 and 2014 is **LTL/ EUR = 3,5 / 1**

1) Solvency Cash Flow Ratios

$$\text{Operating Cash Flow (OCF)} = \frac{\text{Cash flow from operations (CFFO)}}{\text{Current liabilities}}$$

$$\text{OCF 2013} = \frac{29\,448}{93\,052} = 0,316$$

$$\text{OCF 2014} = \frac{24\,719}{118\,558} = 0,208$$

$$\text{OCF 2015} = \frac{17\,121}{117\,070} = 0,146$$

$$\text{OCF 2016} = \frac{17\,372}{142\,673} = 0,122$$

$$\text{OCF 2017} = \frac{20\,603}{153\,537} = 0,131$$

2) Cash Coverage Ratio

$$\text{Cash Interest Coverage} = \frac{\text{CFFO} + \text{Interest Paid} + \text{Tax}}{\text{Interest Paid}}$$

$$\text{CIC 2013} = \frac{34\,979}{2\,501} = 13,986$$

$$\text{CIC 2014} = \frac{28\,366}{28\,88} = 9,822$$

$$\text{CIC 2015} = \frac{20854}{2567} = 8,123$$

$$\text{CIC 2016} = \frac{21454}{2445} = 8,775$$

Appendix 9 continued

$$\text{CIC 2017} = \frac{25112}{2872} = 8,73$$

$$\text{CashDebt Coverage (CDC)} = \frac{\text{CFFO} - \text{Total Dividends}}{\text{Debt}}$$

$$\text{CDC 2013} = \frac{28\ 152}{51\ 005} = 0,55$$

$$\text{CDC 2014} = \frac{22\ 946}{88\ 425} = 0,256$$

$$\text{CDC 2015} = \frac{15\ 663}{93\ 173} = 0,168$$

$$\text{CDC 2016} = \frac{17372}{74833} = 0,232$$

$$\text{CDC 2017} = \frac{20603}{97895} = 0,21$$

$$\text{Cash Dividend Coverage (CDiC)} = \frac{\text{CFFO}}{\text{Total Dividends}}$$

$$\text{CDiC 2013} = \frac{29\ 448}{1296} = 22,722$$

$$\text{CDiC 2014} = \frac{24\ 719}{1773} = 13,942$$

$$\text{CDiC 2015} = \frac{17\ 121}{1458} = 11,742$$

$$\text{CDiC 2016} = \frac{17372}{1217} = 14,27$$

$$\text{CDiC 2017} = \frac{20603}{1228} = 16,78$$

3) Quality of Income

$$\text{Quality of Sales (QoS)} = \frac{\text{Cash from sales}}{\text{Sales}}$$

Appendix 9 continued

$$\text{QoS 2013} = \frac{25\,857}{583\,754} = 0,044$$

$$\text{QoS 2014} = \frac{24\,099}{576\,995} = 0,042$$

$$\text{QoS 2015} = \frac{7\,972}{573\,770} = 0,14$$

$$\text{QoS 2016} = \frac{3\,918}{615\,959} = 0,006$$

$$\text{QoS 2017} = \frac{8\,408}{644\,952} = 0,013$$

$$\text{Quality of Income (QoIn)} = \frac{\text{CFFO}}{\text{Operating Income}}$$

$$\text{QoIn 2013} = \frac{29\,448}{583\,191} = 0,05$$

$$\text{QoIn 2014} = \frac{24\,719}{582\,629} = 0,042$$

$$\text{QoIn 2015} = \frac{17\,121}{576\,366} = 0,029$$

$$\text{QoIn 2016} = \frac{17\,372}{617\,480} = 0,028$$

$$\text{QoIn 2017} = \frac{20\,603}{646\,607} = 0,032$$

4) Total Debt

$$\text{Total Debt (TD)} = \frac{\text{CFFO}}{\text{Total debt}}$$

$$\text{TD 2013} = \frac{29\,448}{61\,005} = 0,577$$

$$\text{TD 2014} = \frac{24\,719}{88\,425} = 0,28$$

$$\text{TD 2015} = \frac{17\,121}{93\,173} = 0,183$$

Appendix 9 continued

$$\text{TD 2016} = \frac{17\,372}{74\,833} = 0,232$$

$$\text{TD 2017} = \frac{20\,603}{97\,895} = 0,21$$

5) Capital Expenditure

$$\text{Capital Expenditure (CEx)} = \frac{\text{CFFO}}{\text{Capital expenditure}}$$

$$\text{CEx 2013} = \frac{29\,448}{73\,572} = 0,4$$

$$\text{CEx 2014} = \frac{24\,719}{84\,555} = 0,292$$

$$\text{CEx 2015} = \frac{17\,121}{87\,164} = 0,196$$

$$\text{CEx 2016} = \frac{13\,372}{83\,011} = 0,161$$

$$\text{CEx 2017} = \frac{20\,603}{68\,417} = 0,301$$

$$\text{Capital Acquisition (CA)} = \frac{\text{CFFO} - \text{Total Dividend}}{\text{Cash paid for acquisition}}$$

$$\text{CA 2013} = \frac{28\,152}{24\,147} = 1,166$$

$$\text{CA 2014} = \frac{22\,946}{18\,783} = 1,22$$

$$\text{CA 2015} = \frac{15\,663}{12\,985} = 1,20$$

$$\text{CA 2016} = \frac{17\,372}{17\,587} = 0,987$$

$$\text{CA 2017} = \frac{20\,603}{18\,830} = 1,094$$

Appendix 9 continued

$$\text{Investment to Finance Ratio } \left(\frac{I}{F} \right) = \frac{\text{Net cash flow from investing}}{\text{Net cash flow from finance}}$$

$$I/F \text{ 2013} = \frac{11\,499}{26\,031} = 0,44$$

$$\frac{I}{F} \text{ 2014} = \frac{16\,278}{12\,001} = 1,356$$

$$\frac{I}{F} \text{ 2015} = \frac{13\,268}{3\,402} = 3,898$$

$$\frac{I}{F} \text{ 2016} = \frac{13\,316}{9\,357} = 1,423$$

$$\frac{I}{F} \text{ 2017} = \frac{14\,283}{10\,305} = 1,386$$

6) Cash flow return

Note!

Share price = **1 LTL** for the period of 2013-2014 years.

Share price = **0,29 Eur** for the period 2015-2017 years.

Number of shares from year 2013 – 2016 is **158 940 298 shares**

Number of shares year 2017 is **158 158 426 shares**

$$\text{Cash flow per share (CFpS)} = \frac{\text{CFFO} - \text{preferred dividends}}{\text{Weighted common stock}}$$

$$\text{CFpS 2013} = \frac{29\,448 - 1296}{158\,940\,398} = 0,000177$$

$$\text{CFpS 2014} = \frac{24\,719 - 1773}{158\,940\,398} = 0,000144$$

$$\text{CFpS 2015} = \frac{17\,121 - 1458}{158\,940\,398} = 0,000098$$

$$\text{CFpS 2016} = \frac{17\,372 - 1228}{158\,940\,398} = 0,0001$$

$$\text{CFpS 2017 (with old nr of common stock)} = \frac{20\,603}{158\,940\,398} = 0,00129$$

Appendix 9 continued

$$\text{CFpS 2017 (with new nr of common stock)} = \frac{20\,603}{158\,940\,426} = 0,00013$$

$$\text{CFpS 2017 (new CS)} - \text{CFpS 2017 (old CS)} = 0,00013 - 0,000129 = 0,000001$$

$$\text{Cash return on assets (CRA)} = \frac{\text{CFFO before interest and tax}}{\text{Total assets}}$$

$$\text{CRA 2013} = \frac{24\,115}{234\,682} = 0,103$$

$$\text{CRA 2014} = \frac{23\,333}{311\,104} = 0,075$$

$$\text{CRA 2015} = \frac{13\,695}{314\,490} = 0,044$$

$$\text{CRA 2016} = \frac{14\,635}{332\,473} = 0,044$$

$$\text{CRA 2017} = \frac{16\,408}{352\,849} = 0,047$$

$$\text{Cash return on Debt on Equity (CRDA)} = \frac{\text{CFFO}}{\text{Stockholders Equity} + \text{Debt}}$$

$$\text{CRA 2013} = \frac{29\,448}{119\,149} = 0,247$$

$$\text{CRA 2014} = \frac{24\,719}{158\,863} = 0,156$$

$$\text{CRA 2015} = \frac{17\,121}{163\,605} = 0,105$$

$$\text{CRA 2016} = \frac{17\,372}{143\,509} = 0,121$$

$$\text{CRA 2017} = \frac{20\,603}{166\,573} = 0,124$$

Appendix 9 continued

$$\text{Cash return on Stockholders' Equity (CRSE)} = \frac{\text{CFFO}}{\text{Stockholders' Equity}}$$

$$\text{CRSE 2013} = \frac{29\,448}{68\,144} = 0,432$$

$$\text{CRSE 2014} = \frac{24\,719}{70\,438} = 0,351$$

$$\text{CRSE 2015} = \frac{17\,121}{70\,432} = 0,243$$

$$\text{CRSE 2016} = \frac{17\,372}{68\,676} = 0,253$$

$$\text{CRSE 2017} = \frac{20\,603}{68\,678} = 0,299$$

AUGA Group cash flow ratios author's calculations

Note!

The currency rates used for the calculations for 2013 and 2014 is **LTL/ EUR = 3,5 / 1**

1) Solvency Cash Flow Ratios

$$\text{Operating Cash Flow (OCF)} = \frac{\text{Cash flow from operations (CFFO)}}{\text{Current liabilities}}$$

$$\text{OCF 2013} = \frac{334}{7026} = 0,048$$

$$\text{OCF 2014} = \frac{5105}{37\,118} = 0,138$$

$$\text{OCF 2015} = \frac{8\,059}{38\,145} = 0,211$$

$$\text{OCF 2016} = \frac{806}{25\,768} = 0,031$$

Appendix 9 continued

$$\text{OCF 2017} = \frac{4\,083}{42\,926} = 0,095$$

2) Cash Coverage Ratio

$$\text{Cash Interest Coverage} = \frac{\text{CFFO} + \text{Interest Paid} + \text{Tax}}{\text{Interest Paid}}$$

$$\text{CIC 2013} = \frac{1\,315}{913} = 1,44$$

$$\text{CIC 2014} = \frac{6\,459}{1\,190} = 5,43$$

$$\text{CIC 2015} = \frac{10\,470}{1\,676} = 6,25$$

$$\text{CIC 2016} = \frac{2\,751}{1\,945} = 1,41$$

$$\text{CIC 2017} = \frac{6\,082}{1\,945} = 3,01$$

$$\text{CashDebt Coverage (CDC)} = \frac{\text{CFFO} - \text{Total Dividends}}{\text{Debt}}$$

CDC 2013, 2014, 2015, 2016, 2017

Note! Impossible to calculate, because AUGA Group did not pay dividends for these years.

$$\text{Cash Dividend Coverage (CDiC)} = \frac{\text{CFFO}}{\text{Total Dividends}}$$

CDC 2013, 2014, 2015, 2016, 2017

Note! Impossible to calculate, because AUGA Group did not pay dividends for these years.

3) Quality of Income

$$\text{Quality of Sales (QoS)} = \frac{\text{Cash from sales}}{\text{Sales}}$$

$$\text{QoS 2013} = \frac{1\,265}{23\,592} = 0,054$$

Appendix 9 continued

$$\text{QoS 2014} = \frac{9\,915}{41\,950} = 0,236$$

$$\text{QoS 2015} = \frac{6\,128}{47\,425} = 0,129$$

$$\text{QoS 2016} = \frac{1\,792}{39\,630} = 0,045$$

$$\text{QoS 2017} = \frac{4\,741}{48\,784} = 0,097$$

$$\text{Quality of Income (QoIn)} = \frac{\text{CFFO}}{\text{Operating Income}}$$

$$\text{QoIn 2013} = \frac{334}{24\,376} = 0,013$$

$$\text{QoIn 2014} = \frac{5\,105}{43\,536} = 0,117$$

$$\text{QoIn 2015} = \frac{8\,059}{47\,883} = 0,168$$

$$\text{QoIn 2016} = \frac{806}{39\,757} = 0,02$$

$$\text{QoIn 2017} = \frac{4\,083}{49\,090} = 0,083$$

4) Total Debt

$$\text{Total Debt (TD)} = \frac{\text{CFFO}}{\text{Total debt}}$$

$$\text{TD 2013} = \frac{334}{16\,382} = 0,02$$

Appendix 9 continued

$$\text{TD 2014} = \frac{5\,105}{38\,249} = 0,133$$

$$\text{TD 2015} = \frac{8\,059}{42\,172} = 0,191$$

$$\text{TD 2016} = \frac{806}{25\,873} = 0,31$$

$$\text{TD 2017} = \frac{4\,083}{33\,733} = 0,0121$$

5) Capital Expenditure

$$\text{Capital Expenditure (CEx)} = \frac{\text{CFFO}}{\text{Capital expenditure}}$$

$$\text{CEx 2013} = \frac{334}{5\,828} = 0,057$$

$$\text{CEx 2014} = \frac{5\,105}{12\,514} = 0,408$$

$$\text{CEx 2015} = \frac{8\,059}{17\,345} = 0,465$$

$$\text{CEx 2016} = \frac{806}{24\,324} = 0,033$$

$$\text{CEx 2017} = \frac{4\,083}{18\,869} = 0,216$$

$$\text{Capital Acquisition (CA)} = \frac{\text{CFFO} - \text{Total Dividend}}{\text{Cash paid for acquisition}}$$

CDC 2013, 2014, 2015, 2016, 2017

Note! Impossible to calculate, because AUGA Group did not pay dividends for these years.

$$\text{Investment to Finance Ratio } \left(\frac{I}{F}\right) = \frac{\text{Net cash flow from investing}}{\text{Net cash flow from finance}}$$

Appendix 9 continued

$$I/F\ 2013 = \frac{700}{6\ 114} = 0,114$$

$$\frac{I}{F} 2014 = \frac{6\ 322}{10\ 526} = 0,6$$

$$\frac{I}{F} 2015 = \frac{1\ 544}{3\ 501} = 0,44$$

$$\frac{I}{F} 2016 = \frac{1\ 430}{4\ 654} = 0,31$$

$$\frac{I}{F} 2017 = \frac{11\ 199}{6\ 090} = 1,84$$

6) Cash flow return

Note!

Share price = **1 LTL** for the period of 2013-2014 years.

Share price = **0,29 Eur** for the period 2015-2017 years.

Number of shares from year 2013 – 2016 is **158 940 298 shares**

Number of shares year 2017 is **158 158 426 shares**

$$\text{Cash flow per share (CFpS)} = \frac{\text{CFFO} - \text{preferred dividends}}{\text{Weighted common stock}}$$

CDC 2013, 2014, 2015, 2016, 2017

Note! Impossible to calculate, because AUGA Group did not pay dividends for these years.

$$\text{Cash return on assets (CRA)} = \frac{\text{CFFO before interest and tax}}{\text{Total assets}}$$

$$\text{CRA 2013} = \frac{7\ 211}{82\ 338} = 0,088$$

$$\text{CRA 2014} = \frac{10\ 470}{123\ 031} = 0,085$$

$$\text{CRA 2015} = \frac{10\ 420}{135\ 266} = 0,077$$

$$\text{CRA 2016} = \frac{2\,703}{122\,090} = 0,022$$

Appendix 9 continued

$$\text{CRA 2017} = \frac{5\,991}{151\,110} = 0,04$$

$$\text{Cash return on Debt on Equity (CRDA)} = \frac{\text{CFFO}}{\text{Stockholders Equity} + \text{Debt}}$$

$$\text{CRA 2013} = \frac{334}{47\,657} = 0,007$$

$$\text{CRA 2014} = \frac{5\,105}{100\,418} = 0,05$$

$$\text{CRA 2015} = \frac{8\,059}{104\,413} = 0,077$$

$$\text{CRA 2016} = \frac{806}{88\,114} = 0,09$$

$$\text{CRA 2017} = \frac{4\,083}{89\,222} = 0,045$$

$$\text{Cash return on Stockholders' Equity (CRSE)} = \frac{\text{CFFO}}{\text{Stockholders' Equity}}$$

$$\text{CRSE 2013} = \frac{334}{31\,275} = 0,01$$

$$\text{CRSE 2014} = \frac{5\,105}{62\,169} = 0,082$$

$$\text{CRSE 2015} = \frac{8\,059}{62\,241} = 0,129$$

$$\text{CRSE 2016} = \frac{806}{62\,241} = 0,013$$

$$\text{CRSE 2017} = \frac{4\,083}{56\,089} = 0,072$$

APPENDIX 10. Ratios ongoing viability author's calculations for Linas Agro and Auga Group

Traditional Ratios and Cash Flow Ratios Ongoing Viability Linas Agro and Auga Group for the period 2013-2017 years

Item	2017	2016	2015	2014	2013	Item	2017	2016	2015	2014	2013
Total Assets (thousands euros)						Total Assets (thousands euros)					
Linas Agro	352249	332473	314490	311104	234656	Linas Agro	352249	332473	314490	311104	234656
Auga Group	151110	122090	135266	123031	82338	Auga Group	151110	122090	135266	123031	82338
SOLVENCY AND LIQUIDITY ANALYSIS						PROFITABILITY ANALYSIS					
Current Ratio						Return on Equity					
Linas Agro	1,43	1,42	1,67	1,63	1,75	Linas Agro	5,1%	2,4%	5,1%	17,1%	22,8%
Auga Group	1,16	1,37	0,74	0,7	0,72	Auga Group	6,2%	3,0%	8,9%	22,7%	-3,5%
Quick Ratio						Return on Assets					
Linas Agro	0,96	0,91	1,19	1,07	1,24	Linas Agro	2,5%	1,2%	2,5%	8,7%	12,0%
Auga Group	0,55	0,79	0,51	0,43	0,51	Auga Group	3,5%	1,7%	4,3%	9,9%	-1,6%
Interest Coverage Ratio						Return on Capital					
Linas Agro	4,5	3,2	4,6	9,3	12,6	Linas Agro	5,1%	3,2%	4,8%	12,8%	18,5%
Auga Group	3,4	1,9	4,7	9,3	-0,4	Auga Group	6,2%	3,6%	7,6%	15,4%	-0,7%
Equity to Assets Ratio						Operating Margin					
Linas Agro	0,48	0,49	0,5	0,49	0,53	Linas Agro	1,9%	1,2%	2,0%	4,5%	5,1%
Auga Group	0,54	0,59	0,51	0,46	0,41	Auga Group	13,5%	9,8%	17,1%	29,8%	9,6%
Debt to Equity Ratio						Profit Margin					
Linas Agro	0,53	0,49	0,6	0,58	0,49	Linas Agro	1,3%	0,6%	1,4%	4,0%	4,4%
Auga Group	0,46	0,4	0,63	0,86	0,96	Auga Group	9,7%	5,4%	11,7%	24,2%	-5,1%
Operating Cash Flow (OCF)						Cash Return on Assets					
Linas Agro	0,131	0,122	0,146	0,208	0,316	Linas Agro	0,047	0,044	0,044	0,075	0,103
Auga Group	0,095	0,031	0,211	0,138	0,048	Auga Group	0,04	0,022	0,077	0,085	0,088
Cash Interest Coverage						Cash Return on Debt, Equity					
Linas Agro	8,743	8,775	8,123	9,822	13,986	Linas Agro	0,124	0,121	0,105	0,156	0,247
Auga Group	3,01	1,41	6,25	5,43	1,44	Auga Group	0,045	0,09	0,077	0,05	0,007
Capital Expenditure						Cash Return on Stockholders' Equity					
Linas Agro	0,301	0,161	1,96	0,292	0,4	Linas Agro	0,299	0,253	0,243	0,351	0,432
Auga Group	0,216	0,033	0,465	0,408	0,057	Auga Group	0,072	0,013	0,129	0,082	0,01
Investment to Finance						Quality of Sales					
Linas Agro	1,386	1,423	3,898	1,356	0,44	Linas Agro	0,013	0,006	0,014	0,042	0,044
Auga Group	1,84	0,31	0,44	0,6	0,114	Auga Group	0,097	0,045	0,129	0,236	0,054
Total Debt						Quality of Income					
Linas Agro	0,21	0,232	0,183	0,28	0,577	Linas Agro	0,032	0,028	0,029	0,042	0,5
Auga Group	0,0121	0,031	0,191	0,133	0,02	Auga Group	0,083	0,02	0,168	0,117	0,013

