

**FINANCIAL ANALYSIS OF TURKISH HOSPITALITY AND FOOD
& BEVERAGE INDUSTRIES AT BORSA ISTANBUL**



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& BEVERAGE INDUSTRIES AT BORSA ISTANBUL**

BY



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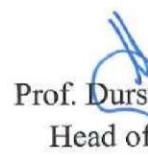
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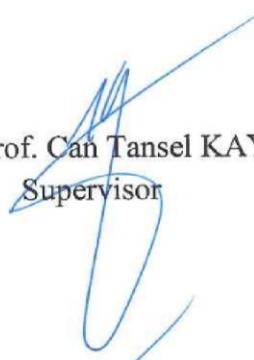
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ABSTRACT

Organizations have been evaluating their financial situations with various financial analysis methods over the years. The best appropriate method of analysis has changed according to industry, time etc. Ratio analysis has been sizably used to evaluate financial relationships. There are many kinds of ratios and the usage of ratios depends on the situation. Ratios are calculated by the data from balance sheets, income statements and cash flow statements. The Numbers application on Macbook is used to calculate ratios and SPSS panel data application is used to analyze ratios. The aim of the study is to measure the association between liquidity, solvency, efficiency and profitability. With the respect of the aim of the study, the kinds of financial analysis and specifically ratio analysis and their kinds have been explained. The background of the financial analysis is discussed and related researches are shown within the study. In order to evaluate arguments; current ratio, accounts receivable turnover ratio, inventory turnover, total asset turnover, debt ratio, equity ratio, debt to equity ratio, profit margin ratio, gross margin, return on total assets and cash flow on total assets are calculated for thirty hospitality and food&beverage firms listed at Borsa İstanbul between the years 2012 and 2017. According to the results, for the hospitality sector, food&beverage sector and both sectors; the independent variables from the models express only 1%, 1% and 6% of the variance of the profitability variable respectively. Simply, no independent variable has a significant effect on profitability. So, in Turkey there is no significant association between the dependent variable and independent variables of the study.

Keywords: *financial analysis, ratio analysis, panel data*

ÖZET

Firmalar, finansal durumlarını değerlendirmek için, yillardır, çeşitli finansal analiz yönetemi kullanırlar. Analiz için en uygun method ise endüstrisine ve dönemine göre değişmektedir. Rasyo analizi, finansal ilişkileri değerlendirmek için çokça kullanılmaktadır. Çok çeşitli rasyolar vardır ve bu rasyoların kullanımını duruma göre değiştirmektedir. Rasyolar; bilanço, gelir tablosu ve nakit akış tablosundaki veriler kullanılarak hesaplanır. Rasyolar, Macbook'ta bulunan numbers uygulaması kullanılarak hesaplanmıştır ve bu rasyolar SPSS panel veri analizi uygulaması ile analiz edilmiştir. Çalışmanın amacı likidite, ödeme gücü ve etkinliğin karlılık üzerindeki etkisini ölçmektedir. Çalışmanın amacına uygun olarak, finansal analiz çeşitleri ve özellikle rasyo analizi ve çeşitleri anlatılmıştır. Finansal analizin geçmişi tartışılmış ve konu ile ilgili diğer araştırmalar gösterilmiştir. Argümanları değerlendirmek için; cari oran, alacak devir hızı, envanter dönüşüm hızı, toplam aktif devir hızı, borç oranı, özvarlık oranı, borç özvarlık oranı, kar oranı, brüt kar oranı, toplam varlıkların getirişi ve toplam varlıklarda nakit akışı 30 ayrı Borsa İstanbul'da listelenen konaklama ve yiyecek&içecek firması için 2012 ve 2017 yılları arasında hesaplanmıştır. Sonuçlara göre; konaklama, yiyecek&içecek ve her iki sektör için, modeldeki bağımsız değişkenlerin karlılık bağımlı değişkenindeki değişimin sırasıyla yaklaşık %1, %1 ve %6'sını açıkladığı görülmüştür. Basitçe, hiçbir bağımsız değişkenin karlılık bağımlı değişkeni üzerinde anlamlı bir etkiye sahip olmadığı görülmüştür. Yani, Türkiye'de söz konusu değişkenler arasında kaydadeğer bir ilişki saptanmamıştır.

Anahtar sözcükler: *finansal analiz, rasyo analizi, panel veri*

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LIST OF ABBREVIATIONS

| | |
|---------------|--|
| ADF | : ADF-Fisher |
| ART | : Accounts Receivable Turnover |
| BPLM | : Breusch-Pagan LM |
| CFOTAS | : Cash Flow On total Assets |
| CRT | : Current ratio |
| D(VARIABLE) | : 1st difference of variable |
| D2 (VARIABLE) | : 2nd difference of variable |
| DEBRT | : Debt Ratio |
| DTERT | : Debt to Equity Ratio |
| EQRT | : Equity Ratio |
| FB | : Food & Beverage |
| GRSMRT | : Gross Margin Ratio |
| HS | : Hospitality |
| INVTR | : Inventory Turnover |
| IPS | : Im, Pesaran, Shin |
| LLC | : Levin-Lin-Chu |
| PRFMRT | : Profit Margin Ratio |
| PSLM | : Pesaran Scaled LM |
| ROTAS | : Return on Total Assets |
| TAST | : Total Asset Turnover |
| VARIABLE_I | : Inverse transformation of variable |
| VARIABLE_L | : Logarithmic transformation of variable |

VARIABLE_S : Square root transformation of variable



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1. INTRODUCTION

1.1. Background

In the present conditions of the world, companies are confronted with vital changes because of the quick economic fluctuations. At the present time, with the help of maximization of the firm values, companies should make efficient investment and financing decisions. Especially to put the efficient investment decisions into practice under proper circumstances, the necessity of fund finding opens a road to diverse capital markets.

For performing a successful asset & liability management and rational investment decision making, financial analysis should be done properly. Thus, with the help of weak and strong sides of the management, it is possible to reveal prudential opportunities and threats. In addition, companies are obliged to be realistic, transparent and objective to provide the required financial resources from money and capital markets. International BASEL I, BASEL II and BASEL III rules are obliged to be financially transparent and to share reliable information to their shareholders.

High fixed capital investments of hospitality sector and the impact of low governmental incentive that has been around for years, are demonstrating that is crucial to be very careful in terms of financial issues. To provide an efficient running company, an active financial procedure should be used. Because of the two functions of an active financial management are “planning and controlling” it is important to choose the proper financial analysis technique and then the results should be interpreted to make decisions.

Hospitality sector managers need to analyze the current situation by ensuring the internal control. They also need to determine the strategically important finance

issues. To accomplish the things that are mentioned above, financial analysis techniques should be considered (Önal, 2006).

To operate financial analysis methods, ratios are used.

The mathematical expressions of the relationship between two data from financial statements are ratios (Reid and Herbel, 2017). Ratio analysis provides detailed information about companies. It is the most popular technique that has been used among the all financial ones.

Several ratios are used in financial analysis, and users of the ratios vary. Managers benefit from ratios for measuring the performance of the company output. Potential investors utilize the ratios for decision making about investment, determining the potential earning capability of the company, foreseeing the dividend policy and predicting the exchange of stock (Andrew and Schmidgall, 1993). Credit institutions trade on ratio analysis for measuring the solvency (Jagels and Coltman, 2004).

Commonly used ratios according to their aim and functions are liquidity ratios, financial structure ratios, profitability ratios, solvency ratios, efficiency ratios and markets ratios (Wild, 2013).

1.2. Purpose of the Study

Financial success is the major aim of an organization. Choosing the proper financial indication tool is so significant to evaluate financial performance and profitability (Wheelen and Hunger, 2012). For this reason, ratio analysis is a tool to evaluate an organization in terms of finance.

The aim of the study is to analyze the relationship between the ratios within the scope of Turkish “Gıda, İçki ve Tütün” and “Lokanta ve Oteller” industries itemized

at Borsa İstanbul between the period 2012 and 2017. Secondary data was used to measure the association between the profitability and the independent variables.

This study has been composed from five essential parts. Introduction is the first part of the study. Literature review is the second part and it includes the concept, financial analysis (financial performance, financial management, financial analysis techniques), ratio analysis (application of financial ratios in the hospitality industry, users of ratio), and kinds of ratio analysis. Liquidity ratios, efficiency ratios, solvency ratios and profitability ratios were used for this study. Research method is the third part and it expresses participants, research design, research questions, research hypotheses and research model. Fourth part involves the results, also data analysis and the final part is about discussion.

Liquidity ratios state the relationship between liquidable assets in one year and short-term debts of the business (Nazlıgül, 2011).

Efficiency ratios indicate the yieldance of operating the assets (Wild, 2013).

Solvency ratios explain the capability of the business to fulfill long-term financial accountability.

Profitability ratios express administrations roll-back on investments and sales (Singh and Schmidgall, 2001).

2. LITERATURE REVIEW

2.1. Concept

The studies about the financial ratios were investigated and it was discovered that, several ratios were used by the companies to evaluate their financial situations and performances.

Mutlu (1991), determined the usage of the ratios in stock corporation related to liquidity, profitability and financial structure analysis for bank, insurance, white goods, service, dairy products, ceramic and cement sectors.

Sing and Schmidgall (2001), evaluated accommodation corporations financial ratios which are used by financial managers in United States of America. In this sense, at "Hospitality Financial and Technology Professionals" data base, in 2000, the survey was sent to 5000 accommodation corporations financial managers and 82 answers were gained. In the evaluation, the report states that the most important and useful ones are liquidity, profitability and efficiency ratios.

Karadeniz, Koşan and Kahilogulları (2014), studied ratio analysis of corporations between 2011 and 2013 in their study "Borsa İstanbul'da İşlem Gören Spor Şirketlerinin Finansal Performansının Oran Yöntemiyle Analizi". The study showed that liquidity ratios stand below the accepted standards and net current assets became negative. These results showed that, short term liabilities of the corporations cannot be fulfilled. Therefore, some of the results of the literature research show that liquidity, efficiency, profitability and solvency ratios are important issues about financial analysis and "comparison of financial analysis of Turkish hospitality and food & beverage industry" has not been studied yet. In this sense, this study fulfills

the absence of this matter in the literature and it will be a resource for any further research.

The purpose of the study is to analyze the Turkish hospitality and Food & Beverage industries between the years 2012-2017. There is a significant gap in the literature regarding profitability, liquidity, solvency and efficiency of company classified in the Turkish hospitality and Food & Beverage industries. Association between liquidity and profitability, solvency and profitability, efficiency and profitability will be studied. 30 firms financial data was used for the analysis.

The study will be conducted based on secondary data collected from www.kap.gov.tr regarding the financial statements of the industries.

2.2. Financial Management

Financial management deals with outcomes relating to the kinds and amount of the assets, the ways of increasing the capital to buy assets, the ways of running the firm to enhance its dignity (Brigham and Houston, 2015).

The financial management cycle provides how numbers are created and utilized in business operations. Firstly, operations generate the numbers and they are used to measure performance. For example, in a hotel, products and services like rooms, food and beverage outlets, shops, etc. are served to the guests. These reveal a sales transaction about the guest. So the numbers that used in financial analysis come from the sales transaction. Secondly, accounting makes up financial reports and statements to explain the operations to the related managers. Thirdly the managers of operations and accounting works together to analyze the reports.

To improve the current situation, they examine changes, cause of changes and result of changes. Lastly, the operation manager makes the necessary changes. This

provides to be more generative and create value in the products and services.

Numbers give an opportunity for managers to lay out volume of business. This enables for forecasting revenues, planning wages, applying cost control, growing business operations and setting annual budget. Also, this devotes feedback about their operations and help about making fitted changes (Hales, 2011).

Owners, managers, investors and creditors are all interested in analyzing financial statements but, their concerns may vary. For instance, managers are interested in internal operating yield of the company, stockholders are concerned about net income & future incomes and dividends, investors and creditors are also concerned about net income but especially interested in debt-paying capacity (Jagels and Coltman, 2007)

2.2.1. Hospitality Management Accounting

This area is about procuring specific internal information to managers about the organization. It is about leading and checking the operations of the hospitality trade. Specific internal information is very important in terms of planning and deciding disjunctive short-term and long-term activities. Key specifications are procured to determine the procedure of the application for activities. Managers administrate the human resource department to perform the best chosen activities. Managers go over the application procedure of activities to be sure if the plan can be applied and if the required changes are done (Dumitrescu)

2.3. Financial Analysis

Financial analysis is a very substantial subject of financial management (Matsatsinis, Doumpos and Zopounidis, 1997).

To analyze financial statements and reports, numbers should be known in terms of where they come from, how they are used, what they mean and measure. There are

two significant paths about number usage in business. Numbers are utilized to measure financial performance and to procure a management tool for using in business operating (Wild, 2013).

Familiarization of the strengths and weaknesses of organizations can progress with financial analysis, especially by considering the qualitative assessment and expounding the financial ratios (Matsatsinis, Doumpos and Zopounidis, 1997).

2.3.1. Financial Performance

To measure financial performance, real numbers and results are used from business operations.

Financial performance is measured by three basic financial statements.

The Profit and Loss Statements reveal profits, revenues and expenses in a specific time period. These show if the profit and revenue are increasing, decreasing or remaining unchanged.

The Balance Sheet reveal the assets, liabilities and owner's equity of a business in a specific time period.

Increasing assets and owner's equity shows that the business is becoming financially stronger but increasing liabilities shows that the business is in depression.

The Cash Flow Statement reveals how much cash is produced by the business and how effectively it is used by operating the business in a specific time period. Liquidity and cash are significant for the success of the business and the numbers from Cash Flow Statement shows how much cash is being gained (Wild, 2013).

2.3.1.1. Financial Performance Measurement Tools

Organizations interpret their management by accounting profit and economic profit. An economic profit is the subtraction of costs (expenses and cost of capital) from revenues (Marshall, 1890). The cost of capital is the rate of return is what a firm provides for suppliers. The cost of capital is correlated with interest rates from the equity part but cost of capital is the ratio of financier's awaited return. The level of this ratio determines the financier's attitude about the firm (Saint, 1995)

Accounting profit which is also called net income is the profit in a given period of time on the financial statements and they are calculated from accounting cycle. The difference between accounting profit and economic profit is capital cost consideration. The subtraction of expenses from the revenues called as accounting profit however the cost of capital is utilized to gain accounting profit is adjusted in economic profit (Peterson and Peterson, 1996)

An economic profit is more steady than accounting profit, so performance assessment via economic profit provides prudential deciding. For this reason, economic profit eliminates the difficulties (Becerra, 2009)

Table 1 *Calculations of Accounting Profit and Economic Profit*

| Economic Profit | Accounting Profit |
|------------------------|--------------------------|
| EBIT | EBIT |
| - Taxes | - Interests |
| - Capital Charges | - Taxes |
| = Economic profit | = Net Income |

Source: Morard, 2010

2.3.2. Financial Analysis Techniques

Financial analysis techniques are divided into four group.

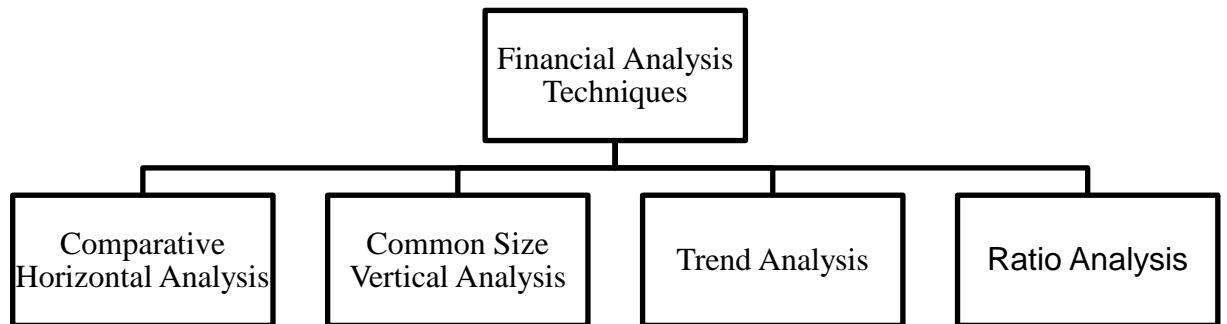


Figure 1 Financial Analysis Techniques

Source: Jagels and Coltman, 2004

In Comparative Horizontal Analysis method, when previous and current accounting statements are obtained from income statement and balance sheet, fluctuation between the two sequential periods can occur. However to obtain these fluctuations not enough alone, supplementary information is a must to see obvious changes. The addition and subtraction between two statements on each line item is calculated as a positive or negative change and the change is divided by the first amount to find the percentage change.

In Common Size Vertical Analysis method, only one period of financial data is enough. Common size means that total assets represents 100 percent and the other values converted to a fraction of total assets. A subset of a balance sheet like current assets, current liabilities, fixed assets, long-term liabilities can be diverted to a common-size vertical analysis format and analyzed one by one (Jagels and Coltman, 2007)

Trend Analysis is an analysis which monitors the change in the financial statement in a long time period like 5,10 or 15 years. In other words, Trend Analysis can make interpretations by considering the periodic data (Agnes and Schmidgall, 2008). A year should be chosen called the main year and the financial statements of the main year accepted as 100. In subsequent years, the data from financial statements are calculated related to the main year value (Karan, 2004). In other words Trend Analysis calculates a series of financial data to examine performance tendency. This analyzing technique is used for especially intracompany comparisons (Bhabotosh, 2008).

In Ratio Analysis method, the relationship between two statement from Income Statement or Balance Sheet is determined. This technique is the most useful one among all the financial analysis techniques (Bakır and Şahin, 2009).

2.4. Ratio Analysis

The appearance of ratio analysis takes place with Euclid's rigorous analysis of the properties of ratios in book V of his elements in 300 B.C. but usage of ratios for the financial statement analysis is comparatively an incoming improvement. The first financial statement analysis usage occurs in the nineteenth century in America, during the industrial maturity ages. When professional managers start to manage the organizations instead of enterprising capitalists, the financial industry obtain more power in the economy, hence financial statements are used more (Horrigan, 1968).

In this section, the demonstration of the usage of financial ratios in terms of understanding how an accounting system is operated for the organization of financial statements will be evaluated. Ratio analysis is used for stating the fractional quantitative relationship between the values in financial statements and in order to compare the current period ratios with previous period ratios. For obtaining an operative analysis, the analyzers must be aware about where to find the essential information to make ratio analysis.

Ratios can state relationships as a numerical value, a quantity, a percentage and a unit basis. Ratios are fractions that a relationship between two values emphasizing how many times the numerator contains the denominator.

For instance, sales revenue is 62,675 TL and the cost of sales is 24,986 TL, so if we want to find the cost of sales as a percentage of sales revenue, the calculation is;

$$\text{Cost of Sales / Sales Revenue} = 24,986 \text{ TL} / 62,675 \text{ TL} = 39\%$$

The total current assets is 5,000 TL and total current liabilities is 2,000 TL , then we can find different types of relationship expressions between the two values;

$$\text{Total current assets} / \text{Total current liabilities} = 5,000 \text{ TL} / 2,000 \text{ TL} = 2,5:1$$

$$\text{Total current liabilities} / \text{Total current assets} = 2,000 \text{ TL} / 5,000 \text{ TL} = 40\%$$

The first one expresses that total current assets are 2.5 times bigger than total current liabilities, in other words there is 2,5 TL in current assets for each 1,00 TL of current liabilities.

The other one expresses that total current liabilities as 40 percent of total current assets. The method of how a ratio is expressed is dependent on the proper format.

One of the unfavorable characteristic of ratio analysis is the lack of theoretical background. Ratio utilizers need to accredit on the puissance. As a consequence, ratio analysis is full of not tested statements related to the usage area, users and also the tie between the ratios. Yield of ratios have been investigated for forecasting the financial challenges, however these investigations have not been united with literature. Some inappropriate ratio analysis are found in literature and they provide a comparison between organizations and over time periods (Horrigan, 1968).

The important point is that the relationship between two values which transformed to a ratio must be realistic, significant and intelligible. For example, when we compare the cost of sales and sales revenue, analysis would be realistic, significant and intelligible but if we compare the cost of sales and management salaries, no effective information would be obtained.

A ratio is just a number so it does not represent suitable and unsuitable results alone. For instance, the food inventory turnover per month of a restaurant may be

applicable but when that ratio is compared with a standard like average turnover ratio in the same types of restaurants industry, its real value cannot be stated. Industry standards cover the hospitality companies' information which are having the same kind of activities but in varied locations, varied operating conditions that occur in the different geographic zone.

As a consequence of economic variances upon a geographical zone, standard ratios cannot be determined from only one operation just like "average operation".

In the future, ratios might have a significant function in the field of analytical devices. That is to say, ratios utilize in little organizations for inner analysis and outer analysts about credit assessment and investments (Horrigan, 1968).

Furthermore, analogous ratios from alike competitive companies can be used as an alternative ratio comparison modality. Crosschecking the current operating period ratios with the last operating period ratios is a fine technique however it is important to find out if the variations between the ratios are favorable and unfavorable. Due to the limited disclosure, somebody who understands the hospitality management should run this dynamic and swiftly changing platform.

The top ratio comparison technique is the evaluation of the current period ratios to find standards for the operating period. Both internal and external factors that influence the operation, should be considered to create standards. General economic situations and "how is the competition" are the external factors. Sales revenue, internal operating policies, fixed and variable costs, operating procedure change and several operating variables make the internal factors.

Pre find operating standards should be utilized to improve operating plans for conditioning the annual operating budget. Operating budget should enlighten coming operations not only about previous operating outcomes but also about current operating outcomes (Jagels and Coltman, 2007)

2.4.1. Application of Financial Ratios in the Hospitality Industry

Schmidgall (1989) found out that different departmental categories give various degrees of significance to the financial ratios. For instance, general managers find operating and activity ratios as the most important ones, owners suppose profitability ratios are the most valuable, bankers think solvency ratios are the most useful data, corporate executives opine liquidity ratios are the one and for financial executives activity ratios and profitability are vital.

Damitio, Dennington and Schmidgall (1995) analyzed that financial managers in lodging industry used comparative statement analysis, common size analysis of income statement and ratio analysis as basic for analyzing financial ratios. But there is no empirical application of these ratios in the study.

Singh and Schmidgall (2002) found the significance of activity, liquidity, profitability, operating and solvency ratios by 500 lodging financial executives. Under favor of a questionnaire, the significance of usage of these financial ratios were generated by a six point semantic differential measurement scale. The last analysis showed that profitability and operating ratios are the most vital ratios for lodging managers. Still, there are no calculations about these ratios and only hotel segment was included in the study within the whole hospitality industry.

Schmidgall and DeFranco (2004) carried out a study about the club segment of the hospitality industry. The data was collected by a questionnaire which was issued to

the club controllers. The information about the statement of activities, statement of cash flow and accounts in the balance were asked to provide by controllers.

Also the most important financial and operating ratios were asked to rank from top to bottom financial ratios in their clubs. The conclusion of the study reveals that the cost of goods sold percentage, the cost of beverage sold percentage, the payroll cost percentage, the current ratio and the debt-equity ratio are the most useful ratios.

2.4.2. Users of Ratio

In general, current and potential creditors, internal operating management and the organization's owners are keen on the examination of ratios. A proprietorship company has one owner, a partnership company has two or further owners and a corporation has many owners called shareholders and stockholders. Controlling costs, safeguarding the assets and profit maximizing for business operation are the responsibilities of management. To control the operations productivity related to pre find standards to examine the operating budget, management uses ratio assessment. Ratio analysis is also used to control the effectuality of day by day operations, to figure out economic situations for satisfying creditors and owners, also to check out current liquidity situations.

Money or trade credits are loans that are given by the creditors to the business operation. The ratios, which may specify the level of safety about the loaned funds and trade credits, draw the interest of creditors. Moreover, to forecast the potential risk of further loans, present and future creditors use the ratios. The borrower will be needed by the creditor, in some instances, for maintaining the level of current asset bigger than current liabilities and the level of working capital.

Consequentially, sundry ratios may be used by ownership of a business operation for measuring such as return on investment, risk level of the investment and to guess the probability of future operations success (Jagels and Coltman, 2007)

All in all, in most cases, associates of the groups cannot agree about which ones are the most important ratios, because they look from a different perspective.

2.5. Kinds of Ratio Analysis

Most common ratio analysis techniques, widely used by the organizations to disclose the financial, economic and operational situations, are divided into four main categories; These selected ratios are; liquidity, efficiency, profitability, and solvency. Four widespread standards are used for comparing in terms of competitor, guidelines, industry and intracompany (Wild, 2013).

2.5.1. Liquidity and Efficiency

Nwaezeaku (2006) identified liquidity as the measure of convertibility to cash or cash equivalents with any assets that is transformative to cash.

Liquidity tells about the reachability of sources to find short term cash requirements. It is influenced by schedule of cash inflows and outflows. The liquidity analysis is done for funding works. Efficiency indicates the organizations' productivity of managing their assets. From a significant level of assets, how much revenue is gained shows the efficiency.

Efficiency and liquidity are supplementary and significant. On condition that, an organization goes into default, its validly existing is indefinite.

In this sense, other ratio analysis has a second priority. Even though the financial measurements suppose the organization exists, the ratio analysis must calculate the

validity of the supposition by liquidity calculations. Furthermore, ineffectual asset managing may induce liquidity problems. Deficiency of liquidity leads nominal profitability and slender opportunities. These situations foresee a lack of owner control. In the company's creditor's point of view; collecting interest, fundraising interest, major payments or deprivation of amounts can be delayed about yield because of the absence of liquidity. Also suppliers and customers are affected by the liquidity problems (Wild, 2013).

Liquidity management is an important subject that draw attention to financial conditions and work economy.

The maximization of profit, obtain high echelon of liquidity to provide safety and to reach maximum level of equity capital. Liquidity management affects organization profitability (Eljelli, 2004)

An organization should not be affected by the absence or surplus of liquidity to meet their short-term obligations. Liquidity analysis is significant for both external and internal analysts in terms of their connection with operations of a work (Saha and Bhunia, 2012).

2.5.1.1. Current Ratio

Cash and other funds that are sold and utilized, called as current assets. Short-term investments, accounts receivables, goods for sale and prepaid expenses are called as current assets too.

Loans that must be subsidised in a year or the operating cycle, called as current liabilities. Accounts payable, interest payable, wages payable, notes payable, etc. also called as current liabilities (Wild, 2013).

Current ratio shows the scope that if the liquidated current assets cover current liabilities. High current ratio refers high liquidity (Reid and Herbel, 2017)

The current ratio identified as;

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$
(1)

Source: Wild, 2013

A vivid liquidity situation and a capability to fulfill current obligations can be possible with a high current ratio. However, too high current ratio shows that the organization has too much investigation in current assets collated to the current obligations. An extravagant investment in current assets is not a logical fund usage since current assets create a low return on investment.

Most of the utilizers practice a standard of 2:1 or 1.5:1 for the current ratio to assist interpreting an organization's debt-paying capability. If an organization's current ratio is 2:1 or more, it's supposed as a good credit risk in the short run. A current ratio analysis must identify three factors: kind of business, structure of current assets, turnover rate of current assets constituents (Wild, 2013).

2.5.1.1. Current Ratio in Hospitality Industry

Hotels and motels in hospitality industry own the biggest inventories as guest rooms that are suitable for sale and these inventories are included in the fixed assets. Food and beverage services are the unique current inventories that are owned by hotel and motel processes but these inventories form only a little part of current assets. For this reason, current ratio of hotel segment is approximately 1.5 or low and current ratio of motel segment is approximately 1. Minimum current ratio should be stated for

not generating short term liquidity and profitability troubles (Jagels and Coltman, 2004).

2.5.1.1.2. Kind of Business

A service organization which donates low or no credit and launch limited inventories, if its revenues produce sufficient amount of cash to give its current liabilities, it may presumably manage on a current ratio less than 1:1. Besides, high-priced goods selling firms need higher ratio due to challenges in deciding client demand and cash bills. For example, if demand decreases, the inventory cannot produce enough cash as expected. Hence, current ratio analysis must involve a ratio comparison of accomplished firms in the same sector and from previous periods. It should not be forgotten that, the current ratio is affected from the firm's accounting methods, particularly inventory method. For example, if costs are increasing, the firm is using "Last in First out" tends to state a few amount of current assets than using "First in First out" (Wild, 2013).

2.5.1.1.3. The Perspectives of Creditors and Owners about Current Ratios

Supreme current ratio is favoured by creditors, because it shows the capacity for refunding their debts. Creditors want to know the least current ratio prior to fund borrowing and credit extension. If the least current ratio is undercounted, the creditor probably claims right after refund.

The reverse situation is valid for the owners, they opt a small current ratio, because a high current ratio shows a high amount of money is engaged and so it could not be used sufficiently. Owners may care about inventories that surpass stipulated requirement, so the cost of owning inventory increases.

After all, managers want a current ratio which is agreeable for both creditors and owners, however it is not an easy issue (Jagels and Coltman, 2004).

2.5.1.1.4. Structure of Current Assets

The structure of an organization's current assets is significant for the consideration of short-term liquidity. Cash, cash equivalents, short-term investments and short-term receivable are much more liquid than accounts receivable, notes receivable and inventory. As might be accepted, cash can be used to pay current debts. Accounts receivable and inventory should be converted into cash prior to payment. An extreme quantity of inventory and receivables devitalize the firm's competency to pay current liabilities (Wild, 2013).

2.5.1.2. Accounts Receivable Turnover

The computation of how often a firm converts their receivables into cash is accounts receivable turnover.

The accounts receivable turnover identified as;

$$\text{Accounts Receivable Turnover} = \frac{\text{Net Sales}}{\text{Average accounts receivable, net}} \quad (2)$$

Source: Wild, 2013

The holding from clients as credit sales is called as accounts receivable.

A big rise in equity from the firm's management operations which gain income, called as net sales.

Short-term receivables from clients along with accounts receivables are usually inclusive in the denominator. Furthermore, accounts receivable turnover is more accurate, supposing that credit sales are utilized for nominator (Wild, 2013).

Free conditions generate bigger and fewer liquid receivables. If sales are rising comparatively to the rising in receivables, this cause fewer accounts receivable turnover (Richards and Laughlin, 1980).

2.5.1.3. Inventory Turnover

Working capital needs are affected by the period of holding inventory of a firm before selling. The measurement of this impact is inventory turnover, it is also named as “merchandise turnover or merchandise inventory turnover”.

The inventory turnover identified as;

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} \quad (3)$$

Source: Wild, 2013

Expenditure of inventory sold to clients during a time duration, called as cost of goods sold.

Goods an organisation possess and await to sell in their operations, called as inventory (Wild, 2013).

If two firms produce the identical sales, the higher inventory turnover ratio firm needs a lower investment in inventory than the smaller inventory ratio one. If the inventory turnover is too high, this situation limits the sales volume.

2.5.1.4. Total Asset Turnover

This ratio demonstrates how yielding the assets are utilized to compose the revenue. A high ratio shows how assets are used productively (Reid and Herbel, 2017)

The firm's talent to use its assets for producing sales and to state of operating competency, demonstrates the total asset turnover.

The total asset turnover identified as;

$$\text{Total asset Turnover} = \frac{\text{Net sales}}{\text{Average total assets}}$$
(4)

Source: Wild, 2013

Funds, an organisation possess and monitors which are hoped to procure current and hereafter advantages for the business, called as assets (Wild, 2013).

2.5.2. Solvency

Solvency is about calculating the quantity of debt. Solvency ratios promote the business capacity of the business's to fulfill financial loans (Reid and Herbel, 2017)

Long-term financial vigor and capability include long-term obligations. Solvency is affected by business operations like financing, investing and operating. Solvency is a more panoptic measurement than liquidity, besides it is long term and less accurate. The design of a firm's capital structure is one of the most significant constituent of solvency analysis, because a firm's financing basis is related to the capital structure. Solvency analysis focuses on a firm's capability to procure long-term security to the

creditors and to fulfill obligations. Demonstrators of the capability involve debt and equity ratios, the relation between subscribed assets and warranted liabilities and the firm's capacitance to make enough income to supply fixed interest charges (Wild, 2013).

The characteristics of an organization's capital structure are taxes, bankruptcy and agency costs. The effect of taxes on the structure rely on the financial differences between debt and equity since when interest payments are tax free (Wijst and Thurik, 1993).

2.5.2.1. Debt and Equity Ratios

Debt and equity ratio analysis provide evaluation about the part of a firm's assets promoted by the owners and the part promoted by creditors. The debt ratio states total liabilities as a percentage of total assets, besides the equity ratio procures supplementary data by stating total equity as a percentage of total assets.

When the capital structure of a firm includes more equity, it has low risk. When debt is superior, the necessary payment for interest is risky. The other consideration is, if the stock holder financing is bigger, the firm lose more via equity prior to the assets become insufficient to fulfill creditors desire (Wild, 2013).

A debt ratio demonstrates the amount of total assets that obliged to the creditors. The risk amount can be calculated by this ratio. High ratio demonstrates high risk. The aim of some organizations are to reach out of debt operations (Reid and Herbel, 2017)

The debt ratio identified as;

$$\text{Debt Ratio} = \frac{\text{Average total liabilities}}{\text{Average total assets}}$$

(5)

Source: Wild, J. J. 2013

What a money loaner demands on assets is called liabilities. These demands show organization responsibilities to procure assets, products and services (Wild, 2013).

An equity ratio demonstrates the amount of total assets that are funded by the owner's equity capital. High ratio shows the extra capital procured by owner (Reid and Herbel, 2017)

The equity ratio identified as;

$$\text{Equity Ratio} = \frac{\text{Total Equity}}{\text{Average total assets}} \quad (6)$$

Source: Wild, 2013

What an owner demands on assets of a firm is called equity. Equity is equivalent to the difference between assets and liabilities (Wild, 2013).

Debt is identified as financial leverage, due to their elevation impact for the return to stockholders. If the big division of firms assets is funded by debt, they are rated as pretty leveraged (Wild, 2013).

2.5.2.2. Debt to Equity Ratios

Capital amortizes financial shock, if the worth of asset diminishes or loans cannot be refunded, it guards against the deprivations (Samad and Hassan, 2006)

The debt to equity ratio identified as;

$$\text{Debt to Equity Ratio} = \frac{\text{Total liabilities}}{\text{Total equity}} \quad (7)$$

Source: Wild, 2013

A higher debt to equity ratio means low potentiality to enlarge via debt financing utilization (Wild, 2013).

2.5.3 Profitability

Aburime (2008) found that profit is the difference between income from the sales and the cost of manufacturing.

A firm's skill to manage their assets productively to turn out profit is a significant issue. Profitability implies to the firm's skill to produce a suitable return on invested capital. Return is decreed by valuation earnings related to the degree and resource of financing. Besides profitability is associated with solvency. This part explains the main profitability computations and their significance in terms of financial analysis (Wild, 2013).

When the revenue surpasses the related expenses, this amount of measurement is called as profitability. Dividends and market price stocks which in other words is profitability catch the investors' interest. Operating productivity measurement that is to say profitability took the managers interest. Therewith, if the company has low profit that means impotent management, it means investors will not work with that company (Niresh, 2012).

2.5.3.1. Profit Margin

A firm's working yield and profitability can be stated by the ratios. Profit margin, which shows the ingenuity to earn net income from sales. It is calculated by net income as a percent of revenues (Wild, 2013).

An organization can enhance their profit by raising the profit per unit produced and by raising the capacity of manufacturing (Reid and Herbel, 2017)

The profit margin ratio identified as;

$$\text{Profit margin} = \frac{\text{Net income}}{\text{Sales Revenue}} \quad (8)$$

Source: Wild, 2013

Quantity gained subsequently removing all expences within a time duration, called as net income, profit, earnings.

A big rise in equity from a firm's managerial activities which gain income, called as sales revenue.

To interpret profit margin, industry must be taken into consideration. For example, X firm may need a profit margin between 20% and 35%, however Y firm may need a profit margin between 2% and 6%. These ratios chew over management since managers are eventually liable to manage efficiency (Wild, 2013).

The organizations that own enhanced technology, have big capital necessities. The organizations which have big fixed assets and higher machine technology, their profit margins get affected more by organization and year influences. These kind of organizations own big fixed overhead costs, profit margins as compared with sales amount probably influenced by financial demands (Lieberson and Oconnor, 1972).

2.5.3.2. Gross Margin

Merchandiser's expenses league together mostly by the cost of goods sold. If gross profit is not enough, merchandiser will flop. These merchandisers usually

calculate this ratio to find out the situation. The difference between profit margin and gross margin is, in gross margin calculation, there is no cost but there is cost of goods sold (Wild, 2013).

The gross margin ratio identified as;

$$\text{Gross margin} = \frac{\text{Net Sales} - \text{Cost of Goods Sold}}{\text{Net Sales}} \quad (9)$$

Source: Wild, 2013

2.5.3.3. Return on Total Assets

The ratio quantifies the effectuality of assets usage by the management part of the organization.

Return on Total assets is the demonstrator of evaluating administrative yield (Samad, 1998). Return on Total Assets indicates how an organization transform their assets to net earnings. High Return on Total Assets shows advanced ability and success (Samad and Hassan, 2006)

The return on total assets identified as;

$$\text{Return on Total Assets} = \frac{\text{Net income}}{\text{Total assets}} \quad (10)$$

Source: Jagels and Coltman, 2007.

2.5.3.4. Cash Flow on Total Assets

Cash Flow data is not sufficient by itself, however it helps to determine refund dividends, enlarge operations. Cash flow on total assets is calculated and tested like

return on total assets, but the numerator is different. This ratio demonstrates the real cash flows and it is not influenced by accounting income evaluation (Wild, 2013).

The cash flow on total assets identified as;

$$\text{Cash Flow on Total Assets} = \frac{\text{Cash Flow from Operations}}{\text{Total assets}} \quad (11)$$

Source: Wild, 2013

3. RESEARCH METHOD

3.1. Participants

Secondary data is expended in this study. Public revelation Platform “www.kap.gov.tr” is utilized to collect the inputs regarding essential financial data for the time that the study involves.

This sample came out of 30 organizations which are selected from BIST organizations. The data was collected between the years 2012 and 2017 for the study. Based upon this data, eleven financial ratios of 30 firms for 6 years were gained. The organizations which are the member of “Gıda, İçki ve Tütün” and “Lokanta ve Oteller” segments were utilized for this study, however from these two segments seven organizations are out of the subject so they were eliminated. Besides, the data from three organizations about these two segments could not be found so they were also eliminated.

The list of the organizations which were studied shown below:

Table 2 *The List of the Sample Companies of the Study*

| STOCK CODE | COMPANY NAME |
|-----------------------|---|
| AEFES | ANADOLU EFES BİRACILIK VE MALT SANAYİİ A.Ş. |
| ALYAG | ALTINYAĞ KOMBİNALARI A.Ş. |
| AVOD | A.V.O.D. KURUTULMUŞ GIDA VE TARIM ÜRÜNLERİ A.Ş. |
| BANVT | BANVİT BANDIRMA VİTAMİNLİ YEM SANAYİİ A.Ş. |

CCOLA COCA-COLA İÇECEK A.Ş.

DARDL DARDANEL ÖNENTAŞ GIDA SANAYİ A.Ş.

ERSU ERSU MEYVE VE GIDA SANAYİ A.Ş.

FRIGO FRİGO-PAK GIDA MADDELERİ SANAYİ VE TİCARET A.Ş.

KENT KENT GIDA MADDELERİ SANAYİİ VE TİCARET A.Ş.

KERVT KEREVİTAŞ GIDA SANAYİ VE TİCARET A.Ş.

KNFRT KONFRUT GIDA SANAYİ VE TİCARET A.Ş.

KRSTL KRİSTAL KOLA VE MEŞRUBAT SANAYİ TİCARET A.Ş.

MERKO MERKO GIDA SANAYİ VE TİCARET A.Ş.

PENGD PENGUEN GIDA SANAYİ A.Ş.

PETUN PINAR ENTEGRE ET VE UN SANAYİİ A.Ş.

PINSU PINAR SU SANAYİ VE TİCARET A.Ş.

PNSUT PINAR SÜT MAMULLERİ SANAYİİ A.Ş.

SELGD SELÇUK GIDA ENDÜSTRİ İHRACAT İTHALAT A.Ş.

TATGD TAT GIDA SANAYİ A.Ş.

TUKAS TUKAŞ GIDA SANAYİ VE TİCARET A.Ş.

TBORG TÜRK TUBORG BİRA VE MALT SANAYİİ A.Ş.

ULKER ÜLKER BİSKÜVİ SANAYİ A.Ş.

VANGD VANET GIDA SANAYİ İÇ VE DIŞ TİCARET A.Ş.

AYCES ALTIN YUNUS ÇEŞME TURİSTİK TESİSLER A.Ş.

AVTUR AVRASYA PETROL VE TURİSTİK TESİSLER YATIRIMLAR
A.Ş.

ETILR ETİLER GIDA VE TİCARİ YATIRIMLAR SANAYİ VE
TİCARET A.Ş.

KSTUR KUŞTUR KUŞADASI TURİZM ENDÜSTRİ A.Ş.

MAALT MARMARİS ALTINYUNUS TURİSTİK TESİSLER A.Ş.

MERIT MERİT TURİZM YATIRIM VE İŞLETME A.Ş.

METUR METEMTUR OTELÇİLİK VE TURİZM İŞLETMELERİ A.Ş.

3.2. Research Design

According to the financial analysis, quantitative data has been obtained. This financial analysis has been adopted on the financial statements which were procured from KAP. These financial statements have been conveyed to a Macbook program “Numbers” and via the formulas, the ratios have been calculated. Then these ratios have been conveyed to SPSS Panel data program and via some tests, the analysis have been done.

In this study, profitability is the dependent variable and liquidity, efficiency, solvency are the independent variables and panel data analysis has been used to put into practice all the ratios to examine how efficient dependent variable is correlated with independent variables.

3.3. Research Questions

The research questions have been formed according to the aim of the study and these questions are seen below:

- Can liquidity, efficiency, solvency and profitability be favorable to examine financial situation of “Gıda, İçki ve Tütün” and “Lokanta ve Oteller” industries between the period 2012 and 2017?
- Which sector‘ financial performances are good between the period 2012 and 2017 according to the financial ratios?

3.4. Research Hypotheses

In the light of these research questions, the hypotheses listed below have been examined.

H1: There is an association between liquidity and profitability.

H2: There is an association between efficiency and profitability.

H3: There is an association between solvency and profitability.

3.5. Research Model

To test the hypotheses listed above, the below figure shows the relevance between independent variables and dependent variable.

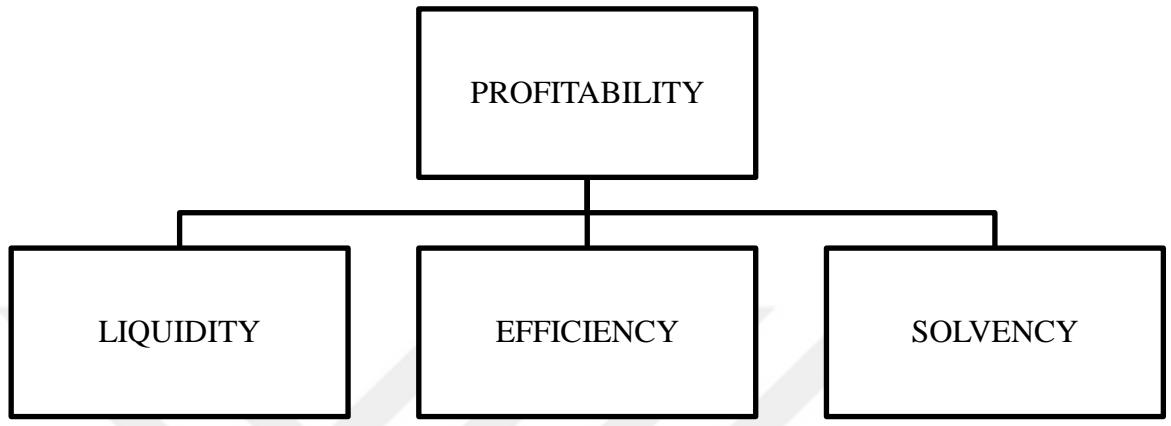


Figure 2 Research Model of the Study

4. RESULTS

4.1. Ratios

Table 3 AEFES

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,79 | 1,58 | 1,78 | 1,88 | 2,24 | 1,58 |
| Accounts Receivable Turnover | 7,79 | 10,28 | 9,47 | 8,96 | 7,90 | 8,46 |
| Inventory Turnover | 4,54 | 5,18 | 5,22 | 5,46 | 6,14 | 6,70 |
| Total Asset Turnover | 0,55 | 0,41 | 0,50 | 0,46 | 0,41 | 0,44 |
| Debt Ratio | 0,42 | 0,40 | 0,41 | 0,43 | 0,42 | 0,47 |
| Equity Ratio | 0,58 | 0,60 | 0,59 | 0,57 | 0,58 | 0,53 |
| Debt to Equity Ratio | 0,72 | 0,67 | 0,70 | 0,75 | 0,72 | 0,88 |
| Profit Margin Ratio | 0,10 | 0,31 | -0,03 | 0,01 | 0,004 | 0,02 |
| Gross Margin Ratio | 0,49 | 0,43 | 0,44 | 0,41 | 0,39 | 0,39 |
| Return on Total Assets | 0,05 | 0,13 | -0,02 | 0,006 | 0,006 | 0,01 |
| Cash Flow On total Assets | 0,07 | 0,06 | 0,08 | 0,08 | 0,07 | 0,07 |

Table 4 ALYAG

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 0,97 | 1,08 | 0,81 | 0,43 | 0,43 | 1,26 |
| Accounts Receivable Turnover | 33,62 | 15,45 | 8,27 | 21,15 | 8,09 | 7,35 |
| Inventory Turnover | 17,67 | 5,45 | 7,84 | 27,67 | 23,46 | 11,75 |
| Total Asset Turnover | 1,22 | 0,77 | 0,78 | 0,55 | 0,92 | 1,16 |
| Debt Ratio | 0,29 | 0,31 | 0,38 | 0,57 | 0,70 | 0,95 |
| Equity Ratio | 0,71 | 0,69 | 0,62 | 0,43 | 0,30 | 0,05 |
| Debt to Equity Ratio | 0,41 | 0,45 | 0,61 | 1,33 | 2,33 | 18,90 |
| Profit Margin Ratio | -0,17 | 0,05 | -0,03 | -0,08 | -0,06 | 0,04 |
| Gross Margin Ratio | -0,03 | 0,11 | 0,05 | 0,05 | 0,10 | 0,08 |
| Return on Total Assets | -0,20 | 0,04 | -0,02 | -0,04 | 0,06 | 0,04 |
| Cash Flow On total Assets | -0,82 | -0,13 | 0,05 | 0,08 | 0,05 | 0,21 |

Table 5 AVOD

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,76 | 1,76 | 1,20 | 1,13 | 1,37 | 1,32 |
| Accounts Receivable Turnover | 2,61 | 3,91 | 7,43 | 9,55 | 6,56 | 7,85 |
| Inventory Turnover | 1,35 | 1,48 | 3,87 | 3,65 | 2,42 | 2,15 |
| Total Asset Turnover | 0,52 | 0,52 | 0,93 | 0,80 | 0,67 | 0,65 |
| Debt Ratio | 0,42 | 0,50 | 0,54 | 0,46 | 0,37 | 0,45 |
| Equity Ratio | 0,58 | 0,50 | 0,46 | 0,54 | 0,63 | 0,55 |
| Debt to Equity Ratio | 0,72 | 1,00 | 1,17 | 0,86 | 0,59 | 0,82 |
| Profit Margin Ratio | 0,04 | -0,01 | 0,01 | 0,03 | 0,01 | 0,0007 |
| Gross Margin Ratio | 0,23 | 0,18 | 0,13 | 0,20 | 0,18 | 0,17 |
| Return on Total Assets | 0,02 | -0,004 | 0,01 | 0,02 | 0,006 | 0,0005 |
| Cash Flow On total Assets | -0,16 | -0,06 | 0,06 | 0,004 | 0,11 | 0,09 |

Table 6 BANVT

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,05 | 0,89 | 0,86 | 0,60 | 1,02 | 1,12 |
| Accounts Receivable Turnover | 8,39 | 7,67 | 7,55 | 10,78 | 12,29 | 9,79 |
| Inventory Turnover | 6,72 | 7,39 | 8,33 | 15,21 | 10,51 | 7,55 |
| Total Asset Turnover | 1,53 | 1,70 | 1,96 | 1,90 | 1,74 | 1,89 |
| Debt Ratio | 0,81 | 0,88 | 0,91 | 0,79 | 0,69 | 0,54 |
| Equity Ratio | 0,19 | 0,12 | 0,09 | 0,21 | 0,31 | 0,46 |
| Debt to Equity Ratio | 4,26 | 7,44 | 9,80 | 3,77 | 2,23 | 1,18 |
| Profit Margin Ratio | 0,01 | -0,03 | -0,01 | 0,05 | 0,03 | 0,10 |
| Gross Margin Ratio | 0,14 | 0,12 | 0,13 | 0,11 | 0,19 | 0,23 |
| Return on Total Assets | 0,01 | -0,06 | -0,02 | 0,09 | 0,06 | 0,19 |
| Cash Flow On total Assets | 0,01 | 0,06 | 0,14 | 0,006 | 0,13 | 0,30 |

Table 7 CCOLA

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 2,25 | 1,54 | 1,56 | 1,75 | 2,09 | 1,38 |
| Accounts Receivable Turnover | 13,89 | 13,53 | 14,18 | 12,05 | 11,67 | 12,62 |
| Inventory Turnover | 7,97 | 7,00 | 6,61 | 7,07 | 13,52 | 9,97 |
| Total Asset Turnover | 0,97 | 0,74 | 0,83 | 0,75 | 0,67 | 0,64 |
| Debt Ratio | 0,55 | 0,59 | 0,53 | 0,54 | 0,52 | 0,59 |
| Equity Ratio | 0,45 | 0,41 | 0,47 | 0,46 | 0,48 | 0,41 |
| Debt to Equity Ratio | 1,23 | 1,44 | 1,14 | 1,17 | 1,09 | 1,45 |
| Profit Margin Ratio | 0,09 | 0,10 | 0,06 | 0,02 | 0,003 | 0,03 |
| Gross Margin Ratio | 0,38 | 0,38 | 0,36 | 0,35 | 0,34 | 0,34 |
| Return on Total Assets | 0,09 | 0,07 | 0,05 | 0,01 | 0,002 | 0,02 |
| Cash Flow On total Assets | 0,12 | 0,09 | 0,10 | 0,10 | 0,11 | 0,09 |

Table 8 *DARDL*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 0,07 | 0,22 | 0,39 | 0,19 | 0,14 | 0,25 |
| Accounts Receivable Turnover | 55,25 | 9,73 | 6,15 | 22,99 | 39,52 | 12,04 |
| Inventory Turnover | 7,31 | 18,02 | 7,62 | 12,81 | 10,43 | 18,31 |
| Total Asset Turnover | 0,98 | 2,91 | 1,92 | 3,78 | 4,38 | 4,05 |
| Debt Ratio | 8,67 | 5,26 | 2,99 | 3,93 | 4,39 | 4,40 |
| Equity Ratio | -7,67 | -4,26 | -1,99 | -2,93 | -3,39 | -3,40 |
| Debt to Equity Ratio | -1,13 | -1,23 | -1,50 | -1,34 | -1,30 | -1,29 |
| Profit Margin Ratio | 0,16 | 2,34 | -0,10 | 0,007 | 0,14 | 0,06 |
| Gross Margin Ratio | 0,39 | 0,38 | 0,39 | 0,35 | 0,37 | 0,25 |
| Return on Total Assets | 0,16 | 6,80 | -0,20 | 0,03 | 0,60 | 0,26 |
| Cash Flow On total Assets | 0,63 | 7,51 | -0,46 | -0,43 | -0,41 | -0,34 |

Table 9 ERSU

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 3,28 | 6,88 | 3,46 | 2,06 | 4,41 | 2,90 |
| Accounts Receivable Turnover | 12,76 | 9,63 | 4,23 | 2,95 | 9,58 | 4,65 |
| Inventory Turnover | 1,50 | 1,32 | 2,73 | 1,33 | 0,78 | 0,60 |
| Total Asset Turnover | 0,46 | 0,46 | 0,56 | 0,28 | 0,17 | 0,18 |
| Debt Ratio | 0,20 | 0,34 | 0,26 | 0,26 | 0,16 | 0,20 |
| Equity Ratio | 0,80 | 0,66 | 0,74 | 0,74 | 0,84 | 0,80 |
| Debt to Equity Ratio | 0,25 | 0,50 | 0,36 | 0,35 | 0,19 | 0,25 |
| Profit Margin Ratio | 0,003 | -0,03 | -0,05 | -0,06 | 0,007 | 0,13 |
| Gross Margin Ratio | 0,09 | 0,10 | 0,10 | 0,15 | 0,20 | 0,24 |
| Return on Total Assets | 0,001 | -0,01 | -0,03 | -0,02 | 0,001 | 0,02 |
| Cash Flow On total Assets | 0,02 | -0,01 | 0,02 | 0,0006 | - | -0,004 |
| | | | | | 0,0006 | |

Table 10 *FRIGO*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 0,73 | 1,50 | 1,14 | 0,92 | 0,86 | 1,44 |
| Accounts Receivable Turnover | 15,32 | 12,83 | 11,49 | 8,06 | 7,58 | 15,58 |
| Inventory Turnover | 3,13 | 1,99 | 2,17 | 2,02 | 2,95 | 1,87 |
| Total Asset Turnover | 0,81 | 0,65 | 0,78 | 0,77 | 0,88 | 0,82 |
| Debt Ratio | 0,63 | 0,73 | 0,75 | 0,80 | 0,79 | 0,72 |
| Equity Ratio | 0,37 | 0,27 | 0,25 | 0,20 | 0,21 | 0,28 |
| Debt to Equity Ratio | 1,71 | 2,70 | 3,00 | 4,02 | 3,75 | 2,56 |
| Profit Margin Ratio | -0,05 | -0,16 | -0,05 | -0,12 | -0,04 | 0,02 |
| Gross Margin Ratio | 0,09 | 0,07 | 0,11 | 0,12 | 0,11 | 0,19 |
| Return on Total Assets | -0,04 | -0,11 | -0,04 | -0,09 | -0,04 | 0,02 |
| Cash Flow On total Assets | 0,03 | -0,09 | 0,04 | 0,02 | 0,02 | 0,02 |

Table 11 *KENT*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,37 | 1,39 | 1,71 | 1,70 | 1,07 | 1,36 |
| Accounts Receivable Turnover | 3,79 | 3,90 | 5,21 | 6,18 | 5,50 | 5,02 |
| Inventory Turnover | 7,88 | 6,87 | 10,67 | 8,21 | 7,47 | 5,99 |
| Total Asset Turnover | 1,04 | 1,09 | 1,19 | 0,93 | 1,09 | 1,19 |
| Debt Ratio | 0,37 | 0,37 | 0,37 | 0,32 | 0,42 | 0,35 |
| Equity Ratio | 0,63 | 0,63 | 0,63 | 0,68 | 0,58 | 0,65 |
| Debt to Equity Ratio | 0,59 | 0,59 | 0,58 | 0,47 | 0,72 | 0,54 |
| Profit Margin Ratio | 0,03 | -0,03 | 0,03 | 0,09 | -0,01 | 0,06 |
| Gross Margin Ratio | 0,28 | 0,29 | 0,29 | 0,36 | 0,30 | 0,30 |
| Return on Total Assets | 0,03 | -0,03 | 0,04 | 0,09 | -0,02 | 0,07 |
| Cash Flow On total Assets | 0,02 | 0,14 | 0,20 | 0,09 | -0,03 | 0,10 |

Table 12 KERVT

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 0,90 | 0,56 | 0,76 | 0,55 | 0,40 | 1,10 |
| Accounts Receivable Turnover | 7,21 | 3,74 | 3,92 | 3,73 | 4,21 | 4,22 |
| Inventory Turnover | 2,71 | 3,01 | 3,27 | 2,58 | 2,81 | 5,94 |
| Total Asset Turnover | 0,96 | 0,72 | 0,72 | 0,58 | 0,76 | 0,71 |
| Debt Ratio | 1,14 | 1,06 | 1,04 | 0,96 | 1,09 | 0,78 |
| Equity Ratio | -0,14 | -0,06 | -0,04 | 0,04 | -0,09 | 0,22 |
| Debt to Equity Ratio | -8,11 | -18,33 | -27,98 | 24,10 | 12,07 | 3,53 |
| Profit Margin Ratio | -0,003 | -0,17 | -0,06 | -0,22 | -0,16 | 0,03 |
| Gross Margin Ratio | 0,27 | 0,28 | 0,28 | 0,28 | 0,25 | 0,18 |
| Return on Total Assets | -0,003 | -0,12 | -0,04 | -0,13 | -0,12 | 0,02 |
| Cash Flow On total Assets | 0,05 | -0,004 | 0,05 | 0,04 | 0,07 | 0,07 |

Table 13 *KNFRT*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,83 | 2,20 | 6,25 | 8,65 | 4,19 | 2,53 |
| Accounts Receivable Turnover | 7,33 | 4,75 | 7,20 | 4,83 | 7,63 | 12,56 |
| Inventory Turnover | 1,33 | 0,95 | 1,43 | 1,06 | 0,58 | 1,08 |
| Total Asset Turnover | 1,02 | 0,78 | 1,16 | 0,75 | 0,51 | 0,67 |
| Debt Ratio | 0,48 | 0,46 | 0,17 | 0,12 | 0,20 | 0,24 |
| Equity Ratio | 0,52 | 0,54 | 0,83 | 0,88 | 0,80 | 0,76 |
| Debt to Equity Ratio | 0,92 | 0,84 | 0,20 | 0,13 | 0,25 | 0,32 |
| Profit Margin Ratio | 0,08 | 0,07 | 0,15 | 0,13 | 0,22 | 0,21 |
| Gross Margin Ratio | 0,20 | 0,28 | 0,32 | 0,20 | 0,28 | 0,29 |
| Return on Total Assets | 0,08 | 0,05 | 0,18 | 0,10 | 0,11 | 0,14 |
| Cash Flow On total Assets | -0,03 | -0,01 | 0,32 | 0,008 | 0,009 | 0,23 |

Table 14 KRSTL

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 10,56 | 5,53 | 2,81 | 3,49 | 2,56 | 3,21 |
| Accounts Receivable Turnover | 0,74 | 1,40 | 1,98 | 2,29 | 2,99 | 2,41 |
| Inventory Turnover | 6,34 | 5,88 | 4,17 | 6,82 | 9,94 | 7,36 |
| Total Asset Turnover | 0,33 | 0,63 | 0,68 | 0,94 | 1,13 | 0,89 |
| Debt Ratio | 0,06 | 0,13 | 0,26 | 0,21 | 0,28 | 0,37 |
| Equity Ratio | 0,94 | 0,87 | 0,74 | 0,79 | 0,72 | 0,63 |
| Debt to Equity Ratio | 0,06 | 0,15 | 0,35 | 0,27 | 0,38 | 0,58 |
| Profit Margin Ratio | -0,07 | 0,05 | 0,01 | 0,02 | 0,03 | 0,03 |
| Gross Margin Ratio | 0,05 | 0,18 | 0,07 | 0,08 | 0,12 | 0,09 |
| Return on Total Assets | -0,02 | 0,03 | 0,004 | 0,07 | 0,03 | 0,02 |
| Cash Flow On total Assets | -0,02 | -0,09 | 0,01 | -0,03 | 0,10 | -0,06 |

Table 15 *MERKO*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 0,83 | 0,84 | 1,56 | 1,32 | 1,13 | 0,85 |
| Accounts Receivable Turnover | 8,53 | 9,65 | 9,28 | 7,42 | 6,26 | 8,55 |
| Inventory Turnover | 1,80 | 1,77 | 11,51 | 1,28 | 1,28 | 2,73 |
| Total Asset Turnover | 0,82 | 0,92 | 2,44 | 0,86 | 0,77 | 1,00 |
| Debt Ratio | 0,75 | 0,80 | 0,43 | 0,68 | 0,73 | 0,84 |
| Equity Ratio | 0,25 | 0,20 | 0,57 | 0,32 | 0,27 | 0,16 |
| Debt to Equity Ratio | 2,97 | 3,92 | 0,75 | 2,13 | 2,71 | 5,27 |
| Profit Margin Ratio | 0,01 | -0,04 | 0,09 | 0,009 | -0,08 | -0,15 |
| Gross Margin Ratio | 0,18 | 0,19 | 0,21 | 0,19 | 0,13 | 0,07 |
| Return on Total Assets | 0,01 | -0,04 | 0,22 | 0,008 | -0,06 | -0,14 |
| Cash Flow On total Assets | 0,04 | 0,04 | 0,09 | 0,04 | 0,003 | 0,007 |

Table 16 PENGD

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 0,93 | 1,35 | 1,06 | 0,94 | 0,81 | 0,83 |
| Accounts Receivable Turnover | 4,37 | 5,66 | 6,38 | 6,18 | 7,87 | 8,40 |
| Inventory Turnover | 1,24 | 1,99 | 2,55 | 1,68 | 1,67 | 1,81 |
| Total Asset Turnover | 0,43 | 0,46 | 0,59 | 0,55 | 0,60 | 0,74 |
| Debt Ratio | 0,53 | 0,63 | 0,68 | 0,69 | 0,76 | 0,84 |
| Equity Ratio | 0,47 | 0,37 | 0,32 | 0,31 | 0,23 | 0,16 |
| Debt to Equity Ratio | 1,14 | 1,69 | 2,08 | 2,23 | 3,31 | 5,27 |
| Profit Margin Ratio | 0,02 | -0,29 | -0,11 | 0,04 | -0,09 | -0,09 |
| Gross Margin Ratio | 0,20 | 0,04 | 0,11 | 0,20 | 0,15 | 0,15 |
| Return on Total Assets | 0,01 | -0,13 | -0,07 | 0,02 | -0,05 | -0,07 |
| Cash Flow On total Assets | 0,002 | -0,09 | 0,03 | -0,008 | -0,03 | -0,09 |

Table 17 PETUN

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,86 | 1,70 | 1,47 | 1,65 | 1,67 | 1,61 |
| Accounts Receivable Turnover | 6,86 | 7,18 | 8,40 | 8,09 | 6,31 | 6,77 |
| Inventory Turnover | 11,28 | 10,65 | 11,72 | 8,76 | 11,39 | 12,18 |
| Total Asset Turnover | 1,01 | 1,09 | 1,24 | 1,13 | 1,17 | 1,00 |
| Debt Ratio | 0,23 | 0,25 | 0,23 | 0,22 | 0,23 | 0,23 |
| Equity Ratio | 0,77 | 0,75 | 0,77 | 0,78 | 0,77 | 0,77 |
| Debt to Equity Ratio | 0,30 | 0,33 | 0,29 | 0,28 | 0,30 | 0,29 |
| Profit Margin Ratio | 0,07 | 0,08 | 0,08 | 0,11 | 0,09 | 0,09 |
| Gross Margin Ratio | 0,17 | 0,17 | 0,15 | 0,17 | 0,17 | 0,15 |
| Return on Total Assets | 0,07 | 0,09 | 0,10 | 0,13 | 0,11 | 0,09 |
| Cash Flow On total Assets | 0,08 | 0,10 | 0,07 | 0,07 | 0,07 | 0,10 |

Table 18 PINSU

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,00 | 0,81 | 1,11 | 0,71 | 0,82 | 0,55 |
| Accounts Receivable Turnover | 7,34 | 7,19 | 6,05 | 7,84 | 7,64 | 7,05 |
| Inventory Turnover | 8,57 | 8,60 | 11,14 | 7,32 | 7,98 | 19,65 |
| Total Asset Turnover | 0,84 | 0,85 | 1,08 | 0,97 | 0,80 | 0,80 |
| Debt Ratio | 0,34 | 0,44 | 0,52 | 0,64 | 0,69 | 0,74 |
| Equity Ratio | 0,66 | 0,56 | 0,48 | 0,36 | 0,31 | 0,26 |
| Debt to Equity Ratio | 0,52 | 0,78 | 1,07 | 1,78 | 2,22 | 2,85 |
| Profit Margin Ratio | 0,001 | -0,08 | 0,02 | -0,06 | -0,13 | -0,10 |
| Gross Margin Ratio | 0,47 | 0,41 | 0,43 | 0,48 | 0,40 | 0,44 |
| Return on Total Assets | 0,001 | -0,07 | 0,02 | -0,06 | -0,10 | -0,08 |
| Cash Flow On total Assets | 0,01 | -0,002 | -0,01 | -0,02 | -0,11 | -0,007 |

Table 19 PNSUT

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,64 | 1,51 | 1,42 | 1,16 | 1,23 | 1,21 |
| Accounts Receivable Turnover | 7,19 | 6,99 | 6,00 | 7,32 | 5,80 | 4,96 |
| Inventory Turnover | 7,09 | 6,92 | 8,12 | 7,58 | 8,44 | 7,15 |
| Total Asset Turnover | 1,18 | 1,19 | 1,21 | 1,14 | 1,14 | 1,03 |
| Debt Ratio | 0,29 | 0,30 | 0,32 | 0,34 | 0,39 | 0,43 |
| Equity Ratio | 0,71 | 0,70 | 0,68 | 0,66 | 0,61 | 0,57 |
| Debt to Equity Ratio | 0,41 | 0,42 | 0,47 | 0,51 | 0,60 | 2,85 |
| Profit Margin Ratio | 0,08 | 0,08 | 0,09 | 0,06 | 0,06 | 0,04 |
| Gross Margin Ratio | 0,20 | 0,19 | 0,17 | 0,16 | 0,18 | 0,16 |
| Return on Total Assets | 0,09 | 0,10 | 0,11 | 0,07 | 0,06 | 0,04 |
| Cash Flow On total Assets | 0,08 | 0,11 | 0,06 | 0,07 | 0,04 | 0,03 |

Table 20 SELGD

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 2,73 | 2,46 | 1,67 | 2,25 | 2,58 | 2,66 |
| Accounts Receivable Turnover | 3,58 | 2,56 | 4,10 | 5,40 | 2,63 | 5,83 |
| Inventory Turnover | 1,87 | 6,15 | 4,20 | 2,79 | 3,37 | 4,61 |
| Total Asset Turnover | 0,44 | 0,61 | 0,65 | 0,48 | 0,45 | 0,67 |
| Debt Ratio | 0,29 | 0,37 | 0,50 | 0,36 | 0,42 | 0,39 |
| Equity Ratio | 0,71 | 0,63 | 0,50 | 0,65 | 0,58 | 0,61 |
| Debt to Equity Ratio | 0,41 | 0,58 | 0,99 | 0,54 | 0,72 | 0,63 |
| Profit Margin Ratio | 0,17 | 0,11 | -0,01 | 0,10 | -0,11 | 0,03 |
| Gross Margin Ratio | 0,10 | 0,004 | -0,03 | 0,02 | 0,007 | 0,21 |
| Return on Total Assets | 0,07 | 0,07 | -0,004 | 0,05 | -0,04 | 0,02 |
| Cash Flow On total Assets | 0,05 | -0,03 | 0,05 | -0,11 | -0,07 | 0,07 |

Table 21 *TATGD*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,66 | 2,00 | 1,98 | 2,39 | 3,26 | 2,08 |
| Accounts Receivable Turnover | 3,60 | 3,81 | 4,47 | 3,83 | 4,26 | 3,82 |
| Inventory Turnover | 3,69 | 3,94 | 3,55 | 3,66 | 3,70 | 3,61 |
| Total Asset Turnover | 1,30 | 1,40 | 1,23 | 1,39 | 1,42 | 1,37 |
| Debt Ratio | 0,61 | 0,61 | 0,47 | 0,36 | 0,33 | 0,37 |
| Equity Ratio | 0,39 | 0,39 | 0,53 | 0,65 | 0,67 | 0,63 |
| Debt to Equity Ratio | 1,57 | 1,56 | 0,90 | 0,54 | 0,50 | 0,59 |
| Profit Margin Ratio | -0,01 | -0,01 | 0,18 | 0,07 | 0,07 | 0,06 |
| Gross Margin Ratio | 0,20 | 0,21 | 0,21 | 0,23 | 0,23 | 0,22 |
| Return on Total Assets | -0,01 | -0,02 | 0,23 | 0,10 | 0,09 | 0,08 |
| Cash Flow On total Assets | 0,02 | 0,05 | 0,06 | 0,05 | 0,13 | 0,02 |

Table 22 TUKAS

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,61 | 1,64 | 1,45 | 1,48 | 1,55 | 1,29 |
| Accounts Receivable Turnover | 2,03 | 2,21 | 3,74 | 5,54 | 4,63 | 4,24 |
| Inventory Turnover | 1,64 | 1,74 | 1,67 | 1,30 | 1,49 | 1,38 |
| Total Asset Turnover | 0,56 | 0,63 | 0,51 | 0,60 | 0,69 | 0,64 |
| Debt Ratio | 0,62 | 0,82 | 0,66 | 0,55 | 0,54 | 0,62 |
| Equity Ratio | 0,38 | 0,18 | 0,34 | 0,45 | 0,46 | 0,38 |
| Debt to Equity Ratio | 1,61 | 4,53 | 1,94 | 1,23 | 1,17 | 1,63 |
| Profit Margin Ratio | -0,16 | -0,29 | -0,41 | 0,23 | 0,08 | 0,03 |
| Gross Margin Ratio | 0,10 | 0,14 | -0,04 | 0,20 | 0,20 | 0,19 |
| Return on Total Assets | -0,09 | -0,18 | -0,21 | 0,14 | 0,05 | 0,02 |
| Cash Flow On total Assets | -0,05 | -0,20 | 0,02 | -0,007 | 0,008 | -0,11 |

Table 23 *TBORG*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,06 | 1,29 | 1,43 | 1,63 | 1,77 | 1,91 |
| Accounts Receivable Turnover | 2,54 | 2,74 | 2,95 | 2,90 | 2,82 | 2,85 |
| Inventory Turnover | 3,89 | 4,21 | 6,82 | 7,04 | 4,24 | 5,21 |
| Total Asset Turnover | 0,97 | 1,01 | 0,89 | 0,82 | 0,75 | 0,74 |
| Debt Ratio | 0,55 | 0,49 | 0,46 | 0,44 | 0,42 | 0,38 |
| Equity Ratio | 0,45 | 0,51 | 0,54 | 0,56 | 0,58 | 0,62 |
| Debt to Equity Ratio | 1,24 | 0,96 | 0,86 | 0,78 | 0,72 | 0,61 |
| Profit Margin Ratio | 0,12 | 0,18 | 0,20 | 0,21 | 0,25 | 0,25 |
| Gross Margin Ratio | 0,50 | 0,55 | 0,56 | 0,55 | 0,57 | 0,57 |
| Return on Total Assets | 0,12 | 0,18 | 0,18 | 0,17 | 0,18 | 0,19 |
| Cash Flow On total Assets | 0,27 | 0,25 | 0,33 | 0,24 | 0,19 | 0,18 |

Table 24 *ULKER*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,98 | 1,17 | 3,10 | 3,70 | 1,11 | 2,40 |
| Accounts Receivable Turnover | 3,92 | 4,24 | 4,79 | 4,74 | 5,07 | 6,23 |
| Inventory Turnover | 9,87 | 10,66 | 10,75 | 10,29 | 8,29 | 6,26 |
| Total Asset Turnover | 0,74 | 0,87 | 0,91 | 0,78 | 0,71 | 0,58 |
| Debt Ratio | 0,66 | 0,60 | 0,61 | 0,58 | 0,66 | 0,68 |
| Equity Ratio | 0,34 | 0,40 | 0,39 | 0,42 | 0,34 | 0,32 |
| Debt to Equity Ratio | 1,92 | 1,49 | 1,59 | 1,39 | 1,95 | 2,11 |
| Profit Margin Ratio | 0,08 | 0,08 | 0,08 | 0,09 | 0,06 | 0,09 |
| Gross Margin Ratio | 0,21 | 0,23 | 0,21 | 0,22 | 0,24 | 0,27 |
| Return on Total Assets | 0,06 | 0,07 | 0,07 | 0,07 | 0,04 | 0,05 |
| Cash Flow On total Assets | 0,04 | 0,05 | 0,06 | 0,07 | 0,11 | 0,09 |

Table 25 VANGD

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,17 | 0,53 | 3,38 | 6,41 | 0,42 | 2,39 |
| Accounts Receivable Turnover | 5,75 | 9,92 | 14,50 | 9,42 | 6,33 | 112,03 |
| Inventory Turnover | 5,81 | 8,83 | 7,14 | 7,04 | 8,00 | 0 |
| Total Asset Turnover | 0,22 | 0,20 | 0,22 | 0,11 | 0,13 | 0,01 |
| Debt Ratio | 0,13 | 0,23 | 0,21 | 0,14 | 0,36 | 0,31 |
| Equity Ratio | 0,87 | 0,77 | 0,79 | 0,86 | 0,64 | 0,69 |
| Debt to Equity Ratio | 0,15 | 0,30 | 0,27 | 0,16 | 0,57 | 0,45 |
| Profit Margin Ratio | -1,15 | 0,16 | 0,42 | -0,33 | -1,33 | 3,22 |
| Gross Margin Ratio | -0,03 | -0,09 | -0,07 | 0,38 | 0,01 | -0,19 |
| Return on Total Assets | -0,25 | 0,03 | 0,09 | -0,03 | -0,18 | 0,03 |
| Cash Flow On total Assets | 0,005 | -0,17 | -0,36 | 0,12 | 0,53 | -0,36 |

Table 26 AYCES

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 0,62 | 0,45 | 0,25 | 0,64 | 0,40 | 0,23 |
| Accounts Receivable Turnover | 8,22 | 7,68 | 34,32 | 40,90 | 16,61 | 36,55 |
| Inventory Turnover | 42,03 | 42,60 | 50,73 | 51,34 | 50,50 | 55,02 |
| Total Asset Turnover | 0,19 | 0,19 | 0,21 | 0,15 | 0,11 | 0,13 |
| Debt Ratio | 0,17 | 0,18 | 0,17 | 0,15 | 0,20 | 0,24 |
| Equity Ratio | 0,83 | 0,82 | 0,83 | 0,85 | 0,80 | 0,76 |
| Debt to Equity Ratio | 0,21 | 0,23 | 0,21 | 0,18 | 0,26 | 0,32 |
| Profit Margin Ratio | 0,06 | -0,04 | -0,04 | -0,06 | -0,41 | -0,19 |
| Gross Margin Ratio | 0,34 | 0,36 | 0,31 | 0,30 | 0,06 | 0,24 |
| Return on Total Assets | 0,01 | -0,01 | -0,01 | -0,009 | -0,04 | -0,03 |
| Cash Flow On total Assets | 0,02 | 0,04 | 0,02 | 0,02 | - | - |
| | | | | | 0,0005 | 0,0002 |

Table 27 *AVTUR*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 0,51 | 0,45 | 10,69 | 0,80 | 0,30 | 0,69 |
| Accounts Receivable Turnover | 2,89 | 1,81 | 4,78 | 0,76 | 1,01 | 2,44 |
| Inventory Turnover | 0 | 47,22 | 183,53 | 79,23 | 111,51 | 69,26 |
| Total Asset Turnover | 0,02 | 0,03 | 0,03 | 0,03 | 0,02 | 0,04 |
| Debt Ratio | 0,08 | 0,10 | 0,08 | 0,12 | 0,18 | 0,21 |
| Equity Ratio | 0,92 | 0,90 | 0,92 | 0,88 | 0,82 | 0,79 |
| Debt to Equity Ratio | 0,08 | 0,11 | 0,09 | 0,13 | 0,22 | 0,27 |
| Profit Margin Ratio | -1,48 | -0,12 | 2,60 | 0,82 | 4,28 | -2,55 |
| Gross Margin Ratio | 0,69 | 0,41 | -0,86 | 0,17 | 3,20 | 0,06 |
| Return on Total Assets | -0,03 | -0,003 | 0,09 | 0,03 | 0,09 | -0,09 |
| Cash Flow On total Assets | 0,001 | 0,004 | -0,29 | 0,34 | 0,08 | 0,02 |

Table 28 *ETILR*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 4,34 | 4,92 | 2,84 | 2,14 | 1,70 | 0,30 |
| Accounts Receivable Turnover | 1,29 | 0,45 | 1,05 | 0,43 | 2,08 | 5,70 |
| Inventory Turnover | 0,59 | 0,24 | 4,92 | 9,74 | 2,54 | 19,25 |
| Total Asset Turnover | 0,60 | 0,19 | 0,39 | 0,25 | 0,36 | 0,21 |
| Debt Ratio | 0,18 | 0,16 | 0,20 | 0,33 | 0,47 | 0,48 |
| Equity Ratio | 0,82 | 0,84 | 0,80 | 0,67 | 0,53 | 0,52 |
| Debt to Equity Ratio | 0,23 | 0,18 | 0,24 | 0,49 | 0,89 | 0,92 |
| Profit Margin Ratio | -0,10 | -0,34 | -3,53 | 0,26 | 0,50 | -0,67 |
| Gross Margin Ratio | 1,29 | 0,64 | 0,36 | 0,91 | 0,83 | 0,29 |
| Return on Total Assets | -0,06 | -0,06 | -1,36 | 0,07 | 0,18 | -0,14 |
| Cash Flow On total Assets | -0,62 | 0,05 | 0,11 | 0,04 | 0,08 | 0,16 |

Table 29 *KSTUR*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 6,64 | 3,70 | 2,02 | 2,34 | 6,84 | 6,51 |
| Accounts Receivable Turnover | 56,86 | 36,01 | 3,86 | 0,05 | 59,49 | 51,58 |
| Inventory Turnover | 11,51 | 13,05 | 0 | 0 | 14,39 | 12,56 |
| Total Asset Turnover | 0,47 | 0,48 | 0,49 | 0,009 | 0,27 | 0,39 |
| Debt Ratio | 0,07 | 0,10 | 0,16 | 0,18 | 0,05 | 0,06 |
| Equity Ratio | 0,93 | 0,90 | 0,84 | 0,82 | 0,95 | 0,94 |
| Debt to Equity Ratio | 0,07 | 0,11 | 0,19 | 0,21 | 0,05 | 0,07 |
| Profit Margin Ratio | 0,24 | 0,36 | 0,31 | 10,76 | 0,15 | 0,34 |
| Gross Margin Ratio | 0,33 | 0,37 | 0,36 | -5,14 | 0,05 | 0,32 |
| Return on Total Assets | 0,11 | 0,18 | 0,15 | 0,10 | 0,04 | 0,13 |
| Cash Flow On total Assets | 0,14 | 0,20 | 0,18 | 0,12 | 0,06 | 0,18 |

Table 30 *MAALT*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 10,54 | 12,89 | 17,55 | 10,18 | 3,49 | 3,19 |
| Accounts Receivable Turnover | 40,18 | 36,86 | 40,64 | 39,36 | 17,66 | 249,39 |
| Inventory Turnover | 41,85 | 444,64 | 169,68 | 198,31 | 242,57 | 361,15 |
| Total Asset Turnover | 0,23 | 0,12 | 0,10 | 0,11 | 0,04 | 0,09 |
| Debt Ratio | 0,10 | 0,02 | 0,02 | 0,04 | 0,12 | 0,15 |
| Equity Ratio | 0,90 | 0,98 | 0,98 | 0,96 | 0,88 | 0,85 |
| Debt to Equity Ratio | 0,12 | 0,03 | 0,02 | 0,04 | 0,14 | 0,18 |
| Profit Margin Ratio | 0,25 | 0,16 | 0,54 | 0,48 | 0,39 | 0,38 |
| Gross Margin Ratio | 0,51 | 0,42 | 0,58 | 0,67 | 0,04 | 0,50 |
| Return on Total Assets | 0,06 | 0,02 | 0,05 | 0,05 | 0,02 | 0,04 |
| Cash Flow On total Assets | 0,08 | -0,06 | 0,07 | 0,08 | 0,10 | 0,08 |

Table 31 *MERIT*

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 3,33 | 4,11 | 1,84 | 4,17 | 3,46 | 3,60 |
| Accounts Receivable Turnover | 0 | 1,57 | 5,75 | 9,29 | 2,85 | 1,48 |
| Inventory Turnover | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Asset Turnover | 0,29 | 0,72 | 0,57 | 0,52 | 0,60 | 0,57 |
| Debt Ratio | 0,08 | 0,14 | 0,10 | 0,09 | 0,08 | 0,12 |
| Equity Ratio | 0,92 | 0,86 | 0,90 | 0,91 | 0,92 | 0,88 |
| Debt to Equity Ratio | 0,09 | 0,17 | 0,11 | 0,09 | 0,09 | 0,13 |
| Profit Margin Ratio | 0,21 | 0,47 | 0,38 | 0,31 | 0,28 | 0,36 |
| Gross Margin Ratio | 0,84 | 0,86 | 0,79 | 0,84 | 0,81 | 0,82 |
| Return on Total Assets | 0,06 | 0,34 | 0,21 | 0,16 | 0,17 | 0,21 |
| Cash Flow On total Assets | 0,0003 | -0,0003 | 0,48 | 0,18 | -0,14 | 0,0002 |

Table 32 METUR

| Ratios/ Years | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Current ratio | 1,73 | 2,99 | 2,52 | 10,23 | 6,86 | 2,37 |
| Accounts Receivable Turnover | 80,59 | 847,38 | 2,27 | 248,71 | 0 | 0 |
| Inventory Turnover | 0,22 | 0,04 | -0,002 | 0,29 | 2,91 | 0,18 |
| Total Asset Turnover | 0,30 | 0,02 | 0,002 | 0,80 | 2,37 | 0,10 |
| Debt Ratio | 0,82 | 1,05 | 1,29 | 0,83 | 0,12 | 0,63 |
| Equity Ratio | 0,18 | -0,05 | -0,29 | 0,17 | 0,88 | 0,37 |
| Debt to Equity Ratio | 4,60 | -21,52 | -4,40 | 4,88 | 0,14 | 1,72 |
| Profit Margin Ratio | 0,72 | -10,53 | -110,50 | 0,37 | 0,17 | -0,49 |
| Gross Margin Ratio | 0,58 | 0,10 | 0,41 | 0,73 | 0,27 | 0,57 |
| Return on Total Assets | 0,21 | -0,22 | -0,25 | 0,30 | 0,40 | -0,05 |
| Cash Flow On total Assets | 0,27 | 0,31 | 0,27 | 0,23 | 1,95 | -0,05 |

4.2. Panel Analysis

The hypotheses of the investigation are tested for hospitality ve food&beverage sectors respectively. The dependent and independent variables are shown in the Table 33.

Table 33 *Financial Analysis Models*

| | INDUSTRIES | HOSPITALITY | FOOD&BEVERAGE | BOTH |
|---|---------------|-------------|---------------|-----------|
| | MODEL | MODEL I | MODEL II | MODEL III |
| D E P E N D E N T | PROFITABILITY | | | |
| I N D E P E N D E N T | LIQUIDITY | | | |
| | EFFICIENCY | | | |
| | SOLVENCY | | | |

Time series is a series of observation which is done periodically. One of the most important issue for time series is stability. Almost every statistical inferences are done by the assumption of the stability of the series. If the serie is not stable, it should be stabilized anyway. In panel analysis which analyse both cross-sectional and time at the same time, there should be stable variables to inhibit any false relationship between variables.

The examination of the stability is suggested to be done in two ways. Unit root process review has been researched in this thesis by the help of Levin, Lin ve Chu (LLC) (2002) test and for every single unit ADF-Fisher Ki-Square (1979) test is used.

H0: There is unit root ($p>0,05$).

H1: There is no unit root ($p<0,05$).

Before the panel analysis, to examine multiplexed connection problem, the correlation between the variables and variance inflation factor was examined. If the simple correlation coefficient between the variables is 0,71 and above, that indicates high association. If the correlation coefficient between the variables is above 0,90, that indicates multiple correlation. If the corelation coefficient is above 0.70, variance inflation factors of each model should be examined. If variance inflation factor is equal to 10 or above, it is called as multicollinearity. One of these variables should be removed from the model (Çokluk, Şekercioğlu, Büyüköztürk, 2010). From every model also with the help of variance inflation factor control, inconvenient variable is removed from the model.

Breusch-Pagan Lagrange Multiplier (BPLM) test is used to figure out the issue of heteroscedasticity error term (Greene, 2003).

H0: There is no heteroscedasticity. ($p>0,05$).

H1: There is heteroscedasticity. ($p<0,05$).

If there is heteroscedasticity issue, in fixed effects models errors are corrected with White's "Diagonal Covariance Coefficient" method and cross-section weights GLS is applied, in random effect models errors are corrected with White's "Cross Section Coefficient Covariance" method and Swamy-Arora weights is applied (Kyriazis and Anastassis, 2007).

In panel analysis predictions, prediction method is determined by Hausman test, that helps to make a selection between fixed effect or random effect models (Green, 2003).

According to the statistic X^2 which is obtained from Hausman test, the appropriate model is determined to be applied.

H0: Random effect is appropriate ($p>0,05$).

H1: Fixed effect is appropriate ($p<0,05$).

4.2.1. Panel Analysis Results for Hospitality Sector

Panel unit root test results for hospitality sector (model 1) is shown below.

Table 34 *Unit Root Test Results for Model 1*

| Series | LLC | | | ADF¹ | | |
|------------------|------------|----------|----------|------------------------|----------|----------|
| | 0 | 1 | 2 | 0 | 1 | 2 |
| Profitability(L) | -0,18 | -6,76** | - | 19,58 | 47,12** | - |
| Liquidity(L) | -1,54 | -5,90** | - | 15,15 | 38,63** | - |
| Efficiency(L) | 0,05 | -6,84** | - | 20,90 | 49,00** | - |
| Solvency(L) | - | -5,44** | - | 15,86 | 34,94** | - |
| | 2,12* | | | | | |

0: At the level 1: 1st difference 2: 2nd difference

*p<0,05

**p<0,01

¹:Asymptotic X²

The calculated “t” value according to the 5% significance level is higher than table value, so H0 rejected ($p>0,05$) and their first rank differences are used for unit root test, then series residuals become stable ($p<0,05$). First rank differences of series are used for regression analysis (Table 34).

The correlation between variables and VIF results for hospitality sector (model 1) is shown below.

Table 35 Correlation between Variables of Model 1

| Variables | 1 | 2 | 3 | 4 | VIF |
|---------------------|----------|----------|----------|----------|------------|
| D(Profitability(L)) | 1 | -0,06 | 0,14 | 0,26 | - |
| D(Liquidity(L)) | | 1 | 0,38 | 0,04 | 1,17 |
| D(Efficiency(L)) | | | 1 | -0,02 | 1,17 |
| D(Solvency(L)) | | | | 1 | 1,00 |

According to Table 35 there is no multicollinearity among independent variables (VIF<10).

Panel analysis results for hospitality sector (model 1) is shown below.

Table 36 *Panel Data Analysis Results for Model 1*

| Dependent: D(Profitability(L)) | | | | |
|--|--------------------|---------------|------------------|----------|
| Method: Panel LS&AR | | | | |
| Independent Variables | Coefficient | Std.E. | t | p |
| D(Liquidity(L)) | -0,173 | 0,251 | -0,691 | 0,495 |
| D(Efficiency(L)) | 0,093 | 0,099 | -0,945 | 0,353 |
| D(Solvency(L)) | 0,574 | 0,434 | 1,314 | 0,200 |
| C | -0,018 | 0,227 | -0,079 | 0,937 |
| Total panel (balanced) observations | 30 | | Model F | 1,072 |
| Cross-sections included | 6 | | Prob(F) | 0,377 |
| Hausman (X^2) | 0,118 | | Durbin Watson | 3,121 |
| Prob. Hausman (X^2) | 0,989 | | $\square R^2$ | 0,007 |
| Model | Random Effects | | | |
| Breusch-Pagan Lagrange | | | | |
| Multiplier Test (BPLM) (X^2) | 3,554 | | | |
| BPLM (p) | 0,059 | | | |
| Corrections | | | | |

In hospitality industry for profitability dependent variable created model 1, according to the Hausman test results, because the (H_0), ($X^2=0,12$; $p>0,05$)

hypothesis is accepted which shows that random effects model is more efficient than fixed effects model, for model 1, random effects model has been used.

According to Breusch-Pagan LM results, heteroscedasticity issue is not valid and the hypotheses showing that error term provides homoscedasticity is accepted (H_0), ($p>0,05$). For this reason, error terms are not needed for the situation.

The random effects panel regression equation that is done for Model 1 is not significant. ($F=1,07$; $p>0,05$)

All the variables that include the model explain only 1% of the variance of Profitability variable and the Durbin Watson scor ($DW=3,12$) is higher than R^2 , so the variance is accepted as real.

Solely, any independent variable has no significant effect on profitability. ($p>0,05$)

$$\text{Profitability} = -0,02 - 0,17 * \text{Liquidity} + 0,09 * \text{Efficiency} + 0,57 * \text{Solvency}$$

H1: There is an association between liquidity and profitability.

H1 rejected: There isn't an association between liquidity and profitability.

H2: There is an association between efficiency and profitability.

H2 rejected: There isn't an association between efficiency and profitability.

H3: There is an association between solvency and profitability.

H3 rejected: There isn't an association between solvency and profitability.

4.2.2. Panel Analysis Results for Food&Beverage Sector

Panel unit root test results for food&beverage sector (model 2) is shown below.

Table 37 *Unit Root Test Results for Model 2*

| Series | LLC | | | ADF¹ | | |
|------------------|------------|----------|----------|------------------------|----------|----------|
| | 0 | 1 | 2 | 0 | 1 | 2 |
| Profitability(L) | -1,69* | 15,83* | - | 96,77** | 197,37** | - |
| | | * | | | | |
| Liquidity(L) | -3,64** | - | | 80,37** | 150,49** | - |
| | | 9,08** | | | | |
| Efficiency(L) | -0,20 | 11,30* | - | 28,18 | 141,52** | - |
| | | * | | | | |
| Solvency(L) | 0,50 | - | | 39,02 | 135,38** | - |
| | | 8,14** | | | | |

0: At the level 1: 1st difference 2: 2nd difference

*p<0,05

**p<0,01

¹:Asymptotic X²

The calculated “t” value according to the 5% significance level is higher than the table value, so H0 rejected ($p>0,05$) and their first rank differences are used for unit root test, then series residuals become stable ($p<0,05$). First rankdifferences of series are used for regression analysis (Table 37).

The correlation between variables and VIF results for food&beverage sector (model 2) is shown below.

Table 38 *Correlation between Variables of Model 2*

| Variables | 1 | 2 | 3 | 4 | VIF |
|---------------------|----------|----------|----------|----------|------------|
| D(Profitability(L)) | 1 | 0,04 | -0,10 | 0,10 | - |
| D(Liquidity(L)) | | 1 | -0,07 | -0,03 | 1,00 |
| D(Efficiency(L)) | | | 1 | -0,08 | 1,01 |
| D(Solvency(L)) | | | | 1 | 1,01 |

According to Table 38, there is no multicollinearity among independent variables ($VIF<10$).

Panel analysis results for food&beverage sector (model 2) is shown below.

Table 39 *Panel Data Analysis Results for Model 2*

| Dependent: D(Profitability(L)) | | | | |
|--|--------------------|---------------|---------------|----------|
| Method: Panel EGLS (Cross-section random effects) | | | | |
| Independent Variables | Coefficient | Std.E. | t | p |
| D(Liquidity(L)) | 9,291 | 24,777 | 0,375 | 0,708 |
| D(Efficiency(L)) | -26,411 | 30,351 | -0,870 | 0,386 |
| D(Solvency(L)) | 6,888 | 7,659 | 0,899 | 0,370 |
| C | 1,482 | 13,861 | 0,106 | 0,915 |
| Total panel (balanced) | | | | |
| observations | 24 | | Model F | 0,775 |
| Cross-sections included | 120 | | Prob(F) | 0,510 |
| Hausman (X^2) | 0,181 | | Durbin Watson | 3,404 |
| Prob. Hausman (X^2) | 0,980 | | $\square R^2$ | 0,005 |
| Random Effects | | | | |
| Model | | | | |
| Breusch-Pagan Lagrange Multiplier Test (BPLM) (X^2) | 14,26 | | | |
| BPLM (p) | 0,000 | | | |
| White cross-section | | | | |
| Corrections | | | | |
| Swamy-Arora | | | | |

In food&beverage industry for profitability dependent variable created model 2, according to the Hausman test results, the hypotheses showing the random effects

model is more efficient than fixed effects model is accepted (H_0), ($X^2=0,18$; $p>0,05$), so for model 2 random effects model is used.

According to Breusch-Pagan LM results, heteroscedasticity issue is not valid and the error term provides homoscedasticity assumption so H_0 is accepted, ($p>0,05$), so error terms are not needed.

According to Breusch-Pagan LM results, heteroscedasticity issue ($LM=14,26$; $p<0,05$) and the error term do not provide homoscedasticity assumption so H_0 is rejected, standard errors are corrected by White's cross section coefficient covariance method and Swamy-Arora method is applied.

The random effects panel regression equation that is done for Model 2 is not significant. ($F=0,77$; $p>0,05$)

All the variables that include the model explains only 1% of the variance of profitability variable and the Durbin Watson scor ($DW=3,40$) is higher than R^2 , so the variance is accepted as real.

Solely, any independent variable has no significant effect on profitability. ($p>0,05$)

$$\text{Profitability} = 1,48 + 9,29 * \text{Liquidity} - 26,44 * \text{Efficiency} + 6,88 * \text{Solvency}$$

H4: There is an association between liquidity and profitability.

H4 rejected: There isn't an association between liquidity and profitability.

H5: There is an association between efficiency and profitability.

H5 rejected: There isn't an association between efficiency and profitability.

H6: There is an association between solvency and profitability.

H6 rejected: There isn't an association between solvency and profitability.



4.2.3. Panel Analysis Results for both Hospitality and Food&Beverage Sector

Panel unit root test results for both hospitality and food&beverage sector (model 3) is shown below.

Table 40 *Unit Root Test Results for Model 3*

| Series | ADF | | | | | |
|------------------|---------|----------|---|-------------|----------|---|
| | LLC | 0 | 1 | 2 | 0 | 1 |
| Profitability(L) | -0,63 | -15,39** | - | 48,42 | 229,61** | - |
| Liquidity(L) | -3,96** | -10,57** | - | 95,52 ** | 189,13** | - |
| Efficiency(L) | -0,17 | -13,24** | - | 49,09 | 190,53** | - |
| Solvency(L) | 1,36 | -9,77** | - | 48,27 | 171,79** | - |

0: At the level 1: 1st difference 2: 2nd difference

*p<0,05

**p<0,01

¹:Asymptotic X²

The calculated “t” value according to the 5% significance level is higher than table value, so H0 rejected (p>0,05) and their first rank differences are used for unit root

test, then series residuals become stable ($p<0,05$). First rank differences of series are used for regression analysis (Table 40).

The correlation between variables and VIF results for food&beverage sector (model 3) is shown below.

Table 41 *Correlation between Variables of Model 3*

| Variables | 1 | 2 | 3 | 4 | VIF |
|---------------------|----------|----------|----------|----------|------------|
| D(Profitability(L)) | 1 | 0,12 | 0,27 | 0,02 | - |
| D(Liquidity(L)) | | 1 | 0,22 | -0,02 | 1,05 |
| D(Efficiency(L)) | | | 1 | -0,13 | 1,07 |
| D(Solvency(L)) | | | | 1 | 1,02 |

According to Table 41 there is no multicollinearity among independent variables ($VIF<10$).

Panel analysis results for food&beverage sector (model 3) is shown below.

Table 42 *Panel Data Analysis Results for Model 3*

| Dependent: D(Profitability(L)) | | | | |
|--|------------------------------------|---------------|------------------|----------|
| Method: Panel EGLS (Cross-section random effects) | | | | |
| Independent Variables | Coefficient | Std.E. | t | p |
| D(Liquidity(L)) | 0,027 | 0,050 | 0,546 | 0,585 |
| D(Efficiency(L)) | 0,064 | 0,055 | 1,169 | 0,244 |
| D(Solvency(L)) | 0,009 | 0,014 | 0,629 | 0,530 |
| C | -0,003 | 0,027 | -0,110 | 0,912 |
| Total panel (balanced) observations | 30 | | Model F | 4,345 |
| Cross-sections included | 150 | | Prob(F) | 0,005 |
| Hausman (X^2) | 0,376 | | Durbin Watson | 2,948 |
| Prob. Hausman (X^2) | 0,945 | | $\square R^2$ | 0,063 |
| Model | Random Effects | | | |
| Breusch-Pagan Lagrange | | | | |
| Multiplier Test (BPLM) (X^2) | 18,015 | | | |
| BPLM (p) | 0,000 | | | |
| Corrections | White cross-section Swamy-Arora | | | |

In both industries for profitability dependent variable created model 3, according to the Hausman test results, the hypotheses showing that random effects model is

more efficient than fixed effects model is accepted (H_0), ($X^2=0,38$; $p>0,05$), so for model 3 random effects model is used.

According to Breusch-Pagan LM results, heteroscedasticity issue is not valid and the error term provides homoscedasticity assumption so H_0 is accepted, ($p>0,05$), so error terms are not needed.

According to Breusch-Pagan LM results, heteroscedasticity issue ($LM=18,01$; $p<0,05$) and the error term do not provide homoscedasticity assumption so H_0 is rejected, standard errors are corrected by White's cross section coefficient covariance method and Swamy-Arora method is applied.

The random effects panel regression equation that is done for Model 3 is significant. ($F=4,34$; $p>0,05$)

All the variables that include the model explain only 6% of the variance of profitability variable and the Durbin Watson scor ($DW=2,95$) is higher than R^2 , so the variance is accepted as real.

Solely, any independent variable has no significant effect on profitability. ($p>0,05$)

$$\text{Profitability} = -0,00 + 0,03 * \text{Liquidity} + 0,06 * \text{Efficiency} + 0,01 * \text{Solvency}$$

H_7 : There is an association between liquidity and profitability.

H_7 rejected: There isn't an association between liquidity and profitability.

H8: There is an association between efficiency and profitability.

H8 rejected: There isn't an association between efficiency and profitability.

H9: There is an association between solvency and profitability.

H9 rejected: There isn't an association between solvency and profitability.



5.DISCUSSION

5.1. Conclusion and Discussion

In today's Turkey, in hospitality and food&beverage market, there are different kinds of concepts that are carried on business life. One of the most important aim of these businesses is to get a share from the market so that they can increase their profitability. Businesses have to have an operative financial management to reach that aim. The determination of a good financial management policy is possible with an appropriate financial analysis. Financial analysis techniques are tools to measure the activity results of a business. Besides, these techniques are used to consider past failures so that it will be possible to make better plans for the future.

Hospitality and food&beverage industries are one of the speedy growth industries all over the world and this situation makes them highly competitive in their markets. So in the markets, it is possible to be successful by the help of financial planning.

There are many kinds of financial analysis and testing methods for the financial data in the literature. In this study ratio analysis and panel data testing method has been used. Panel data is a statistics and econometrics method to measure cross-sectional observations over time. Panel data associates section analysis and time series analysis. In this study, ratio data in a certain period of time has been used so panel data analysis is the best method for the study. In this analysis, eleven kinds of ratio data, thirty firms and six years were taken into account.

In order to interpret the argument, the purpose of the study is to analyze the association between liquidity, efficiency, solvency versus profitability in hospitality and food&beverage sectors. Panel analysis is done for hospitality sector, food&beverage sector and both sectors respectively.

In the panel analysis, Levin, Lin ve Chu (LLC) test, ADF-Fisher Ki-Square test, Breusch-Pagan Lagrange Multiplier (BPLM) test and Hausman test have been used. Also, the variance inflation factor was examined and White's cross section coefficient covariance method and Swamy-Arora method has been applied.

In panel analysis for hospitality sector, firstly unit root test is done. The calculated "t" value is higher than table value according to the 5% significance value, that means H₀ is rejected. To obtain stable series, their first rank difference is found out for regression analysis. Then, the correlation between variables and variance inflation factor is figured out. Finally panel data analysis is started. According to the Haussmann test, random effects model is accepted as the efficient one ($X^2=0,12$; $p>0,05$). According to the Breusch-Pagan LM test, because of accepting the H₀, there is no need for error terms. Pursuant to the random effects panel regression equation ($Profitability = -0,02 - 0,17 * Liquidity + 0,09 * Efficiency + 0,57 * Solvency$) the model is not significant. The independent variables from the model explains only 1% of the variance of profitability. So there is no significant effect of independent variables on the dependent variable.

In the panel analysis for food&beverage sector, firstly unit root test is done. The calculated "t" value is higher than table value according to the 5% significance value, that means H₀ is rejected. To obtain stable series, their first rank difference is found out for regression analysis. Then, the correlation between variables and variance inflation factor is figured out. Finally panel data analysis is started. According to the Haussmann test, random effects model is accepted as the efficient one ($X^2=0,18$; $p>0,05$). According to the Breusch-Pagan LM test, because of rejecting the H₀, error terms are corrected with White's cross section coefficient covariance method . Pursuant to the random effects panel regression equation ($Profitability = 1,48 +$

$9,29 * Liquidity - 26,44 * Efficiency + 6,88 * Solvency$) the model is not significant but the independent variables from the model explains only 1% of the variance of profitability. So there is no significant effect of independent variables on the dependent variable.

In the panel analysis for both sectors, firstly unit root test is done. The calculated “t” value is higher than table value according to the 5% significance value, that means H0 is rejected. To obtain stable series, their first rank difference is found out for regression analysis. Then, the correlation between variables and variance inflation factor is figured out. Finally, panel data analysis is started.

According to the Haussmann test, random effects model is accepted as the efficient one ($X^2=0,38$; $p>0,05$). According to the Breusch-Pagan LM test, because of rejecting the H0, error terms are corrected with White's cross section coefficient covariance method. Pursuant to the random effects panel regression equation (Profitability = $-0,00 + 0,03 * Liquidity + 0,06 * Efficiency + 0,01 * Solvency$) the model is significant but the independent variables from the model explains only 6% of the variance of profitability. So there is no significant effect of independent variables on dependent variable.

5.2. Limitations

According to the results of the study, there are limitations. Sample size can be one of the most important limitation. The sample is formed of 30 companies that have been observed for 6 years between the years 2012 and 2017. Also, only 11 ratios have been used for the analysis. In this study, if more than 6 years of data was used, there would be more significant results.

5.3. Suggestions for Further Researches

When the literature is investigated, it is possible to find some research about ratio analysis in Turkey. However, there are lots of industries that have not been studied yet, in terms of ratio analysis. They must be investigated.

Also further research may be segment based and larger sample size. They could concentrate on the ratios one by one specifically for a long time period.



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APPENDICES

Appendix A

The data of the 30 firms for 6 years are shown in the appendix A. The hospitality sector and the food&beverage sector data has been shown seperately.



Table 43 *Data of Hospitality Sector*

| FIRM | INDUSTRY | YEAR | CRT | ART | INVTR | TAST | DEBRT | EQRT | DTERT | PRFMRT | GRSMRT | ROMAS | CFOTAS |
|-------|----------|------|-------|-------|--------|------|-------|------|-------|--------|--------|--------|---------|
| AVTUR | HS | 2012 | 0,51 | 2,89 | 0 | 0,02 | 0,08 | 0,92 | 0,08 | -1,48 | 0,69 | -0,03 | 0,001 |
| AVTUR | HS | 2013 | 0,45 | 1,81 | 47,22 | 0,03 | 0,1 | 0,9 | 0,11 | -0,12 | 0,41 | -0,003 | 0,004 |
| AVTUR | HS | 2014 | 10,69 | 4,78 | 183,53 | 0,03 | 0,08 | 0,92 | 0,09 | 2,6 | -0,86 | 0,09 | -0,29 |
| AVTUR | HS | 2015 | 0,8 | 0,76 | 79,23 | 0,03 | 0,12 | 0,88 | 0,13 | 0,82 | 0,17 | 0,03 | 0,34 |
| AVTUR | HS | 2016 | 0,3 | 1,01 | 111,51 | 0,02 | 0,18 | 0,82 | 0,22 | 4,28 | 3,2 | 0,09 | 0,08 |
| AVTUR | HS | 2017 | 0,69 | 2,44 | 69,26 | 0,04 | 0,21 | 0,79 | 0,27 | -2,55 | 0,06 | -0,09 | 0,02 |
| AYCES | HS | 2012 | 0,62 | 8,22 | 42,03 | 0,19 | 0,17 | 0,83 | 0,21 | 0,06 | 0,34 | 0,01 | 0,02 |
| AYCES | HS | 2013 | 0,45 | 7,68 | 42,6 | 0,19 | 0,18 | 0,82 | 0,23 | -0,04 | 0,36 | -0,01 | 0,04 |
| AYCES | HS | 2014 | 0,25 | 34,32 | 50,73 | 0,21 | 0,17 | 0,83 | 0,21 | -0,04 | 0,31 | -0,01 | 0,02 |
| AYCES | HS | 2015 | 0,64 | 40,9 | 51,34 | 0,15 | 0,15 | 0,85 | 0,18 | -0,06 | 0,3 | -0,009 | 0,02 |
| AYCES | HS | 2016 | 0,4 | 16,61 | 50,5 | 0,11 | 0,2 | 0,8 | 0,26 | -0,41 | 0,06 | -0,04 | -0,0005 |
| AYCES | HS | 2017 | 0,23 | 36,55 | 55,02 | 0,13 | 0,24 | 0,76 | 0,32 | -0,19 | 0,24 | -0,03 | -0,0002 |
| KSTUR | HS | 2012 | 6,64 | 56,86 | 11,51 | 0,47 | 0,07 | 0,93 | 0,07 | 0,24 | 0,33 | 0,11 | 0,14 |

| | | | | | | | | | | | | | |
|-------|----|------|-------|-------|--------|-------|------|------|------|-------|-------|------|-------|
| KSTUR | HS | 2013 | 3,7 | 36,01 | 13,05 | 0,48 | 0,1 | 0,9 | 0,11 | 0,36 | 0,37 | 0,18 | 0,2 |
| KSTUR | HS | 2014 | 2,02 | 3,86 | 0 | 0,49 | 0,16 | 0,84 | 0,19 | 0,31 | 0,36 | 0,15 | 0,18 |
| KSTUR | HS | 2015 | 2,34 | 0,05 | 0 | 0,009 | 0,18 | 0,82 | 0,21 | 10,76 | -5,14 | 0,1 | 0,12 |
| KSTUR | HS | 2016 | 6,84 | 59,49 | 14,39 | 0,27 | 0,05 | 0,95 | 0,05 | 0,15 | 0,05 | 0,04 | 0,06 |
| KSTUR | HS | 2017 | 6,51 | 51,58 | 12,56 | 0,39 | 0,06 | 0,94 | 0,07 | 0,34 | 0,32 | 0,13 | 0,18 |
| MAALT | HS | 2012 | 10,54 | 40,18 | 41,85 | 0,23 | 0,1 | 0,9 | 0,12 | 0,25 | 0,51 | 0,06 | 0,08 |
| MAALT | HS | 2013 | 12,89 | 36,86 | 444,64 | 0,12 | 0,02 | 0,98 | 0,03 | 0,16 | 0,42 | 0,02 | -0,06 |
| MAALT | HS | 2014 | 17,55 | 40,64 | 169,68 | 0,1 | 0,02 | 0,98 | 0,02 | 0,54 | 0,58 | 0,05 | 0,07 |
| MAALT | HS | 2015 | 10,18 | 39,36 | 198,31 | 0,11 | 0,04 | 0,96 | 0,04 | 0,48 | 0,67 | 0,05 | 0,08 |
| MAALT | HS | 2016 | 3,49 | 17,66 | 242,57 | 0,04 | 0,12 | 0,88 | 0,14 | 0,39 | 0,04 | 0,02 | 0,1 |

Table 44 Data of Hospitality Sector

| FIRM | INDUSTRY | YEAR | CRT | ART | INVTR | TAST | DEBRT | EQRT | DTERT | PRFMRT | GRSMRT | ROMAS | CFOTAS |
|-------|----------|------|-------|--------|--------|-------|-------|-------|--------|--------|--------|-------|---------|
| MAALT | HS | 2017 | 3,19 | 249,39 | 361,15 | 0,09 | 0,15 | 0,85 | 0,18 | 0,38 | 0,5 | 0,04 | 0,08 |
| MERIT | HS | 2012 | 3,33 | 0 | 0 | 0,29 | 0,08 | 0,92 | 0,09 | 0,21 | 0,84 | 0,06 | 0,0003 |
| MERIT | HS | 2013 | 4,11 | 1,57 | 0 | 0,72 | 0,14 | 0,86 | 0,17 | 0,47 | 0,86 | 0,34 | -0,0003 |
| MERIT | HS | 2014 | 1,84 | 5,75 | 0 | 0,57 | 0,1 | 0,9 | 0,11 | 0,38 | 0,79 | 0,21 | 0,48 |
| MERIT | HS | 2015 | 4,17 | 9,29 | 0 | 0,52 | 0,09 | 0,91 | 0,09 | 0,31 | 0,84 | 0,16 | 0,18 |
| MERIT | HS | 2016 | 3,46 | 2,85 | 0 | 0,6 | 0,08 | 0,92 | 0,09 | 0,28 | 0,81 | 0,17 | -0,14 |
| MERIT | HS | 2017 | 3,6 | 1,48 | 0 | 0,57 | 0,12 | 0,88 | 0,13 | 0,36 | 0,82 | 0,21 | 0,0002 |
| METUR | HS | 2012 | 1,73 | 80,59 | 0,22 | 0,3 | 0,82 | 0,18 | 4,6 | 0,72 | 0,58 | 0,21 | 0,27 |
| METUR | HS | 2013 | 2,99 | 847,38 | 0,04 | 0,02 | 1,05 | -0,05 | -21,52 | -10,53 | 0,1 | -0,22 | 0,31 |
| METUR | HS | 2014 | 2,52 | 2,27 | -0,002 | 0,002 | 1,29 | -0,29 | -4,4 | -110,5 | 0,41 | -0,25 | 0,27 |
| METUR | HS | 2015 | 10,23 | 248,71 | 0,29 | 0,8 | 0,83 | 0,17 | 4,88 | 0,37 | 0,73 | 0,3 | 0,23 |
| METUR | HS | 2016 | 6,86 | 0 | 2,91 | 2,37 | 0,12 | 0,88 | 0,14 | 0,17 | 0,27 | 0,4 | 1,95 |
| METUR | HS | 2017 | 2,37 | 0 | 0,18 | 0,1 | 0,63 | 0,37 | 1,72 | -0,49 | 0,57 | -0,05 | -0,05 |

Table 45 *Data of Food&Beverage Sector*

| FIRM | INDUSTRY | YEAR | CRT | ART | INVTR | TAST | DEBRT | EQRT | DTERT | PRFMRT | GRSMRT | ROMAS | CFOTAS |
|-------|----------|------|------|-------|-------|------|-------|------|-------|--------|--------|-------|--------|
| AEFES | FB | 2012 | 1,79 | 7,79 | 4,54 | 0,55 | 0,42 | 0,58 | 0,72 | 0,1 | 0,49 | 0,05 | 0,07 |
| AEFES | FB | 2013 | 1,58 | 10,28 | 5,18 | 0,41 | 0,4 | 0,6 | 0,67 | 0,31 | 0,43 | 0,13 | 0,06 |
| AEFES | FB | 2014 | 1,78 | 9,47 | 5,22 | 0,5 | 0,41 | 0,59 | 0,7 | -0,03 | 0,44 | -0,02 | 0,08 |
| AEFES | FB | 2015 | 1,88 | 8,96 | 5,46 | 0,46 | 0,43 | 0,57 | 0,75 | 0,01 | 0,41 | 0,006 | 0,08 |
| AEFES | FB | 2016 | 2,24 | 7,9 | 6,14 | 0,41 | 0,42 | 0,58 | 0,72 | 0,004 | 0,39 | 0,006 | 0,07 |
| AEFES | FB | 2017 | 1,58 | 8,46 | 6,7 | 0,44 | 0,47 | 0,53 | 0,88 | 0,02 | 0,39 | 0,01 | 0,07 |
| ALYAG | FB | 2012 | 0,97 | 33,62 | 17,67 | 1,22 | 0,29 | 0,71 | 0,41 | -0,17 | -0,03 | -0,2 | -0,82 |
| ALYAG | FB | 2013 | 1,08 | 15,45 | 5,45 | 0,77 | 0,31 | 0,69 | 0,45 | 0,05 | 0,11 | 0,04 | -0,13 |
| ALYAG | FB | 2014 | 0,81 | 8,27 | 7,84 | 0,78 | 0,38 | 0,62 | 0,61 | -0,03 | 0,05 | -0,02 | 0,05 |
| ALYAG | FB | 2015 | 0,43 | 21,15 | 27,67 | 0,55 | 0,57 | 0,43 | 1,33 | -0,08 | 0,05 | -0,04 | 0,08 |
| ALYAG | FB | 2016 | 0,43 | 8,09 | 23,46 | 0,92 | 0,7 | 0,3 | 2,33 | -0,06 | 0,1 | 0,06 | 0,05 |
| ALYAG | FB | 2017 | 1,26 | 7,35 | 11,75 | 1,16 | 0,95 | 0,05 | 18,9 | 0,04 | 0,08 | 0,04 | 0,21 |
| AVOD | FB | 2012 | 1,76 | 2,61 | 1,35 | 0,52 | 0,42 | 0,58 | 0,72 | 0,04 | 0,23 | 0,02 | -0,16 |

| | | | | | | | | | | | | | |
|-------|----|------|------|-------|-------|------|------|------|------|--------|------|--------|-------|
| AVOD | FB | 2013 | 1,76 | 3,91 | 1,48 | 0,52 | 0,5 | 0,5 | 1 | -0,01 | 0,18 | -0,004 | -0,06 |
| AVOD | FB | 2014 | 1,2 | 7,43 | 3,87 | 0,93 | 0,54 | 0,46 | 1,17 | 0,01 | 0,13 | 0,01 | 0,06 |
| AVOD | FB | 2015 | 1,13 | 9,55 | 3,65 | 0,8 | 0,46 | 0,54 | 0,86 | 0,03 | 0,2 | 0,02 | 0,004 |
| AVOD | FB | 2016 | 1,37 | 6,56 | 2,42 | 0,67 | 0,37 | 0,63 | 0,59 | 0,01 | 0,18 | 0,006 | 0,11 |
| AVOD | FB | 2017 | 1,32 | 7,85 | 2,15 | 0,65 | 0,45 | 0,55 | 0,82 | 0,0007 | 0,17 | 0,0005 | 0,09 |
| BANVT | FB | 2012 | 1,05 | 8,39 | 6,72 | 1,53 | 0,81 | 0,19 | 4,26 | 0,01 | 0,14 | 0,01 | 0,01 |
| BANVT | FB | 2013 | 0,89 | 7,67 | 7,39 | 1,7 | 0,88 | 0,12 | 7,44 | -0,03 | 0,12 | -0,06 | 0,06 |
| BANVT | FB | 2014 | 0,86 | 7,55 | 8,33 | 1,96 | 0,91 | 0,09 | 9,8 | -0,01 | 0,13 | -0,02 | 0,14 |
| BANVT | FB | 2015 | 0,6 | 10,78 | 15,21 | 1,9 | 0,79 | 0,21 | 3,77 | 0,05 | 0,11 | 0,09 | 0,006 |
| BANVT | FB | 2016 | 1,02 | 12,29 | 10,51 | 1,74 | 0,69 | 0,31 | 2,23 | 0,03 | 0,19 | 0,06 | 0,13 |

Table 46 *Data of Food&Beverage Sector*

| FIRM | INDUSTRY | YEAR | CRT | ART | INVTR | TAST | DEBRT | EQRT | DTERT | PRFMRT | GRSMRT | ROMAS | CFOTAS |
|-------|----------|------|------|-------|-------|------|-------|-------|-------|--------|--------|-------|--------|
| BANVT | FB | 2017 | 1,12 | 9,79 | 7,55 | 1,89 | 0,54 | 0,46 | 1,18 | 0,1 | 0,23 | 0,19 | 0,3 |
| CCOLA | FB | 2012 | 2,25 | 13,89 | 7,97 | 0,97 | 0,55 | 0,45 | 1,23 | 0,09 | 0,38 | 0,09 | 0,12 |
| CCOLA | FB | 2013 | 1,54 | 13,53 | 7 | 0,74 | 0,59 | 0,41 | 1,44 | 0,1 | 0,38 | 0,07 | 0,09 |
| CCOLA | FB | 2014 | 1,56 | 14,18 | 6,61 | 0,83 | 0,53 | 0,47 | 1,14 | 0,06 | 0,36 | 0,05 | 0,1 |
| CCOLA | FB | 2015 | 1,75 | 12,05 | 7,07 | 0,75 | 0,54 | 0,46 | 1,17 | 0,02 | 0,35 | 0,01 | 0,1 |
| CCOLA | FB | 2016 | 2,09 | 11,67 | 13,52 | 0,67 | 0,52 | 0,48 | 1,09 | 0,003 | 0,34 | 0,002 | 0,11 |
| CCOLA | FB | 2017 | 1,38 | 12,62 | 9,97 | 0,64 | 0,59 | 0,41 | 1,45 | 0,03 | 0,34 | 0,02 | 0,09 |
| DARDL | FB | 2012 | 0,07 | 55,25 | 7,31 | 0,98 | 8,67 | -7,67 | -1,13 | 0,16 | 0,39 | 0,16 | 0,63 |
| DARDL | FB | 2013 | 0,22 | 9,73 | 18,02 | 2,91 | 5,26 | -4,26 | -1,23 | 2,34 | 0,38 | 6,8 | 7,51 |
| DARDL | FB | 2014 | 0,39 | 6,15 | 7,62 | 1,92 | 2,99 | -1,99 | -1,5 | -0,1 | 0,39 | -0,2 | -0,46 |
| DARDL | FB | 2015 | 0,19 | 22,99 | 12,81 | 3,78 | 3,93 | -2,93 | -1,34 | 0,007 | 0,35 | 0,03 | -0,43 |
| DARDL | FB | 2016 | 0,14 | 39,52 | 10,43 | 4,38 | 4,39 | -3,39 | -1,3 | 0,14 | 0,37 | 0,6 | -0,41 |
| DARDL | FB | 2017 | 0,25 | 12,04 | 18,31 | 4,05 | 4,4 | -3,4 | -1,29 | 0,06 | 0,25 | 0,26 | -0,34 |

| | | | | | | | | | | | | | |
|-------|----|------|------|-------|------|------|------|------|------|-------|------|-------|---------|
| ERSU | FB | 2012 | 3,28 | 12,76 | 1,5 | 0,46 | 0,2 | 0,8 | 0,25 | 0,003 | 0,09 | 0,001 | 0,02 |
| ERSU | FB | 2013 | 6,88 | 9,63 | 1,32 | 0,46 | 0,34 | 0,66 | 0,5 | -0,03 | 0,1 | -0,01 | -0,01 |
| ERSU | FB | 2014 | 3,46 | 4,23 | 2,73 | 0,56 | 0,26 | 0,74 | 0,36 | -0,05 | 0,1 | -0,03 | 0,02 |
| ERSU | FB | 2015 | 2,06 | 2,95 | 1,33 | 0,28 | 0,26 | 0,74 | 0,35 | -0,06 | 0,15 | -0,02 | 0,0006 |
| ERSU | FB | 2016 | 4,41 | 9,58 | 0,78 | 0,17 | 0,16 | 0,84 | 0,19 | 0,007 | 0,2 | 0,001 | -0,0006 |
| ERSU | FB | 2017 | 2,9 | 4,65 | 0,6 | 0,18 | 0,2 | 0,8 | 0,25 | 0,13 | 0,24 | 0,02 | -0,004 |
| ETILR | FB | 2012 | 4,34 | 1,29 | 0,59 | 0,6 | 0,18 | 0,82 | 0,23 | -0,1 | 1,29 | -0,06 | -0,62 |
| ETILR | FB | 2013 | 4,92 | 0,45 | 0,24 | 0,19 | 0,16 | 0,84 | 0,18 | -0,34 | 0,64 | -0,06 | 0,05 |
| ETILR | FB | 2014 | 2,84 | 1,05 | 4,92 | 0,39 | 0,2 | 0,8 | 0,24 | -3,53 | 0,36 | -1,36 | 0,11 |
| ETILR | FB | 2015 | 2,14 | 0,43 | 9,74 | 0,25 | 0,33 | 0,67 | 0,49 | 0,26 | 0,91 | 0,07 | 0,04 |

Table 47 *Data of Food&Beverage Sector*

| FIRM | INDUSTRY | YEAR | CRT | ART | INVTR | TAST | DEBRT | EQRT | DTERT | PRFMRT | GRSMRT | ROMAS | CFOTAS |
|-------|----------|------|------|-------|-------|------|-------|------|-------|--------|--------|-------|--------|
| ETILR | FB | 2016 | 1,7 | 2,08 | 2,54 | 0,36 | 0,47 | 0,53 | 0,89 | 0,5 | 0,83 | 0,18 | 0,08 |
| ETILR | FB | 2017 | 0,3 | 5,7 | 19,25 | 0,21 | 0,48 | 0,52 | 0,92 | -0,67 | 0,29 | -0,14 | 0,16 |
| FRIGO | FB | 2012 | 0,73 | 15,32 | 3,13 | 0,81 | 0,63 | 0,37 | 1,71 | -0,05 | 0,09 | -0,04 | 0,03 |
| FRIGO | FB | 2013 | 1,5 | 12,83 | 1,99 | 0,65 | 0,73 | 0,27 | 2,7 | -0,16 | 0,07 | -0,11 | -0,09 |
| FRIGO | FB | 2014 | 1,14 | 11,49 | 2,17 | 0,78 | 0,75 | 0,25 | 3 | -0,05 | 0,11 | -0,04 | 0,04 |
| FRIGO | FB | 2015 | 0,92 | 8,06 | 2,02 | 0,77 | 0,8 | 0,2 | 4,02 | -0,12 | 0,12 | -0,09 | 0,02 |
| FRIGO | FB | 2016 | 0,86 | 7,58 | 2,95 | 0,88 | 0,79 | 0,21 | 3,75 | -0,04 | 0,11 | -0,04 | 0,02 |
| FRIGO | FB | 2017 | 1,44 | 15,58 | 1,87 | 0,82 | 0,72 | 0,28 | 2,56 | 0,02 | 0,19 | 0,02 | 0,02 |
| KENT | FB | 2012 | 1,37 | 3,79 | 7,88 | 1,04 | 0,37 | 0,63 | 0,59 | 0,03 | 0,28 | 0,03 | 0,02 |
| KENT | FB | 2013 | 1,39 | 3,9 | 6,87 | 1,09 | 0,37 | 0,63 | 0,59 | -0,03 | 0,29 | -0,03 | 0,14 |
| KENT | FB | 2014 | 1,71 | 5,21 | 10,67 | 1,19 | 0,37 | 0,63 | 0,58 | 0,03 | 0,29 | 0,04 | 0,2 |
| KENT | FB | 2015 | 1,7 | 6,18 | 8,21 | 0,93 | 0,32 | 0,68 | 0,47 | 0,09 | 0,36 | 0,09 | 0,09 |
| KENT | FB | 2016 | 1,07 | 5,5 | 7,47 | 1,09 | 0,42 | 0,58 | 0,72 | -0,01 | 0,3 | -0,02 | -0,03 |

| KENT | FB | 2017 | 1,36 | 5,02 | 5,99 | 1,19 | 0,35 | 0,65 | 0,54 | 0,06 | 0,3 | 0,07 | 0,1 |
|-------|----|------|------|------|------|------|------|-------|--------|--------|------|--------|--------|
| KERVT | FB | 2012 | 0,9 | 7,21 | 2,71 | 0,96 | 1,14 | -0,14 | -8,11 | -0,003 | 0,27 | -0,003 | 0,05 |
| KERVT | FB | 2013 | 0,56 | 3,74 | 3,01 | 0,72 | 1,06 | -0,06 | -18,33 | -0,17 | 0,28 | -0,12 | -0,004 |
| KERVT | FB | 2014 | 0,76 | 3,92 | 3,27 | 0,72 | 1,04 | -0,04 | -27,98 | -0,06 | 0,28 | -0,04 | 0,05 |
| KERVT | FB | 2015 | 0,55 | 3,73 | 2,58 | 0,58 | 0,96 | 0,04 | 24,1 | -0,22 | 0,28 | -0,13 | 0,04 |
| KERVT | FB | 2016 | 0,4 | 4,21 | 2,81 | 0,76 | 1,09 | -0,09 | 12,07 | -0,16 | 0,25 | -0,12 | 0,07 |
| KERVT | FB | 2017 | 1,1 | 4,22 | 5,94 | 0,71 | 0,78 | 0,22 | 3,53 | 0,03 | 0,18 | 0,02 | 0,07 |
| KNFRT | FB | 2012 | 1,83 | 7,33 | 1,33 | 1,02 | 0,48 | 0,52 | 0,92 | 0,08 | 0,2 | 0,08 | -0,03 |
| KNFRT | FB | 2013 | 2,2 | 4,75 | 0,95 | 0,78 | 0,46 | 0,54 | 0,84 | 0,07 | 0,28 | 0,05 | -0,01 |
| KNFRT | FB | 2014 | 6,25 | 7,2 | 1,43 | 1,16 | 0,17 | 0,83 | 0,2 | 0,15 | 0,32 | 0,18 | 0,32 |

Table 48 *Data of Food&Beverage Sector*

| FIRM | INDUSTRY | YEAR | CRT | ART | INVTR | TAST | DEBRT | EQRT | DTERT | PRFMRT | GRSMRT | ROMAS | CFOTAS |
|-------|----------|------|-------|-------|-------|------|-------|------|-------|--------|--------|-------|--------|
| KNFRT | FB | 2015 | 8,65 | 4,83 | 1,06 | 0,75 | 0,12 | 0,88 | 0,13 | 0,13 | 0,2 | 0,1 | 0,008 |
| KNFRT | FB | 2016 | 4,19 | 7,63 | 0,58 | 0,51 | 0,2 | 0,8 | 0,25 | 0,22 | 0,28 | 0,11 | 0,009 |
| KNFRT | FB | 2017 | 2,53 | 12,56 | 1,08 | 0,67 | 0,24 | 0,76 | 0,32 | 0,21 | 0,29 | 0,14 | 0,23 |
| KRSTL | FB | 2012 | 10,56 | 0,74 | 6,34 | 0,33 | 0,06 | 0,94 | 0,06 | -0,07 | 0,05 | -0,02 | -0,02 |
| KRSTL | FB | 2013 | 5,53 | 1,4 | 5,88 | 0,63 | 0,13 | 0,87 | 0,15 | 0,05 | 0,18 | 0,03 | -0,09 |
| KRSTL | FB | 2014 | 2,81 | 1,98 | 4,17 | 0,68 | 0,26 | 0,74 | 0,35 | 0,01 | 0,07 | 0,004 | 0,01 |
| KRSTL | FB | 2015 | 3,49 | 2,29 | 6,82 | 0,94 | 0,21 | 0,79 | 0,27 | 0,02 | 0,08 | 0,07 | -0,03 |
| KRSTL | FB | 2016 | 2,56 | 2,99 | 9,94 | 1,13 | 0,28 | 0,72 | 0,38 | 0,03 | 0,12 | 0,03 | 0,1 |
| KRSTL | FB | 2017 | 3,21 | 2,41 | 7,36 | 0,89 | 0,37 | 0,63 | 0,58 | 0,03 | 0,09 | 0,02 | -0,06 |
| MERKO | FB | 2012 | 0,83 | 8,53 | 1,8 | 0,82 | 0,75 | 0,25 | 2,97 | 0,01 | 0,18 | 0,01 | 0,04 |
| MERKO | FB | 2013 | 0,84 | 9,65 | 1,77 | 0,92 | 0,8 | 0,2 | 3,92 | -0,04 | 0,19 | -0,04 | 0,04 |
| MERKO | FB | 2014 | 1,56 | 9,28 | 11,51 | 2,44 | 0,43 | 0,57 | 0,75 | 0,09 | 0,21 | 0,22 | 0,09 |
| MERKO | FB | 2015 | 1,32 | 7,42 | 1,28 | 0,86 | 0,68 | 0,32 | 2,13 | 0,009 | 0,19 | 0,008 | 0,04 |

| | | | | | | | | | | | | | |
|-------|----|------|------|------|-------|------|------|------|------|-------|------|-------|--------|
| MERKO | FB | 2016 | 1,13 | 6,26 | 1,28 | 0,77 | 0,73 | 0,27 | 2,71 | -0,08 | 0,13 | -0,06 | 0,003 |
| MERKO | FB | 2017 | 0,85 | 8,55 | 2,73 | 1 | 0,84 | 0,16 | 5,27 | -0,15 | 0,07 | -0,14 | 0,007 |
| PENGD | FB | 2012 | 0,93 | 4,37 | 1,24 | 0,43 | 0,53 | 0,47 | 1,14 | 0,02 | 0,2 | 0,01 | 0,002 |
| PENGD | FB | 2013 | 1,35 | 5,66 | 1,99 | 0,46 | 0,63 | 0,37 | 1,69 | -0,29 | 0,04 | -0,13 | -0,09 |
| PENGD | FB | 2014 | 1,06 | 6,38 | 2,55 | 0,59 | 0,68 | 0,32 | 2,08 | -0,11 | 0,11 | -0,07 | 0,03 |
| PENGD | FB | 2015 | 0,94 | 6,18 | 1,68 | 0,55 | 0,69 | 0,31 | 2,23 | 0,04 | 0,2 | 0,02 | -0,008 |
| PENGD | FB | 2016 | 0,81 | 7,87 | 1,67 | 0,6 | 0,76 | 0,23 | 3,31 | -0,09 | 0,15 | -0,05 | -0,03 |
| PENGD | FB | 2017 | 0,83 | 8,4 | 1,81 | 0,74 | 0,84 | 0,16 | 5,27 | -0,09 | 0,15 | -0,07 | -0,09 |
| PETUN | FB | 2012 | 1,86 | 6,86 | 11,28 | 1,01 | 0,23 | 0,77 | 0,3 | 0,07 | 0,17 | 0,07 | 0,08 |
| PETUN | FB | 2013 | 1,7 | 7,18 | 10,65 | 1,09 | 0,25 | 0,75 | 0,33 | 0,08 | 0,17 | 0,09 | 0,1 |

Table 49 *Data of Food&Beverage Sector*

| FIRM | INDUSTRY | YEAR | CRT | ART | INVTR | TAST | DEBRT | EQRT | DTERT | PRFMRT | GRSMRT | ROMAS | CFOTAS |
|-------|----------|------|------|------|-------|------|-------|------|-------|--------|--------|-------|--------|
| PETUN | FB | 2014 | 1,47 | 8,4 | 11,72 | 1,24 | 0,23 | 0,77 | 0,29 | 0,08 | 0,15 | 0,1 | 0,07 |
| PETUN | FB | 2015 | 1,65 | 8,09 | 8,76 | 1,13 | 0,22 | 0,78 | 0,28 | 0,11 | 0,17 | 0,13 | 0,07 |
| PETUN | FB | 2016 | 1,67 | 6,31 | 11,39 | 1,17 | 0,23 | 0,77 | 0,3 | 0,09 | 0,17 | 0,11 | 0,07 |
| PETUN | FB | 2017 | 1,61 | 6,77 | 12,18 | 1 | 0,23 | 0,77 | 0,29 | 0,09 | 0,15 | 0,09 | 0,1 |
| PINSU | FB | 2012 | 1 | 7,34 | 8,57 | 0,84 | 0,34 | 0,66 | 0,52 | 0,001 | 0,47 | 0,001 | 0,01 |
| PINSU | FB | 2013 | 0,81 | 7,19 | 8,6 | 0,85 | 0,44 | 0,56 | 0,78 | -0,08 | 0,41 | -0,07 | -0,002 |
| PINSU | FB | 2014 | 1,11 | 6,05 | 11,14 | 1,08 | 0,52 | 0,48 | 1,07 | 0,02 | 0,43 | 0,02 | -0,01 |
| PINSU | FB | 2015 | 0,71 | 7,84 | 7,32 | 0,97 | 0,64 | 0,36 | 1,78 | -0,06 | 0,48 | -0,06 | -0,02 |
| PINSU | FB | 2016 | 0,82 | 7,64 | 7,98 | 0,8 | 0,69 | 0,31 | 2,22 | -0,13 | 0,4 | -0,1 | -0,11 |
| PINSU | FB | 2017 | 0,55 | 7,05 | 19,65 | 0,8 | 0,74 | 0,26 | 2,85 | -0,1 | 0,44 | -0,08 | -0,007 |
| PNSUT | FB | 2012 | 1,64 | 7,19 | 7,09 | 1,18 | 0,29 | 0,71 | 0,41 | 0,08 | 0,2 | 0,09 | 0,08 |
| PNSUT | FB | 2013 | 1,51 | 6,99 | 6,92 | 1,19 | 0,3 | 0,7 | 0,42 | 0,08 | 0,19 | 0,1 | 0,11 |
| PNSUT | FB | 2014 | 1,42 | 6 | 8,12 | 1,21 | 0,32 | 0,68 | 0,47 | 0,09 | 0,17 | 0,11 | 0,06 |

| | | | | | | | | | | | | | |
|-------|----|------|------|------|------|------|------|------|------|-------|-------|--------|-------|
| PNSUT | FB | 2015 | 1,16 | 7,32 | 7,58 | 1,14 | 0,34 | 0,66 | 0,51 | 0,06 | 0,16 | 0,07 | 0,07 |
| PNSUT | FB | 2016 | 1,23 | 5,8 | 8,44 | 1,14 | 0,39 | 0,61 | 0,6 | 0,06 | 0,18 | 0,06 | 0,04 |
| PNSUT | FB | 2017 | 1,21 | 4,96 | 7,15 | 1,03 | 0,43 | 0,57 | 2,85 | 0,04 | 0,16 | 0,04 | 0,03 |
| SELGD | FB | 2012 | 2,73 | 3,58 | 1,87 | 0,44 | 0,29 | 0,71 | 0,41 | 0,17 | 0,1 | 0,07 | 0,05 |
| SELGD | FB | 2013 | 2,46 | 2,56 | 6,15 | 0,61 | 0,37 | 0,63 | 0,58 | 0,11 | 0,004 | 0,07 | -0,03 |
| SELGD | FB | 2014 | 1,67 | 4,1 | 4,2 | 0,65 | 0,5 | 0,5 | 0,99 | -0,01 | -0,03 | -0,004 | 0,05 |
| SELGD | FB | 2015 | 2,25 | 5,4 | 2,79 | 0,48 | 0,36 | 0,65 | 0,54 | 0,1 | 0,02 | 0,05 | -0,11 |
| SELGD | FB | 2016 | 2,58 | 2,63 | 3,37 | 0,45 | 0,42 | 0,58 | 0,72 | -0,11 | 0,007 | -0,04 | -0,07 |
| SELGD | FB | 2017 | 2,66 | 5,83 | 4,61 | 0,67 | 0,39 | 0,61 | 0,63 | 0,03 | 0,21 | 0,02 | 0,07 |
| TATGD | FB | 2012 | 1,66 | 3,6 | 3,69 | 1,3 | 0,61 | 0,39 | 1,57 | -0,01 | 0,2 | -0,01 | 0,02 |

Table 50 *Data of Food&Beverage Sector*

| FIRM | INDUSTRY | YEAR | CRT | ART | INVTR | TAST | DEBRT | EQRT | DTERT | PRFMRT | GRSMRT | ROMAS | CFOTAS |
|-------|----------|------|------|------|-------|------|-------|------|-------|--------|--------|-------|--------|
| TATGD | FB | 2013 | 2 | 3,81 | 3,94 | 1,4 | 0,61 | 0,39 | 1,56 | -0,01 | 0,21 | -0,02 | 0,05 |
| TATGD | FB | 2014 | 1,98 | 4,47 | 3,55 | 1,23 | 0,47 | 0,53 | 0,9 | 0,18 | 0,21 | 0,23 | 0,06 |
| TATGD | FB | 2015 | 2,39 | 3,83 | 3,66 | 1,39 | 0,36 | 0,65 | 0,54 | 0,07 | 0,23 | 0,1 | 0,05 |
| TATGD | FB | 2016 | 3,26 | 4,26 | 3,7 | 1,42 | 0,33 | 0,67 | 0,5 | 0,07 | 0,23 | 0,09 | 0,13 |
| TATGD | FB | 2017 | 2,08 | 3,82 | 3,61 | 1,37 | 0,37 | 0,63 | 0,59 | 0,06 | 0,22 | 0,08 | 0,02 |
| TBORG | FB | 2012 | 1,06 | 2,54 | 3,89 | 0,97 | 0,55 | 0,45 | 1,24 | 0,12 | 0,5 | 0,12 | 0,27 |
| TBORG | FB | 2013 | 1,29 | 2,74 | 4,21 | 1,01 | 0,49 | 0,51 | 0,96 | 0,18 | 0,55 | 0,18 | 0,25 |
| TBORG | FB | 2014 | 1,43 | 2,95 | 6,82 | 0,89 | 0,46 | 0,54 | 0,86 | 0,2 | 0,56 | 0,18 | 0,33 |
| TBORG | FB | 2015 | 1,63 | 2,9 | 7,04 | 0,82 | 0,44 | 0,56 | 0,78 | 0,21 | 0,55 | 0,17 | 0,24 |
| TBORG | FB | 2016 | 1,77 | 2,82 | 4,24 | 0,75 | 0,42 | 0,58 | 0,72 | 0,25 | 0,57 | 0,18 | 0,19 |
| TBORG | FB | 2017 | 1,91 | 2,85 | 5,21 | 0,74 | 0,38 | 0,62 | 0,61 | 0,25 | 0,57 | 0,19 | 0,18 |
| TUKAS | FB | 2012 | 1,61 | 2,03 | 1,64 | 0,56 | 0,62 | 0,38 | 1,61 | -0,16 | 0,1 | -0,09 | -0,05 |
| TUKAS | FB | 2013 | 1,64 | 2,21 | 1,74 | 0,63 | 0,82 | 0,18 | 4,53 | -0,29 | 0,14 | -0,18 | -0,2 |

| | | | | | | | | | | | | | |
|-------|----|------|------|------|-------|------|------|------|------|-------|-------|-------|--------|
| TUKAS | FB | 2014 | 1,45 | 3,74 | 1,67 | 0,51 | 0,66 | 0,34 | 1,94 | -0,41 | -0,04 | -0,21 | 0,02 |
| TUKAS | FB | 2015 | 1,48 | 5,54 | 1,3 | 0,6 | 0,55 | 0,45 | 1,23 | 0,23 | 0,2 | 0,14 | -0,007 |
| TUKAS | FB | 2016 | 1,55 | 4,63 | 1,49 | 0,69 | 0,54 | 0,46 | 1,17 | 0,08 | 0,2 | 0,05 | 0,008 |
| TUKAS | FB | 2017 | 1,29 | 4,24 | 1,38 | 0,64 | 0,62 | 0,38 | 1,63 | 0,03 | 0,19 | 0,02 | -0,11 |
| ULKER | FB | 2012 | 1,98 | 3,92 | 9,87 | 0,74 | 0,66 | 0,34 | 1,92 | 0,08 | 0,21 | 0,06 | 0,04 |
| ULKER | FB | 2013 | 1,17 | 4,24 | 10,66 | 0,87 | 0,6 | 0,4 | 1,49 | 0,08 | 0,23 | 0,07 | 0,05 |
| ULKER | FB | 2014 | 3,1 | 4,79 | 10,75 | 0,91 | 0,61 | 0,39 | 1,59 | 0,08 | 0,21 | 0,07 | 0,06 |
| ULKER | FB | 2015 | 3,7 | 4,74 | 10,29 | 0,78 | 0,58 | 0,42 | 1,39 | 0,09 | 0,22 | 0,07 | 0,07 |
| ULKER | FB | 2016 | 1,11 | 5,07 | 8,29 | 0,71 | 0,66 | 0,34 | 1,95 | 0,06 | 0,24 | 0,04 | 0,11 |
| ULKER | FB | 2017 | 2,4 | 6,23 | 6,26 | 0,58 | 0,68 | 0,32 | 2,11 | 0,09 | 0,27 | 0,05 | 0,09 |

Table 51 *Data of Food&Beverage Sector*

| FIRM | INDUSTRY | YEAR | CRT | ART | INVTR | TAST | DEBRT | EQRT | DTERT | PRFMRT | GRSMRT | ROMAS | CFOTAS |
|-------|----------|------|------|--------|-------|------|-------|------|-------|--------|--------|-------|--------|
| VANGD | FB | 2012 | 1,17 | 5,75 | 5,81 | 0,22 | 0,13 | 0,87 | 0,15 | -1,15 | -0,03 | -0,25 | 0,005 |
| VANGD | FB | 2013 | 0,53 | 9,92 | 8,83 | 0,2 | 0,23 | 0,77 | 0,3 | 0,16 | -0,09 | 0,03 | -0,17 |
| VANGD | FB | 2014 | 3,38 | 14,5 | 7,14 | 0,22 | 0,21 | 0,79 | 0,27 | 0,42 | -0,07 | 0,09 | -0,36 |
| VANGD | FB | 2015 | 6,41 | 9,42 | 7,04 | 0,11 | 0,14 | 0,86 | 0,16 | -0,33 | 0,38 | -0,03 | 0,12 |
| VANGD | FB | 2016 | 0,42 | 6,33 | 8 | 0,13 | 0,36 | 0,64 | 0,57 | -1,33 | 0,01 | -0,18 | 0,53 |
| VANGD | FB | 2017 | 2,39 | 112,03 | 0 | 0,01 | 0,31 | 0,69 | 0,45 | 3,22 | -0,19 | 0,03 | -0,36 |

Table 52 *Data of Hospitality Sector*

| CORP | YEAR | ART | ART_LOG | CFOTAS | CFOTAS_LOG | CRT | CRT_FRK1 | CRT_LOG | DEBRT | DEBRT_FRK1 |
|-------|------------|-------|-------------|---------|--------------|-------|----------|-------------|-------|------------|
| AVTUR | 2012-01-01 | 2,89 | 1,358409158 | 0,001 | -0,913793852 | 0,51 | #N/A | 0,714142843 | 0,08 | #N/A |
| AVTUR | 2013-01-01 | 1,81 | 1,033184483 | 0,004 | -0,906340401 | 0,45 | 0,06 | 0,670820393 | 0,1 | 0,02 |
| AVTUR | 2014-01-01 | 4,78 | 1,754403683 | -0,29 | -2,207274913 | 10,69 | 10,24 | 3,269556545 | 0,08 | 0,02 |
| AVTUR | 2015-01-01 | 0,76 | 0,565313809 | 0,34 | -0,301105093 | 0,8 | 9,89 | 0,894427191 | 0,12 | 0,04 |
| AVTUR | 2016-01-01 | 1,01 | 0,698134722 | 0,08 | -0,733969175 | 0,3 | 0,5 | 0,547722558 | 0,18 | 0,06 |
| AVTUR | 2017-01-01 | 2,44 | 1,235471471 | 0,02 | -0,867500568 | 0,69 | 0,39 | 0,830662386 | 0,21 | 0,03 |
| AYCES | 2012-01-01 | 8,22 | 2,221375038 | 0,02 | -0,867500568 | 0,62 | #N/A | 0,787400787 | 0,17 | #N/A |
| AYCES | 2013-01-01 | 7,68 | 2,161021529 | 0,04 | -0,820980552 | 0,45 | 0,17 | 0,670820393 | 0,18 | 0,01 |
| AYCES | 2014-01-01 | 34,32 | 3,564449376 | 0,02 | -0,867500568 | 0,25 | 0,2 | 0,5 | 0,17 | 0,01 |
| AYCES | 2015-01-01 | 40,9 | 3,735285827 | 0,02 | -0,867500568 | 0,64 | 0,39 | 0,8 | 0,15 | 0,02 |
| AYCES | 2016-01-01 | 16,61 | 2,868466923 | -0,0005 | -0,917541514 | 0,4 | 0,24 | 0,632455532 | 0,2 | 0,05 |
| AYCES | 2017-01-01 | 36,55 | 3,625673378 | -0,0002 | -0,916790857 | 0,23 | 0,17 | 0,479583152 | 0,24 | 0,04 |
| KSTUR | 2012-01-01 | 56,86 | 4,0580263 | 0,14 | -0,616186139 | 6,64 | #N/A | 2,576819745 | 0,07 | #N/A |

| | | | | | | | | | | |
|-------|------------|--------|-------------|---------|--------------|-------|------|-------------|------|------|
| KSTUR | 2013-01-01 | 36,01 | 3,611188146 | 0,2 | -0,510825624 | 3,7 | 2,94 | 1,923538406 | 0,1 | 0,03 |
| KSTUR | 2014-01-01 | 3,86 | 1,581038438 | 0,18 | -0,544727175 | 2,02 | 1,68 | 1,42126704 | 0,16 | 0,06 |
| KSTUR | 2015-01-01 | 0,05 | 0,048790164 | 0,12 | -0,653926467 | 2,34 | 0,32 | 1,529705854 | 0,18 | 0,02 |
| KSTUR | 2016-01-01 | 59,49 | 4,102478062 | 0,06 | -0,776528789 | 6,84 | 4,5 | 2,615339366 | 0,05 | 0,13 |
| KSTUR | 2017-01-01 | 51,58 | 3,962335819 | 0,18 | -0,544727175 | 6,51 | 0,33 | 2,551470164 | 0,06 | 0,01 |
| MAALT | 2012-01-01 | 40,18 | 3,717952702 | 0,08 | -0,733969175 | 10,54 | #N/A | 3,246536616 | 0,1 | #N/A |
| MAALT | 2013-01-01 | 36,86 | 3,633895146 | -0,06 | -1,078809661 | 12,89 | 2,35 | 3,590264614 | 0,02 | 0,08 |
| MAALT | 2014-01-01 | 40,64 | 3,729061244 | 0,07 | -0,755022584 | 17,55 | 4,66 | 4,189272013 | 0,02 | 0 |
| MAALT | 2015-01-01 | 39,36 | 3,697839195 | 0,08 | -0,733969175 | 10,18 | 7,37 | 3,190611227 | 0,04 | 0,02 |
| MAALT | 2016-01-01 | 17,66 | 2,926382195 | 0,1 | -0,693147181 | 3,49 | 6,69 | 1,868154169 | 0,12 | 0,08 |
| MAALT | 2017-01-01 | 249,39 | 5,523019702 | 0,08 | -0,733969175 | 3,19 | 0,3 | 1,78605711 | 0,15 | 0,03 |
| MERIT | 2012-01-01 | 0 | 0 | 0,0003 | -0,915541013 | 3,33 | #N/A | 1,824828759 | 0,08 | #N/A |
| MERIT | 2013-01-01 | 1,57 | 0,943905899 | -0,0003 | -0,917041013 | 4,11 | 0,78 | 2,027313493 | 0,14 | 0,06 |
| MERIT | 2014-01-01 | 5,75 | 1,909542505 | 0,48 | -0,127833372 | 1,84 | 2,27 | 1,356465997 | 0,1 | 0,04 |
| MERIT | 2015-01-01 | 9,29 | 2,33117255 | 0,18 | -0,544727175 | 4,17 | 2,33 | 2,042057786 | 0,09 | 0,01 |

| | | | | | | | | | | |
|-------|------------|--------|-------------|--------|--------------|-------|------|-------------|------|------|
| MERIT | 2016-01-01 | 2,85 | 1,348073148 | -0,14 | -1,347073648 | 3,46 | 0,71 | 1,860107524 | 0,08 | 0,01 |
| MERIT | 2017-01-01 | 1,48 | 0,90825856 | 0,0002 | -0,915790857 | 3,6 | 0,14 | 1,897366596 | 0,12 | 0,04 |
| METUR | 2012-01-01 | 80,59 | 4,401706705 | 0,27 | -0,400477567 | 1,73 | #N/A | 1,315294644 | 0,82 | #N/A |
| METUR | 2013-01-01 | 847,38 | 6,743328649 | 0,31 | -0,342490309 | 2,99 | 1,26 | 1,729161647 | 1,05 | 0,23 |
| METUR | 2014-01-01 | 2,27 | 1,184789985 | 0,27 | -0,400477567 | 2,52 | 0,47 | 1,587450787 | 1,29 | 0,24 |
| METUR | 2015-01-01 | 248,71 | 5,520300245 | 0,23 | -0,46203546 | 10,23 | 7,71 | 3,198437118 | 0,83 | 0,46 |
| METUR | 2016-01-01 | 0 | 0 | 1,95 | 0,854415328 | 6,86 | 3,37 | 2,619160171 | 0,12 | 0,71 |
| METUR | 2017-01-01 | 0 | 0 | -0,05 | -1,049822124 | 2,37 | 4,49 | 1,539480432 | 0,63 | 0,51 |

Table 53 *Data of Hospitality Sector*

| CORP | YEAR | DEBRT_LOG | DTERT | DTERT_FRK1 | DTERT_LOG | EFFICIENCY | EFFICIENCY_LOG |
|-------|------------|--------------|-------|------------|-------------|-------------|----------------|
| AVTUR | 2012-01-01 | -2,525728644 | 0,08 | #N/A | 1,757857918 | 0,97 | -0,030459207 |
| AVTUR | 2013-01-01 | -2,302585093 | 0,11 | 0,03 | 1,752672081 | 16,35333333 | 2,79443175 |
| AVTUR | 2014-01-01 | -2,525728644 | 0,09 | 0,02 | 1,756132292 | 62,78 | 4,139636551 |
| AVTUR | 2015-01-01 | -2,120263536 | 0,13 | 0,04 | 1,749199855 | 26,67333333 | 3,283664315 |
| AVTUR | 2016-01-01 | -1,714798428 | 0,22 | 0,09 | 1,733423892 | 37,51333333 | 3,624696425 |
| AVTUR | 2017-01-01 | -1,560647748 | 0,27 | 0,05 | 1,72455072 | 23,91333333 | 3,174436183 |
| AYCES | 2012-01-01 | -1,771956842 | 0,21 | #N/A | 1,735189118 | 16,81333333 | 2,822172222 |
| AYCES | 2013-01-01 | -1,714798428 | 0,23 | 0,02 | 1,731655545 | 16,82333333 | 2,822766812 |
| AYCES | 2014-01-01 | -1,771956842 | 0,21 | 0,02 | 1,735189118 | 28,42 | 3,347093123 |
| AYCES | 2015-01-01 | -1,897119985 | 0,18 | 0,03 | 1,740466175 | 30,79666667 | 3,427406459 |
| AYCES | 2016-01-01 | -1,609437912 | 0,26 | 0,08 | 1,726331664 | 22,40666667 | 3,109358534 |
| AYCES | 2017-01-01 | -1,427116356 | 0,32 | 0,06 | 1,715598108 | 30,56666667 | 3,419910091 |

Table 54 *Data of Hospitality Sector*

| CORP | YEAR | DEBRT_LOG | DTERT | DTERT_FRK1 | DTERT_LOG | EFFICIENCY | EFFICIENCY_LOG |
|-------|------------|--------------|-------|------------|-------------|-------------|----------------|
| KSTUR | 2012-01-01 | -2,659260037 | 0,07 | #N/A | 1,759580571 | 22,94666667 | 3,133172683 |
| KSTUR | 2013-01-01 | -2,302585093 | 0,11 | 0,04 | 1,752672081 | 16,51333333 | 2,804168135 |
| KSTUR | 2014-01-01 | -1,832581464 | 0,19 | 0,08 | 1,738710248 | 1,45 | 0,371563556 |
| KSTUR | 2015-01-01 | -1,714798428 | 0,21 | 0,02 | 1,735189118 | 0,019666667 | -3,928830124 |
| KSTUR | 2016-01-01 | -2,995732274 | 0,05 | 0,16 | 1,763017 | 24,71666667 | 3,20747778 |
| KSTUR | 2017-01-01 | -2,813410717 | 0,07 | 0,02 | 1,759580571 | 21,51 | 3,068517943 |
| MAALT | 2012-01-01 | -2,302585093 | 0,12 | #N/A | 1,750937475 | 27,42 | 3,311272674 |
| MAALT | 2013-01-01 | -3,912023005 | 0,03 | 0,09 | 1,766441661 | 160,54 | 5,078543133 |
| MAALT | 2014-01-01 | -3,912023005 | 0,02 | 0,01 | 1,768149604 | 70,14 | 4,250493245 |
| MAALT | 2015-01-01 | -3,218875825 | 0,04 | 0,02 | 1,764730797 | 79,26 | 4,372733588 |
| MAALT | 2016-01-01 | -2,120263536 | 0,14 | 0,1 | 1,74745921 | 86,75666667 | 4,463107265 |

| | | | | | | | |
|-------|------------|--------------|--------|-------|-------------|--------------|--------------|
| MAALT | 2017-01-01 | -1,897119985 | 0,18 | 0,04 | 1,740466175 | 203,54333333 | 5,315878922 |
| MERIT | 2012-01-01 | -2,525728644 | 0,09 | #N/A | 1,756132292 | 0,096666667 | -2,336486645 |
| MERIT | 2013-01-01 | -1,966112856 | 0,17 | 0,08 | 1,742219024 | 0,763333333 | -0,270060471 |
| MERIT | 2014-01-01 | -2,302585093 | 0,11 | 0,06 | 1,752672081 | 2,106666667 | 0,745106919 |
| MERIT | 2015-01-01 | -2,407945609 | 0,09 | 0,02 | 1,756132292 | 3,27 | 1,184789985 |
| MERIT | 2016-01-01 | -2,525728644 | 0,09 | 0 | 1,756132292 | 1,15 | 0,139761942 |
| MERIT | 2017-01-01 | -2,120263536 | 0,13 | 0,04 | 1,749199855 | 0,683333333 | -0,380772496 |
| METUR | 2012-01-01 | -0,198450939 | 4,6 | #N/A | 0,246860078 | 27,03666667 | 3,297193969 |
| METUR | 2013-01-01 | 0,048790164 | -21,52 | 26,12 | 3,310543013 | 282,48 | 5,643607752 |
| METUR | 2014-01-01 | 0,254642218 | -4,4 | 17,12 | 2,33020026 | 0,756666667 | -0,278832457 |
| METUR | 2015-01-01 | -0,186329578 | 4,88 | 9,28 | 0 | 83,26666667 | 4,422048309 |
| METUR | 2016-01-01 | -2,120263536 | 0,14 | 4,74 | 1,74745921 | 1,76 | 0,565313809 |
| METUR | 2017-01-01 | -0,46203546 | 1,72 | 1,58 | 1,425515074 | 0,093333333 | -2,371577964 |

Table 55 *Data of Hospitality Sector*

| CORP | YEAR | EFFICIENCY_LOG_D1 | EQRT | EQRT_FRK1 | EQRT_LOG | GRSMRT | GRSMRT_FRK1 | GRSMRT_LOG |
|-------|------------|-------------------|------|-----------|--------------|--------|-------------|-------------|
| AVTUR | 2012-01-01 | #N/A | 0,92 | #N/A | -2,525728644 | 0,69 | #N/A | 1,695615609 |
| AVTUR | 2013-01-01 | 2,824890958 | 0,9 | 0,02 | -2,302585093 | 0,41 | 0,28 | 1,745715531 |
| AVTUR | 2014-01-01 | 1,345204801 | 0,92 | 0,02 | -2,525728644 | -0,86 | 1,27 | 1,945910149 |
| AVTUR | 2015-01-01 | -0,855972237 | 0,88 | 0,04 | -2,120263536 | 0,17 | 1,03 | 1,786746927 |
| AVTUR | 2016-01-01 | 0,341032111 | 0,82 | 0,06 | -1,714798428 | 3,2 | 3,03 | 1,078409581 |
| AVTUR | 2017-01-01 | -0,450260242 | 0,79 | 0,03 | -1,560647748 | 0,06 | 3,14 | 1,805004696 |
| AYCES | 2012-01-01 | #N/A | 0,83 | #N/A | -1,771956842 | 0,34 | #N/A | 1,757857918 |
| AYCES | 2013-01-01 | 0,000594589 | 0,82 | 0,01 | -1,714798428 | 0,36 | 0,02 | 1,754403683 |
| AYCES | 2014-01-01 | 0,524326311 | 0,83 | 0,01 | -1,771956842 | 0,31 | 0,05 | 1,763017 |
| AYCES | 2015-01-01 | 0,080313336 | 0,85 | 0,02 | -1,897119985 | 0,3 | 0,01 | 1,764730797 |
| AYCES | 2016-01-01 | -0,318047925 | 0,8 | 0,05 | -1,609437912 | 0,06 | 0,24 | 1,805004696 |
| AYCES | 2017-01-01 | 0,310551557 | 0,76 | 0,04 | -1,427116356 | 0,24 | 0,18 | 1,774952351 |

| | | | | | | | | |
|-------|------------|--------------|------|------|--------------|-------|------|-------------|
| KSTUR | 2012-01-01 | #N/A | 0,93 | #N/A | -2,659260037 | 0,33 | #N/A | 1,759580571 |
| KSTUR | 2013-01-01 | -0,329004547 | 0,9 | 0,03 | -2,302585093 | 0,37 | 0,04 | 1,752672081 |
| KSTUR | 2014-01-01 | -2,432604579 | 0,84 | 0,06 | -1,832581464 | 0,36 | 0,01 | 1,754403683 |
| KSTUR | 2015-01-01 | -4,30039368 | 0,82 | 0,02 | -1,714798428 | -5,14 | 5,5 | 2,423031246 |
| KSTUR | 2016-01-01 | 7,136307904 | 0,95 | 0,13 | -2,995732274 | 0,05 | 5,19 | 1,806648082 |
| KSTUR | 2017-01-01 | -0,138959837 | 0,94 | 0,01 | -2,813410717 | 0,32 | 0,27 | 1,761300262 |
| MAALT | 2012-01-01 | #N/A | 0,9 | #N/A | -2,302585093 | 0,51 | #N/A | 1,728109442 |
| MAALT | 2013-01-01 | 1,767270459 | 0,98 | 0,08 | -3,912023005 | 0,42 | 0,09 | 1,743968805 |
| MAALT | 2014-01-01 | -0,828049888 | 0,98 | 0 | -3,912023005 | 0,58 | 0,16 | 1,715598108 |
| MAALT | 2015-01-01 | 0,122240343 | 0,96 | 0,02 | -3,218875825 | 0,67 | 0,09 | 1,699278616 |
| MAALT | 2016-01-01 | 0,090373677 | 0,88 | 0,08 | -2,120263536 | 0,04 | 0,63 | 1,808288771 |
| MAALT | 2017-01-01 | 0,852771657 | 0,85 | 0,03 | -1,897119985 | 0,5 | 0,46 | 1,729884066 |
| MERIT | 2012-01-01 | #N/A | 0,92 | #N/A | -2,525728644 | 0,84 | #N/A | 1,667706821 |
| MERIT | 2013-01-01 | 2,066426174 | 0,86 | 0,06 | -1,966112856 | 0,86 | 0,02 | 1,663926098 |
| MERIT | 2014-01-01 | 1,015167391 | 0,9 | 0,04 | -2,302585093 | 0,79 | 0,07 | 1,677096561 |

| | | | | | | | | |
|-------|------------|--------------|-------|------|--------------|------|------|-------------|
| MERIT | 2015-01-01 | 0,439683065 | 0,91 | 0,01 | -2,407945609 | 0,84 | 0,05 | 1,667706821 |
| MERIT | 2016-01-01 | -1,045028043 | 0,92 | 0,01 | -2,525728644 | 0,81 | 0,03 | 1,673351238 |
| MERIT | 2017-01-01 | -0,520534438 | 0,88 | 0,04 | -2,120263536 | 0,82 | 0,01 | 1,671473303 |
| METUR | 2012-01-01 | #N/A | 0,18 | #N/A | -0,198450939 | 0,58 | #N/A | 1,715598108 |
| METUR | 2013-01-01 | 2,346413782 | -0,05 | 0,23 | 0,048790164 | 0,1 | 0,48 | 1,798404012 |
| METUR | 2014-01-01 | -5,922440209 | -0,29 | 0,24 | 0,254642218 | 0,41 | 0,31 | 1,745715531 |
| METUR | 2015-01-01 | 4,700880766 | 0,17 | 0,46 | -0,186329578 | 0,73 | 0,32 | 1,688249093 |
| METUR | 2016-01-01 | -3,8567345 | 0,88 | 0,71 | -2,120263536 | 0,27 | 0,46 | 1,769854634 |
| METUR | 2017-01-01 | -2,936891774 | 0,37 | 0,51 | -0,46203546 | 0,57 | 0,3 | 1,717395054 |

Table 56 *Data of Hospitality Sector*

| CORP | YEAR | INDUST | INVTR | INVTR_FRK1 | INVTR_LOG | LIQUIDITY | LIQUIDITY_LOG | LIQUIDITY_LOG_D1 |
|-------|------------|--------|--------|------------|-------------|-----------|---------------|------------------|
| AVTUR | 2012-01-01 | HS | 0 | #N/A | 0 | 0,51 | -0,673344553 | #N/A |
| AVTUR | 2013-01-01 | HS | 47,22 | 47,22 | 3,875773873 | 0,45 | -0,798507696 | -0,125163143 |
| AVTUR | 2014-01-01 | HS | 183,53 | 136,31 | 5,217812052 | 10,69 | 2,369308725 | 3,167816421 |
| AVTUR | 2015-01-01 | HS | 79,23 | 104,3 | 4,38489751 | 0,8 | -0,223143551 | -2,592452276 |
| AVTUR | 2016-01-01 | HS | 111,51 | 32,28 | 4,723042107 | 0,3 | -1,203972804 | -0,980829253 |
| AVTUR | 2017-01-01 | HS | 69,26 | 42,25 | 4,252202647 | 0,69 | -0,371063681 | 0,832909123 |
| AYCES | 2012-01-01 | HS | 42,03 | #N/A | 3,761897547 | 0,62 | -0,478035801 | #N/A |
| AYCES | 2013-01-01 | HS | 42,6 | 0,57 | 3,77505715 | 0,45 | -0,798507696 | -0,320471895 |
| AYCES | 2014-01-01 | HS | 50,73 | 8,13 | 3,946037884 | 0,25 | -1,386294361 | -0,587786665 |
| AYCES | 2015-01-01 | HS | 51,34 | 0,61 | 3,957760897 | 0,64 | -0,446287103 | 0,940007258 |
| AYCES | 2016-01-01 | HS | 50,5 | 0,84 | 3,941581808 | 0,4 | -0,916290732 | -0,470003629 |
| AYCES | 2017-01-01 | HS | 55,02 | 4,52 | 4,02570877 | 0,23 | -1,46967597 | -0,553385238 |
| KSTUR | 2012-01-01 | HS | 11,51 | #N/A | 2,526528324 | 6,64 | 1,893111963 | #N/A |

| | | | | | | | | |
|-------|------------|----|--------|--------|-------------|-------|-------------|--------------|
| KSTUR | 2013-01-01 | HS | 13,05 | 1,54 | 2,642622396 | 3,7 | 1,30833282 | -0,584779144 |
| KSTUR | 2014-01-01 | HS | 0 | 13,05 | 0 | 2,02 | 0,703097511 | -0,605235308 |
| KSTUR | 2015-01-01 | HS | 0 | 0 | 0 | 2,34 | 0,850150929 | 0,147053418 |
| KSTUR | 2016-01-01 | HS | 14,39 | 14,39 | 2,733717948 | 6,84 | 1,922787732 | 1,072636802 |
| KSTUR | 2017-01-01 | HS | 12,56 | 1,83 | 2,607124283 | 6,51 | 1,873339456 | -0,049448275 |
| MAALT | 2012-01-01 | HS | 41,85 | #N/A | 3,757705645 | 10,54 | 2,355177543 | #N/A |
| MAALT | 2013-01-01 | HS | 444,64 | 402,79 | 6,099511451 | 12,89 | 2,556451817 | 0,201274274 |
| MAALT | 2014-01-01 | HS | 169,68 | 274,96 | 5,139790458 | 17,55 | 2,86505395 | 0,308602133 |
| MAALT | 2015-01-01 | HS | 198,31 | 28,63 | 5,294861402 | 10,18 | 2,320425011 | -0,544628939 |
| MAALT | 2016-01-01 | HS | 242,57 | 44,26 | 5,495404376 | 3,49 | 1,249901736 | -1,070523275 |
| MAALT | 2017-01-01 | HS | 361,15 | 118,58 | 5,892058491 | 3,19 | 1,160020917 | -0,089880819 |
| MERIT | 2012-01-01 | HS | 0 | #N/A | 0 | 3,33 | 1,202972304 | #N/A |
| MERIT | 2013-01-01 | HS | 0 | 0 | 0 | 4,11 | 1,413423029 | 0,210450725 |
| MERIT | 2014-01-01 | HS | 0 | 0 | 0 | 1,84 | 0,609765572 | -0,803657457 |
| MERIT | 2015-01-01 | HS | 0 | 0 | 0 | 4,17 | 1,427916036 | 0,818150464 |

| | | | | | | | | |
|-------|------------|----|--------|-------|--------------|-------|-------------|--------------|
| MERIT | 2016-01-01 | HS | 0 | 0 | 0 | 3,46 | 1,241268589 | -0,186647447 |
| MERIT | 2017-01-01 | HS | 0 | 0 | 0 | 3,6 | 1,280933845 | 0,039665256 |
| METUR | 2012-01-01 | HS | 0,22 | #N/A | 0,198850859 | 1,73 | 0,548121409 | #N/A |
| METUR | 2013-01-01 | HS | 0,04 | 0,18 | 0,039220713 | 2,99 | 1,095273387 | 0,547151979 |
| METUR | 2014-01-01 | HS | -0,002 | 0,042 | -0,002002003 | 2,52 | 0,924258902 | -0,171014486 |
| METUR | 2015-01-01 | HS | 0,29 | 0,292 | 0,254642218 | 10,23 | 2,32532458 | 1,401065678 |
| METUR | 2016-01-01 | HS | 2,91 | 2,62 | 1,363537374 | 6,86 | 1,925707442 | -0,399617138 |
| METUR | 2017-01-01 | HS | 0,18 | 2,73 | 0,165514438 | 2,37 | 0,862889955 | -1,062817487 |

Table 57 *Data of Hospitality Sector*

| CORP | YEAR | PRFMRT | PRFMRT_LOG | PROFITABILITY | PROFITABILITY_LOG | PROFITABILITY_LOG_D1 |
|-------|------------|--------|--------------|---------------|-------------------|----------------------|
| AVTUR | 2012-01-01 | -1,48 | -0,675675676 | -0,20475 | -0,790614124 | #N/A |
| AVTUR | 2013-01-01 | -0,12 | -8,333333333 | 0,07275 | -0,656094116 | 0,134520007 |
| AVTUR | 2014-01-01 | 2,6 | 0,384615385 | 0,385 | -0,479334957 | 0,17675916 |
| AVTUR | 2015-01-01 | 0,82 | 1,219512195 | 0,34 | -0,506817602 | -0,027482646 |
| AVTUR | 2016-01-01 | 4,28 | 0,23364486 | 1,9125 | 2,436116486 | 2,942934088 |
| AVTUR | 2017-01-01 | -2,55 | -0,392156863 | -0,64 | -0,970778917 | -3,406895403 |
| AYCES | 2012-01-01 | 0,06 | 16,66666667 | 0,1075 | -0,637898706 | #N/A |
| AYCES | 2013-01-01 | -0,04 | -25 | 0,0875 | -0,648411287 | -0,01051258 |
| AYCES | 2014-01-01 | -0,04 | -25 | 0,07 | -0,657520003 | -0,009108716 |
| AYCES | 2015-01-01 | -0,06 | -16,66666667 | 0,06275 | -0,661269442 | -0,003749439 |
| AYCES | 2016-01-01 | -0,41 | -2,43902439 | -0,097625 | -0,740805752 | -0,079536311 |
| AYCES | 2017-01-01 | -0,19 | -5,263157895 | 0,00495 | -0,690669113 | 0,05013664 |
| KSTUR | 2012-01-01 | 0,24 | 4,166666667 | 0,205 | -0,585005022 | #N/A |

| | | | | | | |
|-------|------------|-------|--------------|----------|--------------|--------------|
| KSTUR | 2013-01-01 | 0,36 | 2,7777777778 | 0,2775 | -0,543776724 | 0,041228298 |
| KSTUR | 2014-01-01 | 0,31 | 3,225806452 | 0,25 | -0,559615788 | -0,015839064 |
| KSTUR | 2015-01-01 | 10,76 | 0,092936803 | 1,46 | 0,616186139 | 1,175801927 |
| KSTUR | 2016-01-01 | 0,15 | 6,666666667 | 0,075 | -0,654925968 | -1,271112107 |
| KSTUR | 2017-01-01 | 0,34 | 2,941176471 | 0,2425 | -0,563892345 | 0,091033623 |
| MAALT | 2012-01-01 | 0,25 | 4 | 0,225 | -0,573800423 | #N/A |
| MAALT | 2013-01-01 | 0,16 | 6,25 | 0,135 | -0,623261053 | -0,04946063 |
| MAALT | 2014-01-01 | 0,54 | 1,851851852 | 0,31 | -0,524728529 | 0,098532524 |
| MAALT | 2015-01-01 | 0,48 | 2,083333333 | 0,32 | -0,518793793 | 0,005934736 |
| MAALT | 2016-01-01 | 0,39 | 2,564102564 | 0,1375 | -0,621919671 | -0,103125878 |
| MAALT | 2017-01-01 | 0,38 | 2,631578947 | 0,25 | -0,559615788 | 0,062303883 |
| MERIT | 2012-01-01 | 0,21 | 4,761904762 | 0,277575 | -0,543733182 | #N/A |
| MERIT | 2013-01-01 | 0,47 | 2,127659574 | 0,417425 | -0,459053267 | 0,084679914 |

| | | | | | | |
|-------|------------|--------|--------------|----------|--------------|--------------|
| MERIT | 2014-01-01 | 0,38 | 2,631578947 | 0,465 | -0,428530381 | 0,030522886 |
| MERIT | 2015-01-01 | 0,31 | 3,225806452 | 0,3725 | -0,487045095 | -0,058514714 |
| MERIT | 2016-01-01 | 0,28 | 3,571428571 | 0,28 | -0,542324291 | -0,055279196 |
| MERIT | 2017-01-01 | 0,36 | 2,777777778 | 0,34755 | -0,502259035 | 0,040065256 |
| METUR | 2012-01-01 | 0,72 | 1,388888889 | 0,445 | -0,441475546 | #N/A |
| METUR | 2013-01-01 | -10,53 | -0,094966762 | -2,585 | -1,522790106 | -1,08131456 |
| METUR | 2014-01-01 | -110,5 | -0,009049774 | -27,5175 | -3,384983308 | -1,862193202 |
| METUR | 2015-01-01 | 0,37 | 2,702702703 | 0,4075 | -0,465305108 | 2,919678199 |
| METUR | 2016-01-01 | 0,17 | 5,882352941 | 0,6975 | -0,264285495 | 0,201019614 |
| METUR | 2017-01-01 | -0,49 | -2,040816327 | -0,005 | -0,695644061 | -0,431358566 |

Table 58 *Data of Hospitality Sector*

| CORP | YEAR | ROMAS | ROMAS_LOG | SOLVENCY | SOLVENCY_LOG | SOLVENCY_LOG_D1 | TAST | TAST_LOG |
|-------|------------|--------|-----------|-------------|--------------|-----------------|------|--------------|
| AVTUR | 2012-01-01 | -0,03 | -0,03 | 0,36 | -0,970778917 | #N/A | 0,02 | -3,912023005 |
| AVTUR | 2013-01-01 | -0,003 | -0,003 | 0,37 | -0,966983846 | 0,003795071 | 0,03 | -3,506557897 |
| AVTUR | 2014-01-01 | 0,09 | 0,09 | 0,363333333 | -0,969515493 | -0,002531647 | 0,03 | -3,506557897 |
| AVTUR | 2015-01-01 | 0,03 | 0,03 | 0,376666667 | -0,964445774 | 0,005069719 | 0,03 | -3,506557897 |
| AVTUR | 2016-01-01 | 0,09 | 0,09 | 0,406666667 | -0,95294405 | 0,011501724 | 0,02 | -3,912023005 |
| AVTUR | 2017-01-01 | -0,09 | -0,09 | 0,423333333 | -0,946496574 | 0,006447476 | 0,04 | -3,218875825 |
| AYCES | 2012-01-01 | 0,01 | 0,01 | 0,403333333 | -0,954228571 | #N/A | 0,19 | -1,660731207 |
| AYCES | 2013-01-01 | -0,01 | -0,01 | 0,41 | -0,951657876 | 0,002570696 | 0,19 | -1,660731207 |
| AYCES | 2014-01-01 | -0,01 | -0,01 | 0,403333333 | -0,954228571 | -0,002570696 | 0,21 | -1,560647748 |
| AYCES | 2015-01-01 | -0,009 | -0,009 | 0,393333333 | -0,958072266 | -0,003843695 | 0,15 | -1,897119985 |
| AYCES | 2016-01-01 | -0,04 | -0,04 | 0,42 | -0,947789399 | 0,010282867 | 0,11 | -2,207274913 |
| AYCES | 2017-01-01 | -0,03 | -0,03 | 0,44 | -0,940007258 | 0,00778214 | 0,13 | -2,040220829 |
| KSTUR | 2012-01-01 | 0,11 | 0,11 | 0,356666667 | -0,972040747 | #N/A | 0,47 | -0,755022584 |

| | | | | | | | | |
|-------|------------|------|------|-------------|--------------|--------------|-------|--------------|
| KSTUR | 2013-01-01 | 0,18 | 0,18 | 0,37 | -0,966983846 | 0,005056901 | 0,48 | -0,733969175 |
| KSTUR | 2014-01-01 | 0,15 | 0,15 | 0,396666667 | -0,956792675 | 0,010191171 | 0,49 | -0,713349888 |
| KSTUR | 2015-01-01 | 0,1 | 0,1 | 0,403333333 | -0,954228571 | 0,002564104 | 0,009 | -4,710530702 |
| KSTUR | 2016-01-01 | 0,04 | 0,04 | 0,35 | -0,97455964 | -0,020331069 | 0,27 | -1,30933332 |
| KSTUR | 2017-01-01 | 0,13 | 0,13 | 0,356666667 | -0,972040747 | 0,002518893 | 0,39 | -0,94160854 |
| MAALT | 2012-01-01 | 0,06 | 0,06 | 0,373333333 | -0,965715615 | #N/A | 0,23 | -1,46967597 |
| MAALT | 2013-01-01 | 0,02 | 0,02 | 0,343333333 | -0,977072204 | -0,011356589 | 0,12 | -2,120263536 |
| MAALT | 2014-01-01 | 0,05 | 0,05 | 0,34 | -0,978326123 | -0,001253919 | 0,1 | -2,302585093 |
| MAALT | 2015-01-01 | 0,05 | 0,05 | 0,346666667 | -0,975816711 | 0,002509412 | 0,11 | -2,207274913 |
| MAALT | 2016-01-01 | 0,02 | 0,02 | 0,38 | -0,963174318 | 0,012642393 | 0,04 | -3,218875825 |
| MAALT | 2017-01-01 | 0,04 | 0,04 | 0,393333333 | -0,958072266 | 0,005102052 | 0,09 | -2,407945609 |
| MERIT | 2012-01-01 | 0,06 | 0,06 | 0,363333333 | -0,969515493 | #N/A | 0,29 | -1,237874356 |
| MERIT | 2013-01-01 | 0,34 | 0,34 | 0,39 | -0,959350221 | 0,010165272 | 0,72 | -0,328504067 |

| | | | | | | | | |
|-------|------------|-------|-------|--------------|--------------|--------------|-------|--------------|
| MERIT | 2014-01-01 | 0,21 | 0,21 | 0,37 | -0,966983846 | -0,007633625 | 0,57 | -0,562118918 |
| MERIT | 2015-01-01 | 0,16 | 0,16 | 0,363333333 | -0,969515493 | -0,002531647 | 0,52 | -0,653926467 |
| MERIT | 2016-01-01 | 0,17 | 0,17 | 0,363333333 | -0,969515493 | 0 | 0,6 | -0,510825624 |
| MERIT | 2017-01-01 | 0,21 | 0,21 | 0,376666667 | -0,964445774 | 0,005069719 | 0,57 | -0,562118918 |
| METUR | 2012-01-01 | 0,21 | 0,21 | 1,866666667 | -0,125163143 | #N/A | 0,3 | -1,203972804 |
| METUR | 2013-01-01 | -0,22 | -0,22 | -6,84 | -2,286455711 | -2,161292568 | 0,02 | -3,912023005 |
| METUR | 2014-01-01 | -0,25 | -0,25 | -1,133333333 | -1,419084184 | 0,867371527 | 0,002 | -6,214608098 |
| METUR | 2015-01-01 | 0,3 | 0,3 | 1,96 | -0,039220713 | 1,379863471 | 0,8 | -0,223143551 |
| METUR | 2016-01-01 | 0,4 | 0,4 | 0,38 | -0,963174318 | -0,923953605 | 2,37 | 0,862889955 |
| METUR | 2017-01-01 | -0,05 | -0,05 | 0,906666667 | -0,738757692 | 0,224416626 | 0,1 | -2,302585093 |

Table 59 *Data of Food&Beverage Sector*

| FIRM | YEAR | ART | CFOTAS | CRT | DEBRT | DTERT | EFFICIENCY | EFFICIENCY_LOG | EFFICIENCY_LOG_D1 |
|-------|------------|-------|--------|------|-------|-------|-------------|----------------|-------------------|
| AEFES | 2012-01-01 | 7,79 | 0,07 | 1,79 | 0,42 | 0,72 | 4,293333333 | 1,457063432 | #N/A |
| AEFES | 2013-01-01 | 10,28 | 0,06 | 1,58 | 0,4 | 0,67 | 5,29 | 1,665818246 | 0,208754814 |
| AEFES | 2014-01-01 | 9,47 | 0,08 | 1,78 | 0,41 | 0,7 | 5,063333333 | 1,622025028 | -0,043793218 |
| AEFES | 2015-01-01 | 8,96 | 0,08 | 1,88 | 0,43 | 0,75 | 4,96 | 1,601405741 | -0,020619287 |
| AEFES | 2016-01-01 | 7,9 | 0,07 | 2,24 | 0,42 | 0,72 | 4,816666667 | 1,572082126 | -0,029323615 |
| AEFES | 2017-01-01 | 8,46 | 0,07 | 1,58 | 0,47 | 0,88 | 5,2 | 1,648658626 | 0,0765765 |
| ALYAG | 2012-01-01 | 33,62 | -0,82 | 0,97 | 0,29 | 0,41 | 17,50333333 | 2,862391339 | #N/A |
| ALYAG | 2013-01-01 | 15,45 | -0,13 | 1,08 | 0,31 | 0,45 | 7,223333333 | 1,977316527 | -0,885074812 |
| ALYAG | 2014-01-01 | 8,27 | 0,05 | 0,81 | 0,38 | 0,61 | 5,63 | 1,728109442 | -0,249207085 |
| ALYAG | 2015-01-01 | 21,15 | 0,08 | 0,43 | 0,57 | 1,33 | 16,45666667 | 2,800730664 | 1,072621221 |
| ALYAG | 2016-01-01 | 8,09 | 0,05 | 0,43 | 0,7 | 2,33 | 10,82333333 | 2,381704297 | -0,419026366 |
| ALYAG | 2017-01-01 | 7,35 | 0,21 | 1,26 | 0,95 | 18,9 | 6,753333333 | 1,91003621 | -0,471668087 |
| AVOD | 2012-01-01 | 2,61 | -0,16 | 1,76 | 0,42 | 0,72 | 1,493333333 | 0,401010758 | #N/A |

| AVOD | 2013-01-01 | 3,91 | -0,06 | 1,76 | 0,5 | 1 | 1,97 | 0,678033543 | 0,277022785 |
|-------|------------|-------|-------|------|------|------|-------------|-------------|--------------|
| AVOD | 2014-01-01 | 7,43 | 0,06 | 1,2 | 0,54 | 1,17 | 4,076666667 | 1,405279661 | 0,727246118 |
| AVOD | 2015-01-01 | 9,55 | 0,004 | 1,13 | 0,46 | 0,86 | 4,666666667 | 1,540445041 | 0,13516538 |
| AVOD | 2016-01-01 | 6,56 | 0,11 | 1,37 | 0,37 | 0,59 | 3,216666667 | 1,168345627 | -0,372099414 |
| AVOD | 2017-01-01 | 7,85 | 0,09 | 1,32 | 0,45 | 0,82 | 3,55 | 1,266947603 | 0,098601977 |
| BANVT | 2012-01-01 | 8,39 | 0,01 | 1,05 | 0,81 | 4,26 | 5,546666667 | 1,713197147 | #N/A |
| BANVT | 2013-01-01 | 7,67 | 0,06 | 0,89 | 0,88 | 7,44 | 5,586666667 | 1,720382806 | 0,00718566 |
| BANVT | 2014-01-01 | 7,55 | 0,14 | 0,86 | 0,91 | 9,8 | 5,946666667 | 1,782830838 | 0,062448032 |
| BANVT | 2015-01-01 | 10,78 | 0,006 | 0,6 | 0,79 | 3,77 | 9,296666667 | 2,229655913 | 0,446825074 |
| BANVT | 2016-01-01 | 12,29 | 0,13 | 1,02 | 0,69 | 2,23 | 8,18 | 2,101692151 | -0,127963762 |
| BANVT | 2017-01-01 | 9,79 | 0,3 | 1,12 | 0,54 | 1,18 | 6,41 | 1,857859271 | -0,24383288 |
| CCOLA | 2012-01-01 | 13,89 | 0,12 | 2,25 | 0,55 | 1,23 | 7,61 | 2,029463172 | #N/A |
| CCOLA | 2013-01-01 | 13,53 | 0,09 | 1,54 | 0,59 | 1,44 | 7,09 | 1,958685341 | -0,070777831 |
| CCOLA | 2014-01-01 | 14,18 | 0,1 | 1,56 | 0,53 | 1,14 | 7,206666667 | 1,975006524 | 0,016321183 |
| CCOLA | 2015-01-01 | 12,05 | 0,1 | 1,75 | 0,54 | 1,17 | 6,623333333 | 1,890598768 | -0,084407756 |

| | | | | | | | | | |
|-------|------------|-------|---------|------|------|-------|-------------|--------------|--------------|
| CCOLA | 2016-01-01 | 11,67 | 0,11 | 2,09 | 0,52 | 1,09 | 8,62 | 2,154085085 | 0,263486317 |
| CCOLA | 2017-01-01 | 12,62 | 0,09 | 1,38 | 0,59 | 1,45 | 7,743333333 | 2,046832258 | -0,107252827 |
| DARDL | 2012-01-01 | 55,25 | 0,63 | 0,07 | 8,67 | -1,13 | 21,18 | 3,05305734 | #N/A |
| DARDL | 2013-01-01 | 9,73 | 7,51 | 0,22 | 5,26 | -1,23 | 10,22 | 2,324346585 | -0,728710755 |
| DARDL | 2014-01-01 | 6,15 | -0,46 | 0,39 | 2,99 | -1,5 | 5,23 | 1,654411278 | -0,669935307 |
| DARDL | 2015-01-01 | 22,99 | -0,43 | 0,19 | 3,93 | -1,34 | 13,19333333 | 2,579711652 | 0,925300373 |
| DARDL | 2016-01-01 | 39,52 | -0,41 | 0,14 | 4,39 | -1,3 | 18,11 | 2,896464272 | 0,31675262 |
| DARDL | 2017-01-01 | 12,04 | -0,34 | 0,25 | 4,4 | -1,29 | 11,46666667 | 2,439444276 | -0,457019996 |
| ERSU | 2012-01-01 | 12,76 | 0,02 | 3,28 | 0,2 | 0,25 | 4,906666667 | 1,590594825 | #N/A |
| ERSU | 2013-01-01 | 9,63 | -0,01 | 6,88 | 0,34 | 0,5 | 3,803333333 | 1,335877875 | -0,254716949 |
| ERSU | 2014-01-01 | 4,23 | 0,02 | 3,46 | 0,26 | 0,36 | 2,506666667 | 0,918953849 | -0,416924026 |
| ERSU | 2015-01-01 | 2,95 | 0,0006 | 2,06 | 0,26 | 0,35 | 1,52 | 0,418710335 | -0,500243514 |
| ERSU | 2016-01-01 | 9,58 | -0,0006 | 4,41 | 0,16 | 0,19 | 3,51 | 1,255616037 | 0,836905703 |
| ERSU | 2017-01-01 | 4,65 | -0,004 | 2,9 | 0,2 | 0,25 | 1,81 | 0,593326845 | -0,662289192 |
| ETILR | 2012-01-01 | 1,29 | -0,62 | 4,34 | 0,18 | 0,23 | 0,826666667 | -0,190353728 | #N/A |

| ETILR | 2013-01-01 | 0,45 | 0,05 | 4,92 | 0,16 | 0,18 | 0,293333333 | -1,22644566 | -1,036091932 |
|-------|------------|-------|-------|------|------|------|-------------|-------------|--------------|
| ETILR | 2014-01-01 | 1,05 | 0,11 | 2,84 | 0,2 | 0,24 | 2,12 | 0,751416089 | 1,977861749 |
| ETILR | 2015-01-01 | 0,43 | 0,04 | 2,14 | 0,33 | 0,49 | 3,473333333 | 1,245114748 | 0,493698659 |
| ETILR | 2016-01-01 | 2,08 | 0,08 | 1,7 | 0,47 | 0,89 | 1,66 | 0,506817602 | -0,738297145 |
| ETILR | 2017-01-01 | 5,7 | 0,16 | 0,3 | 0,48 | 0,92 | 8,386666667 | 2,126643143 | 1,619825541 |
| FRIGO | 2012-01-01 | 15,32 | 0,03 | 0,73 | 0,63 | 1,71 | 6,42 | 1,859418118 | #N/A |
| FRIGO | 2013-01-01 | 12,83 | -0,09 | 1,5 | 0,73 | 2,7 | 5,156666667 | 1,640290376 | -0,219127742 |
| FRIGO | 2014-01-01 | 11,49 | 0,04 | 1,14 | 0,75 | 3 | 4,813333333 | 1,571389845 | -0,068900531 |
| FRIGO | 2015-01-01 | 8,06 | 0,02 | 0,92 | 0,8 | 4,02 | 3,616666667 | 1,285552791 | -0,285837053 |
| FRIGO | 2016-01-01 | 7,58 | 0,02 | 0,86 | 0,79 | 3,75 | 3,803333333 | 1,335877875 | 0,050325084 |
| FRIGO | 2017-01-01 | 15,58 | 0,02 | 1,44 | 0,72 | 2,56 | 6,09 | 1,806648082 | 0,470770207 |
| KENT | 2012-01-01 | 3,79 | 0,02 | 1,37 | 0,37 | 0,59 | 4,236666667 | 1,443776797 | #N/A |
| KENT | 2013-01-01 | 3,9 | 0,14 | 1,39 | 0,37 | 0,59 | 3,953333333 | 1,374559105 | -0,069217692 |
| KENT | 2014-01-01 | 5,21 | 0,2 | 1,71 | 0,37 | 0,58 | 5,69 | 1,738710248 | 0,364151143 |
| KENT | 2015-01-01 | 6,18 | 0,09 | 1,7 | 0,32 | 0,47 | 5,106666667 | 1,630546876 | -0,108163372 |

| | | | | | | | | | |
|-------|------------|-------|--------|-------|------|--------|-------------|-------------|--------------|
| KENT | 2016-01-01 | 5,5 | -0,03 | 1,07 | 0,42 | 0,72 | 4,686666667 | 1,544721598 | -0,085825278 |
| KENT | 2017-01-01 | 5,02 | 0,1 | 1,36 | 0,35 | 0,54 | 4,066666667 | 1,402823663 | -0,141897935 |
| KERVT | 2012-01-01 | 7,21 | 0,05 | 0,9 | 1,14 | -8,11 | 3,626666667 | 1,288313953 | #N/A |
| KERVT | 2013-01-01 | 3,74 | -0,004 | 0,56 | 1,06 | -18,33 | 2,49 | 0,91228271 | -0,376031242 |
| KERVT | 2014-01-01 | 3,92 | 0,05 | 0,76 | 1,04 | -27,98 | 2,636666667 | 0,969515493 | 0,057232783 |
| KERVT | 2015-01-01 | 3,73 | 0,04 | 0,55 | 0,96 | 24,1 | 2,296666667 | 0,831458796 | -0,138056697 |
| KERVT | 2016-01-01 | 4,21 | 0,07 | 0,4 | 1,09 | 12,07 | 2,593333333 | 0,95294405 | 0,121485253 |
| KERVT | 2017-01-01 | 4,22 | 0,07 | 1,1 | 0,78 | 3,53 | 3,623333333 | 1,287394412 | 0,334450363 |
| KNFRT | 2012-01-01 | 7,33 | -0,03 | 1,83 | 0,48 | 0,92 | 3,226666667 | 1,171449613 | #N/A |
| KNFRT | 2013-01-01 | 4,75 | -0,01 | 2,2 | 0,46 | 0,84 | 2,16 | 0,770108222 | -0,401341391 |
| KNFRT | 2014-01-01 | 7,2 | 0,32 | 6,25 | 0,17 | 0,2 | 3,263333333 | 1,182749168 | 0,412640946 |
| KNFRT | 2015-01-01 | 4,83 | 0,008 | 8,65 | 0,12 | 0,13 | 2,213333333 | 0,794499675 | -0,388249493 |
| KNFRT | 2016-01-01 | 7,63 | 0,009 | 4,19 | 0,2 | 0,25 | 2,906666667 | 1,067006949 | 0,272507274 |
| KNFRT | 2017-01-01 | 12,56 | 0,23 | 2,53 | 0,24 | 0,32 | 4,77 | 1,562346305 | 0,495339356 |
| KRSTL | 2012-01-01 | 0,74 | -0,02 | 10,56 | 0,06 | 0,06 | 2,47 | 0,904218151 | #N/A |

| KRSTL | 2013-01-01 | 1,4 | -0,09 | 5,53 | 0,13 | 0,15 | 2,636666667 | 0,969515493 | 0,065297342 |
|-------|------------|------|--------|------|------|------|-------------|-------------|--------------|
| KRSTL | 2014-01-01 | 1,98 | 0,01 | 2,81 | 0,26 | 0,35 | 2,276666667 | 0,822712385 | -0,146803108 |
| KRSTL | 2015-01-01 | 2,29 | -0,03 | 3,49 | 0,21 | 0,27 | 3,35 | 1,208960346 | 0,386247961 |
| KRSTL | 2016-01-01 | 2,99 | 0,1 | 2,56 | 0,28 | 0,38 | 4,686666667 | 1,544721598 | 0,335761252 |
| KRSTL | 2017-01-01 | 2,41 | -0,06 | 3,21 | 0,37 | 0,58 | 3,553333333 | 1,26788613 | -0,276835468 |
| MERKO | 2012-01-01 | 8,53 | 0,04 | 0,83 | 0,75 | 2,97 | 3,716666667 | 1,312827209 | #N/A |
| MERKO | 2013-01-01 | 9,65 | 0,04 | 0,84 | 0,8 | 3,92 | 4,113333333 | 1,41423373 | 0,101406521 |
| MERKO | 2014-01-01 | 9,28 | 0,09 | 1,56 | 0,43 | 0,75 | 7,743333333 | 2,046832258 | 0,632598528 |
| MERKO | 2015-01-01 | 7,42 | 0,04 | 1,32 | 0,68 | 2,13 | 3,186666667 | 1,158975438 | -0,88785682 |
| MERKO | 2016-01-01 | 6,26 | 0,003 | 1,13 | 0,73 | 2,71 | 2,77 | 1,01884732 | -0,140128118 |
| MERKO | 2017-01-01 | 8,55 | 0,007 | 0,85 | 0,84 | 5,27 | 4,093333333 | 1,409359634 | 0,390512314 |
| PENGD | 2012-01-01 | 4,37 | 0,002 | 0,93 | 0,53 | 1,14 | 2,013333333 | 0,699791723 | #N/A |
| PENGD | 2013-01-01 | 5,66 | -0,09 | 1,35 | 0,63 | 1,69 | 2,703333333 | 0,994485579 | 0,294693856 |
| PENGD | 2014-01-01 | 6,38 | 0,03 | 1,06 | 0,68 | 2,08 | 3,173333333 | 1,15478256 | 0,160296981 |
| PENGD | 2015-01-01 | 6,18 | -0,008 | 0,94 | 0,69 | 2,23 | 2,803333333 | 1,030809185 | -0,123973375 |

| PENGD | 2016-01-01 | 7,87 | -0,03 | 0,81 | 0,76 | 3,31 | 3,38 | 1,217875709 | 0,187066524 | |
|-------|------------|------|--------|------|------|------|-------------|-------------|--------------|--|
| PENGD | 2017-01-01 | 8,4 | -0,09 | 0,83 | 0,84 | 5,27 | 3,65 | 1,294727168 | 0,076851458 | |
| PETUN | 2012-01-01 | 6,86 | 0,08 | 1,86 | 0,23 | 0,3 | 6,383333333 | 1,853690427 | #N/A | |
| PETUN | 2013-01-01 | 7,18 | 0,1 | 1,7 | 0,25 | 0,33 | 6,306666667 | 1,841607275 | -0,012083152 | |
| PETUN | 2014-01-01 | 8,4 | 0,07 | 1,47 | 0,23 | 0,29 | 7,12 | 1,962907725 | 0,12130045 | |
| PETUN | 2015-01-01 | 8,09 | 0,07 | 1,65 | 0,22 | 0,28 | 5,993333333 | 1,79064774 | -0,172259985 | |
| PETUN | 2016-01-01 | 6,31 | 0,07 | 1,67 | 0,23 | 0,3 | 6,29 | 1,838961071 | 0,04831333 | |
| PETUN | 2017-01-01 | 6,77 | 0,1 | 1,61 | 0,23 | 0,29 | 6,65 | 1,894616855 | 0,055655784 | |
| PINSU | 2012-01-01 | 7,34 | 0,01 | 1 | 0,34 | 0,52 | 5,583333333 | 1,71978597 | #N/A | |
| PINSU | 2013-01-01 | 7,19 | -0,002 | 0,81 | 0,44 | 0,78 | 5,546666667 | 1,713197147 | -0,006588823 | |
| PINSU | 2014-01-01 | 6,05 | -0,01 | 1,11 | 0,52 | 1,07 | 6,09 | 1,806648082 | 0,093450935 | |
| PINSU | 2015-01-01 | 7,84 | -0,02 | 0,71 | 0,64 | 1,78 | 5,376666667 | 1,682068603 | -0,124579478 | |
| PINSU | 2016-01-01 | 7,64 | -0,11 | 0,82 | 0,69 | 2,22 | 5,473333333 | 1,699887815 | 0,017819212 | |
| PINSU | 2017-01-01 | 7,05 | -0,007 | 0,55 | 0,74 | 2,85 | 9,166666667 | 2,215573716 | 0,515685901 | |
| PNSUT | 2012-01-01 | 7,19 | 0,08 | 1,64 | 0,29 | 0,41 | 5,153333333 | 1,639643754 | #N/A | |

| PNSUT | 2013-01-01 | 6,99 | 0,11 | 1,51 | 0,3 | 0,42 | 5,033333333 | 1,616082455 | -0,023561299 |
|-------|------------|------|-------|------|------|------|-------------|-------------|--------------|
| PNSUT | 2014-01-01 | 6 | 0,06 | 1,42 | 0,32 | 0,47 | 5,11 | 1,631199404 | 0,015116949 |
| PNSUT | 2015-01-01 | 7,32 | 0,07 | 1,16 | 0,34 | 0,51 | 5,346666667 | 1,676473314 | 0,04527391 |
| PNSUT | 2016-01-01 | 5,8 | 0,04 | 1,23 | 0,39 | 0,6 | 5,126666667 | 1,634455675 | -0,042017638 |
| PNSUT | 2017-01-01 | 4,96 | 0,03 | 1,21 | 0,43 | 2,85 | 4,38 | 1,477048724 | -0,157406951 |
| SELGD | 2012-01-01 | 3,58 | 0,05 | 2,73 | 0,29 | 0,41 | 1,963333333 | 0,674643709 | #N/A |
| SELGD | 2013-01-01 | 2,56 | -0,03 | 2,46 | 0,37 | 0,58 | 3,106666667 | 1,13355034 | 0,458906631 |
| SELGD | 2014-01-01 | 4,1 | 0,05 | 1,67 | 0,5 | 0,99 | 2,983333333 | 1,093041244 | -0,040509096 |
| SELGD | 2015-01-01 | 5,4 | -0,11 | 2,25 | 0,36 | 0,54 | 2,89 | 1,061256502 | -0,031784741 |
| SELGD | 2016-01-01 | 2,63 | -0,07 | 2,58 | 0,42 | 0,72 | 2,15 | 0,765467842 | -0,29578866 |
| SELGD | 2017-01-01 | 5,83 | 0,07 | 2,66 | 0,39 | 0,63 | 3,703333333 | 1,309233315 | 0,543765473 |
| TATGD | 2012-01-01 | 3,6 | 0,02 | 1,66 | 0,61 | 1,57 | 2,863333333 | 1,051986447 | #N/A |
| TATGD | 2013-01-01 | 3,81 | 0,05 | 2 | 0,61 | 1,56 | 3,05 | 1,115141591 | 0,063155143 |
| TATGD | 2014-01-01 | 4,47 | 0,06 | 1,98 | 0,47 | 0,9 | 3,083333333 | 1,126011263 | 0,010869672 |

| TATGD | 2015-01-01 | 3,83 | 0,05 | 2,39 | 0,36 | 0,54 | 2,96 | 1,085189268 | -0,040821995 |
|-------|------------|------|--------|------|------|------|-------------|-------------|--------------|
| TATGD | 2016-01-01 | 4,26 | 0,13 | 3,26 | 0,33 | 0,5 | 3,126666667 | 1,139967474 | 0,054778206 |
| TATGD | 2017-01-01 | 3,82 | 0,02 | 2,08 | 0,37 | 0,59 | 2,933333333 | 1,076139433 | -0,063828042 |
| TBORG | 2012-01-01 | 2,54 | 0,27 | 1,06 | 0,55 | 1,24 | 2,466666667 | 0,902867712 | #N/A |
| TBORG | 2013-01-01 | 2,74 | 0,25 | 1,29 | 0,49 | 0,96 | 2,653333333 | 0,975816711 | 0,072949 |
| TBORG | 2014-01-01 | 2,95 | 0,33 | 1,43 | 0,46 | 0,86 | 3,553333333 | 1,26788613 | 0,292069419 |
| TBORG | 2015-01-01 | 2,9 | 0,24 | 1,63 | 0,44 | 0,78 | 3,586666667 | 1,277223266 | 0,009337136 |
| TBORG | 2016-01-01 | 2,82 | 0,19 | 1,77 | 0,42 | 0,72 | 2,603333333 | 0,956792675 | -0,320430591 |
| TBORG | 2017-01-01 | 2,85 | 0,18 | 1,91 | 0,38 | 0,61 | 2,933333333 | 1,076139433 | 0,119346758 |
| TUKAS | 2012-01-01 | 2,03 | -0,05 | 1,61 | 0,62 | 1,61 | 1,41 | 0,343589704 | #N/A |
| TUKAS | 2013-01-01 | 2,21 | -0,2 | 1,64 | 0,82 | 4,53 | 1,526666667 | 0,423086709 | 0,079497005 |
| TUKAS | 2014-01-01 | 3,74 | 0,02 | 1,45 | 0,66 | 1,94 | 1,973333333 | 0,67972416 | 0,256637451 |
| TUKAS | 2015-01-01 | 5,54 | -0,007 | 1,48 | 0,55 | 1,23 | 2,48 | 0,90825856 | 0,2285344 |
| TUKAS | 2016-01-01 | 4,63 | 0,008 | 1,55 | 0,54 | 1,17 | 2,27 | 0,819779831 | -0,088478729 |
| TUKAS | 2017-01-01 | 4,24 | -0,11 | 1,29 | 0,62 | 1,63 | 2,086666667 | 0,735567896 | -0,084211935 |

| | | | | | | | | | |
|-------|------------|--------|-------|------|------|------|-------------|-------------|--------------|
| ULKER | 2012-01-01 | 3,92 | 0,04 | 1,98 | 0,66 | 1,92 | 4,843333333 | 1,577603189 | #N/A |
| ULKER | 2013-01-01 | 4,24 | 0,05 | 1,17 | 0,6 | 1,49 | 5,256666667 | 1,659497112 | 0,081893923 |
| ULKER | 2014-01-01 | 4,79 | 0,06 | 3,1 | 0,61 | 1,59 | 5,483333333 | 1,701713189 | 0,042216076 |
| ULKER | 2015-01-01 | 4,74 | 0,07 | 3,7 | 0,58 | 1,39 | 5,27 | 1,662030363 | -0,039682826 |
| ULKER | 2016-01-01 | 5,07 | 0,11 | 1,11 | 0,66 | 1,95 | 4,69 | 1,545432582 | -0,11659778 |
| ULKER | 2017-01-01 | 6,23 | 0,09 | 2,4 | 0,68 | 2,11 | 4,356666667 | 1,471707239 | -0,073725343 |
| VANGD | 2012-01-01 | 5,75 | 0,005 | 1,17 | 0,13 | 0,15 | 3,926666667 | 1,36779089 | #N/A |
| VANGD | 2013-01-01 | 9,92 | -0,17 | 0,53 | 0,23 | 0,3 | 6,316666667 | 1,843191643 | 0,475400753 |
| VANGD | 2014-01-01 | 14,5 | -0,36 | 3,38 | 0,21 | 0,27 | 7,286666667 | 1,986046194 | 0,142854551 |
| VANGD | 2015-01-01 | 9,42 | 0,12 | 6,41 | 0,14 | 0,16 | 5,523333333 | 1,708981543 | -0,277064651 |
| VANGD | 2016-01-01 | 6,33 | 0,53 | 0,42 | 0,36 | 0,57 | 4,82 | 1,572773928 | -0,136207615 |
| VANGD | 2017-01-01 | 112,03 | -0,36 | 2,39 | 0,31 | 0,45 | 37,34666667 | 3,620243662 | 2,047469734 |

Table 60 *Data of Food&Beverage Sector*

| FIRM | YEAR | EQRT | GRSMRT | INDUST | INVTR | LIQUIDITY | LIQUIDITY_LOG | LIQUIDITY_LOG_D1 | PRFMRT |
|-------|------------|------|--------|--------|-------|-----------|---------------|------------------|--------|
| AEFES | 2012-01-01 | 0,58 | 0,49 | FB | 4,54 | 1,79 | 0,58221562 | #N/A | 0,1 |
| AEFES | 2013-01-01 | 0,6 | 0,43 | FB | 5,18 | 1,58 | 0,457424847 | -0,124790773 | 0,31 |
| AEFES | 2014-01-01 | 0,59 | 0,44 | FB | 5,22 | 1,78 | 0,576613364 | 0,119188517 | -0,03 |
| AEFES | 2015-01-01 | 0,57 | 0,41 | FB | 5,46 | 1,88 | 0,631271777 | 0,054658413 | 0,01 |
| AEFES | 2016-01-01 | 0,58 | 0,39 | FB | 6,14 | 2,24 | 0,806475866 | 0,175204089 | 0,004 |
| AEFES | 2017-01-01 | 0,53 | 0,39 | FB | 6,7 | 1,58 | 0,457424847 | -0,349051019 | 0,02 |
| ALYAG | 2012-01-01 | 0,71 | -0,03 | FB | 17,67 | 0,97 | -0,030459207 | #N/A | -0,17 |
| ALYAG | 2013-01-01 | 0,69 | 0,11 | FB | 5,45 | 1,08 | 0,076961041 | 0,107420249 | 0,05 |
| ALYAG | 2014-01-01 | 0,62 | 0,05 | FB | 7,84 | 0,81 | -0,210721031 | -0,287682072 | -0,03 |
| ALYAG | 2015-01-01 | 0,43 | 0,05 | FB | 27,67 | 0,43 | -0,84397007 | -0,633249039 | -0,08 |
| ALYAG | 2016-01-01 | 0,3 | 0,1 | FB | 23,46 | 0,43 | -0,84397007 | 0 | -0,06 |
| ALYAG | 2017-01-01 | 0,05 | 0,08 | FB | 11,75 | 1,26 | 0,231111721 | 1,075081791 | 0,04 |

| | | | | | | | | | |
|-------|------------|------|------|----|-------|------|--------------|--------------|--------|
| AVOD | 2012-01-01 | 0,58 | 0,23 | FB | 1,35 | 1,76 | 0,565313809 | #N/A | 0,04 |
| AVOD | 2013-01-01 | 0,5 | 0,18 | FB | 1,48 | 1,76 | 0,565313809 | 0 | -0,01 |
| AVOD | 2014-01-01 | 0,46 | 0,13 | FB | 3,87 | 1,2 | 0,182321557 | -0,382992252 | 0,01 |
| AVOD | 2015-01-01 | 0,54 | 0,2 | FB | 3,65 | 1,13 | 0,122217633 | -0,060103924 | 0,03 |
| AVOD | 2016-01-01 | 0,63 | 0,18 | FB | 2,42 | 1,37 | 0,31481074 | 0,192593107 | 0,01 |
| AVOD | 2017-01-01 | 0,55 | 0,17 | FB | 2,15 | 1,32 | 0,277631737 | -0,037179003 | 0,0007 |
| BANVT | 2012-01-01 | 0,19 | 0,14 | FB | 6,72 | 1,05 | 0,048790164 | #N/A | 0,01 |
| BANVT | 2013-01-01 | 0,12 | 0,12 | FB | 7,39 | 0,89 | -0,116533816 | -0,16532398 | -0,03 |
| BANVT | 2014-01-01 | 0,09 | 0,13 | FB | 8,33 | 0,86 | -0,15082289 | -0,034289073 | -0,01 |
| BANVT | 2015-01-01 | 0,21 | 0,11 | FB | 15,21 | 0,6 | -0,510825624 | -0,360002734 | 0,05 |
| BANVT | 2016-01-01 | 0,31 | 0,19 | FB | 10,51 | 1,02 | 0,019802627 | 0,530628251 | 0,03 |
| BANVT | 2017-01-01 | 0,46 | 0,23 | FB | 7,55 | 1,12 | 0,113328685 | 0,093526058 | 0,1 |
| CCOLA | 2012-01-01 | 0,45 | 0,38 | FB | 7,97 | 2,25 | 0,810930216 | #N/A | 0,09 |
| CCOLA | 2013-01-01 | 0,41 | 0,38 | FB | 7 | 1,54 | 0,431782416 | -0,3791478 | 0,1 |

| | | | | | | | | | |
|-------|------------|-------|------|----|-------|------|--------------|--------------|-------|
| CCOLA | 2014-01-01 | 0,47 | 0,36 | FB | 6,61 | 1,56 | 0,444685821 | 0,012903405 | 0,06 |
| CCOLA | 2015-01-01 | 0,46 | 0,35 | FB | 7,07 | 1,75 | 0,559615788 | 0,114929967 | 0,02 |
| CCOLA | 2016-01-01 | 0,48 | 0,34 | FB | 13,52 | 2,09 | 0,737164066 | 0,177548278 | 0,003 |
| CCOLA | 2017-01-01 | 0,41 | 0,34 | FB | 9,97 | 1,38 | 0,322083499 | -0,415080567 | 0,03 |
| DARDL | 2012-01-01 | -7,67 | 0,39 | FB | 7,31 | 0,07 | -2,659260037 | #N/A | 0,16 |
| DARDL | 2013-01-01 | -4,26 | 0,38 | FB | 18,02 | 0,22 | -1,514127733 | 1,145132304 | 2,34 |
| DARDL | 2014-01-01 | -1,99 | 0,39 | FB | 7,62 | 0,39 | -0,94160854 | 0,572519193 | -0,1 |
| DARDL | 2015-01-01 | -2,93 | 0,35 | FB | 12,81 | 0,19 | -1,660731207 | -0,719122667 | 0,007 |
| DARDL | 2016-01-01 | -3,39 | 0,37 | FB | 10,43 | 0,14 | -1,966112856 | -0,30538165 | 0,14 |
| DARDL | 2017-01-01 | -3,4 | 0,25 | FB | 18,31 | 0,25 | -1,386294361 | 0,579818495 | 0,06 |
| ERSU | 2012-01-01 | 0,8 | 0,09 | FB | 1,5 | 3,28 | 1,187843422 | #N/A | 0,003 |
| ERSU | 2013-01-01 | 0,66 | 0,1 | FB | 1,32 | 6,88 | 1,928618652 | 0,74077523 | -0,03 |
| ERSU | 2014-01-01 | 0,74 | 0,1 | FB | 2,73 | 3,46 | 1,241268589 | -0,687350063 | -0,05 |
| ERSU | 2015-01-01 | 0,74 | 0,15 | FB | 1,33 | 2,06 | 0,722705983 | -0,518562606 | -0,06 |
| ERSU | 2016-01-01 | 0,84 | 0,2 | FB | 0,78 | 4,41 | 1,483874689 | 0,761168707 | 0,007 |

| | | | | | | | | | |
|-------|------------|------|------|----|-------|------|--------------|--------------|-------|
| ERSU | 2017-01-01 | 0,8 | 0,24 | FB | 0,6 | 2,9 | 1,064710737 | -0,419163952 | 0,13 |
| ETILR | 2012-01-01 | 0,82 | 1,29 | FB | 0,59 | 4,34 | 1,467874348 | #N/A | -0,1 |
| ETILR | 2013-01-01 | 0,84 | 0,64 | FB | 0,24 | 4,92 | 1,593308531 | 0,125434182 | -0,34 |
| ETILR | 2014-01-01 | 0,8 | 0,36 | FB | 4,92 | 2,84 | 1,043804052 | -0,549504478 | -3,53 |
| ETILR | 2015-01-01 | 0,67 | 0,91 | FB | 9,74 | 2,14 | 0,760805829 | -0,282998223 | 0,26 |
| ETILR | 2016-01-01 | 0,53 | 0,83 | FB | 2,54 | 1,7 | 0,530628251 | -0,230177578 | 0,5 |
| ETILR | 2017-01-01 | 0,52 | 0,29 | FB | 19,25 | 0,3 | -1,203972804 | -1,734601055 | -0,67 |
| FRIGO | 2012-01-01 | 0,37 | 0,09 | FB | 3,13 | 0,73 | -0,314710745 | #N/A | -0,05 |
| FRIGO | 2013-01-01 | 0,27 | 0,07 | FB | 1,99 | 1,5 | 0,405465108 | 0,720175853 | -0,16 |
| FRIGO | 2014-01-01 | 0,25 | 0,11 | FB | 2,17 | 1,14 | 0,131028262 | -0,274436846 | -0,05 |
| FRIGO | 2015-01-01 | 0,2 | 0,12 | FB | 2,02 | 0,92 | -0,083381609 | -0,214409871 | -0,12 |
| FRIGO | 2016-01-01 | 0,21 | 0,11 | FB | 2,95 | 0,86 | -0,15082289 | -0,067441281 | -0,04 |
| FRIGO | 2017-01-01 | 0,28 | 0,19 | FB | 1,87 | 1,44 | 0,364643114 | 0,515466003 | 0,02 |
| KENT | 2012-01-01 | 0,63 | 0,28 | FB | 7,88 | 1,37 | 0,31481074 | #N/A | 0,03 |
| KENT | 2013-01-01 | 0,63 | 0,29 | FB | 6,87 | 1,39 | 0,329303747 | 0,014493007 | -0,03 |

| | | | | | | | | | |
|-------|------------|-------|------|----|-------|------|--------------|--------------|--------|
| KENT | 2014-01-01 | 0,63 | 0,29 | FB | 10,67 | 1,71 | 0,536493371 | 0,207189623 | 0,03 |
| KENT | 2015-01-01 | 0,68 | 0,36 | FB | 8,21 | 1,7 | 0,530628251 | -0,005865119 | 0,09 |
| KENT | 2016-01-01 | 0,58 | 0,3 | FB | 7,47 | 1,07 | 0,067658648 | -0,462969603 | -0,01 |
| KENT | 2017-01-01 | 0,65 | 0,3 | FB | 5,99 | 1,36 | 0,3074847 | 0,239826051 | 0,06 |
| KERVT | 2012-01-01 | -0,14 | 0,27 | FB | 2,71 | 0,9 | -0,105360516 | #N/A | -0,003 |
| KERVT | 2013-01-01 | -0,06 | 0,28 | FB | 3,01 | 0,56 | -0,579818495 | -0,47445798 | -0,17 |
| KERVT | 2014-01-01 | -0,04 | 0,28 | FB | 3,27 | 0,76 | -0,274436846 | 0,30538165 | -0,06 |
| KERVT | 2015-01-01 | 0,04 | 0,28 | FB | 2,58 | 0,55 | -0,597837001 | -0,323400155 | -0,22 |
| KERVT | 2016-01-01 | -0,09 | 0,25 | FB | 2,81 | 0,4 | -0,916290732 | -0,318453731 | -0,16 |
| KERVT | 2017-01-01 | 0,22 | 0,18 | FB | 5,94 | 1,1 | 0,09531018 | 1,011600912 | 0,03 |
| KNFRT | 2012-01-01 | 0,52 | 0,2 | FB | 1,33 | 1,83 | 0,604315967 | #N/A | 0,08 |
| KNFRT | 2013-01-01 | 0,54 | 0,28 | FB | 0,95 | 2,2 | 0,78845736 | 0,184141394 | 0,07 |
| KNFRT | 2014-01-01 | 0,83 | 0,32 | FB | 1,43 | 6,25 | 1,832581464 | 1,044124103 | 0,15 |
| KNFRT | 2015-01-01 | 0,88 | 0,2 | FB | 1,06 | 8,65 | 2,157559321 | 0,324977857 | 0,13 |
| KNFRT | 2016-01-01 | 0,8 | 0,28 | FB | 0,58 | 4,19 | 1,432700734 | -0,724858587 | 0,22 |

| KNFRT | 2017-01-01 | 0,76 | 0,29 | FB | 1,08 | 2,53 | 0,928219303 | -0,504481431 | 0,21 | |
|-------|------------|------|------|----|-------|-------|--------------|--------------|-------|--|
| KRSTL | 2012-01-01 | 0,94 | 0,05 | FB | 6,34 | 10,56 | 2,357073278 | #N/A | -0,07 | |
| KRSTL | 2013-01-01 | 0,87 | 0,18 | FB | 5,88 | 5,53 | 1,710187816 | -0,646885463 | 0,05 | |
| KRSTL | 2014-01-01 | 0,74 | 0,07 | FB | 4,17 | 2,81 | 1,033184483 | -0,677003332 | 0,01 | |
| KRSTL | 2015-01-01 | 0,79 | 0,08 | FB | 6,82 | 3,49 | 1,249901736 | 0,216717253 | 0,02 | |
| KRSTL | 2016-01-01 | 0,72 | 0,12 | FB | 9,94 | 2,56 | 0,940007258 | -0,309894478 | 0,03 | |
| KRSTL | 2017-01-01 | 0,63 | 0,09 | FB | 7,36 | 3,21 | 1,166270937 | 0,226263679 | 0,03 | |
| MERKO | 2012-01-01 | 0,25 | 0,18 | FB | 1,8 | 0,83 | -0,186329578 | #N/A | 0,01 | |
| MERKO | 2013-01-01 | 0,2 | 0,19 | FB | 1,77 | 0,84 | -0,174353387 | 0,011976191 | -0,04 | |
| MERKO | 2014-01-01 | 0,57 | 0,21 | FB | 11,51 | 1,56 | 0,444685821 | 0,619039208 | 0,09 | |
| MERKO | 2015-01-01 | 0,32 | 0,19 | FB | 1,28 | 1,32 | 0,277631737 | -0,167054085 | 0,009 | |
| MERKO | 2016-01-01 | 0,27 | 0,13 | FB | 1,28 | 1,13 | 0,122217633 | -0,155414104 | -0,08 | |
| MERKO | 2017-01-01 | 0,16 | 0,07 | FB | 2,73 | 0,85 | -0,162518929 | -0,284736562 | -0,15 | |
| PENGD | 2012-01-01 | 0,47 | 0,2 | FB | 1,24 | 0,93 | -0,072570693 | #N/A | 0,02 | |
| PENGD | 2013-01-01 | 0,37 | 0,04 | FB | 1,99 | 1,35 | 0,300104592 | 0,372675285 | -0,29 | |

| | | | | | | | | | |
|-------|------------|------|------|----|-------|------|--------------|--------------|-------|
| PENGD | 2014-01-01 | 0,32 | 0,11 | FB | 2,55 | 1,06 | 0,058268908 | -0,241835684 | -0,11 |
| PENGD | 2015-01-01 | 0,31 | 0,2 | FB | 1,68 | 0,94 | -0,061875404 | -0,120144312 | 0,04 |
| PENGD | 2016-01-01 | 0,23 | 0,15 | FB | 1,67 | 0,81 | -0,210721031 | -0,148845628 | -0,09 |
| PENGD | 2017-01-01 | 0,16 | 0,15 | FB | 1,81 | 0,83 | -0,186329578 | 0,024391453 | -0,09 |
| PETUN | 2012-01-01 | 0,77 | 0,17 | FB | 11,28 | 1,86 | 0,620576488 | #N/A | 0,07 |
| PETUN | 2013-01-01 | 0,75 | 0,17 | FB | 10,65 | 1,7 | 0,530628251 | -0,089948237 | 0,08 |
| PETUN | 2014-01-01 | 0,77 | 0,15 | FB | 11,72 | 1,47 | 0,385262401 | -0,14536585 | 0,08 |
| PETUN | 2015-01-01 | 0,78 | 0,17 | FB | 8,76 | 1,65 | 0,500775288 | 0,115512887 | 0,11 |
| PETUN | 2016-01-01 | 0,77 | 0,17 | FB | 11,39 | 1,67 | 0,512823626 | 0,012048339 | 0,09 |
| PETUN | 2017-01-01 | 0,77 | 0,15 | FB | 12,18 | 1,61 | 0,476234179 | -0,036589447 | 0,09 |
| PINSU | 2012-01-01 | 0,66 | 0,47 | FB | 8,57 | 1 | 0 | #N/A | 0,001 |
| PINSU | 2013-01-01 | 0,56 | 0,41 | FB | 8,6 | 0,81 | -0,210721031 | -0,210721031 | -0,08 |
| PINSU | 2014-01-01 | 0,48 | 0,43 | FB | 11,14 | 1,11 | 0,104360015 | 0,315081047 | 0,02 |
| PINSU | 2015-01-01 | 0,36 | 0,48 | FB | 7,32 | 0,71 | -0,342490309 | -0,446850324 | -0,06 |
| PINSU | 2016-01-01 | 0,31 | 0,4 | FB | 7,98 | 0,82 | -0,198450939 | 0,14403937 | -0,13 |

| | | | | | | | | | |
|-------|------------|------|-------|----|-------|------|--------------|--------------|-------|
| PINSU | 2017-01-01 | 0,26 | 0,44 | FB | 19,65 | 0,55 | -0,597837001 | -0,399386062 | -0,1 |
| PNSUT | 2012-01-01 | 0,71 | 0,2 | FB | 7,09 | 1,64 | 0,494696242 | #N/A | 0,08 |
| PNSUT | 2013-01-01 | 0,7 | 0,19 | FB | 6,92 | 1,51 | 0,412109651 | -0,082586591 | 0,08 |
| PNSUT | 2014-01-01 | 0,68 | 0,17 | FB | 8,12 | 1,42 | 0,350656872 | -0,061452779 | 0,09 |
| PNSUT | 2015-01-01 | 0,66 | 0,16 | FB | 7,58 | 1,16 | 0,148420005 | -0,202236866 | 0,06 |
| PNSUT | 2016-01-01 | 0,61 | 0,18 | FB | 8,44 | 1,23 | 0,207014169 | 0,058594164 | 0,06 |
| PNSUT | 2017-01-01 | 0,57 | 0,16 | FB | 7,15 | 1,21 | 0,19062036 | -0,01639381 | 0,04 |
| SELGD | 2012-01-01 | 0,71 | 0,1 | FB | 1,87 | 2,73 | 1,004301609 | #N/A | 0,17 |
| SELGD | 2013-01-01 | 0,63 | 0,004 | FB | 6,15 | 2,46 | 0,90016135 | -0,104140259 | 0,11 |
| SELGD | 2014-01-01 | 0,5 | -0,03 | FB | 4,2 | 1,67 | 0,512823626 | -0,387337724 | -0,01 |
| SELGD | 2015-01-01 | 0,65 | 0,02 | FB | 2,79 | 2,25 | 0,810930216 | 0,29810659 | 0,1 |
| SELGD | 2016-01-01 | 0,58 | 0,007 | FB | 3,37 | 2,58 | 0,947789399 | 0,136859183 | -0,11 |
| SELGD | 2017-01-01 | 0,61 | 0,21 | FB | 4,61 | 2,66 | 0,978326123 | 0,030536724 | 0,03 |
| TATGD | 2012-01-01 | 0,39 | 0,2 | FB | 3,69 | 1,66 | 0,506817602 | #N/A | -0,01 |
| TATGD | 2013-01-01 | 0,39 | 0,21 | FB | 3,94 | 2 | 0,693147181 | 0,186329578 | -0,01 |

| | | | | | | | | | |
|-------|------------|------|-------|----|------|------|-------------|--------------|-------|
| TATGD | 2014-01-01 | 0,53 | 0,21 | FB | 3,55 | 1,98 | 0,683096845 | -0,010050336 | 0,18 |
| TATGD | 2015-01-01 | 0,65 | 0,23 | FB | 3,66 | 2,39 | 0,871293366 | 0,188196521 | 0,07 |
| TATGD | 2016-01-01 | 0,67 | 0,23 | FB | 3,7 | 3,26 | 1,181727195 | 0,310433829 | 0,07 |
| TATGD | 2017-01-01 | 0,63 | 0,22 | FB | 3,61 | 2,08 | 0,732367894 | -0,449359302 | 0,06 |
| TBORG | 2012-01-01 | 0,45 | 0,5 | FB | 3,89 | 1,06 | 0,058268908 | #N/A | 0,12 |
| TBORG | 2013-01-01 | 0,51 | 0,55 | FB | 4,21 | 1,29 | 0,254642218 | 0,19637331 | 0,18 |
| TBORG | 2014-01-01 | 0,54 | 0,56 | FB | 6,82 | 1,43 | 0,357674444 | 0,103032226 | 0,2 |
| TBORG | 2015-01-01 | 0,56 | 0,55 | FB | 7,04 | 1,63 | 0,488580015 | 0,130905571 | 0,21 |
| TBORG | 2016-01-01 | 0,58 | 0,57 | FB | 4,24 | 1,77 | 0,570979547 | 0,082399532 | 0,25 |
| TBORG | 2017-01-01 | 0,62 | 0,57 | FB | 5,21 | 1,91 | 0,647103242 | 0,076123695 | 0,25 |
| TUKAS | 2012-01-01 | 0,38 | 0,1 | FB | 1,64 | 1,61 | 0,476234179 | #N/A | -0,16 |
| TUKAS | 2013-01-01 | 0,18 | 0,14 | FB | 1,74 | 1,64 | 0,494696242 | 0,018462063 | -0,29 |
| TUKAS | 2014-01-01 | 0,34 | -0,04 | FB | 1,67 | 1,45 | 0,371563556 | -0,123132685 | -0,41 |
| TUKAS | 2015-01-01 | 0,45 | 0,2 | FB | 1,3 | 1,48 | 0,392042088 | 0,020478531 | 0,23 |

| | | | | | | | | | |
|-------|------------|------|-------|----|-------|------|--------------|--------------|-------|
| TUKAS | 2016-01-01 | 0,46 | 0,2 | FB | 1,49 | 1,55 | 0,438254931 | 0,046212843 | 0,08 |
| TUKAS | 2017-01-01 | 0,38 | 0,19 | FB | 1,38 | 1,29 | 0,254642218 | -0,183612713 | 0,03 |
| ULKER | 2012-01-01 | 0,34 | 0,21 | FB | 9,87 | 1,98 | 0,683096845 | #N/A | 0,08 |
| ULKER | 2013-01-01 | 0,4 | 0,23 | FB | 10,66 | 1,17 | 0,157003749 | -0,526093096 | 0,08 |
| ULKER | 2014-01-01 | 0,39 | 0,21 | FB | 10,75 | 3,1 | 1,131402111 | 0,974398363 | 0,08 |
| ULKER | 2015-01-01 | 0,42 | 0,22 | FB | 10,29 | 3,7 | 1,30833282 | 0,176930708 | 0,09 |
| ULKER | 2016-01-01 | 0,34 | 0,24 | FB | 8,29 | 1,11 | 0,104360015 | -1,203972804 | 0,06 |
| ULKER | 2017-01-01 | 0,32 | 0,27 | FB | 6,26 | 2,4 | 0,875468737 | 0,771108722 | 0,09 |
| VANGD | 2012-01-01 | 0,87 | -0,03 | FB | 5,81 | 1,17 | 0,157003749 | #N/A | -1,15 |
| VANGD | 2013-01-01 | 0,77 | -0,09 | FB | 8,83 | 0,53 | -0,634878272 | -0,791882021 | 0,16 |
| VANGD | 2014-01-01 | 0,79 | -0,07 | FB | 7,14 | 3,38 | 1,217875709 | 1,852753982 | 0,42 |
| VANGD | 2015-01-01 | 0,86 | 0,38 | FB | 7,04 | 6,41 | 1,857859271 | 0,639983561 | -0,33 |
| VANGD | 2016-01-01 | 0,64 | 0,01 | FB | 8 | 0,42 | -0,867500568 | -2,725359839 | -1,33 |
| VANGD | 2017-01-01 | 0,69 | -0,19 | FB | 0 | 2,39 | 0,871293366 | 1,738793934 | 3,22 |

Table 61 *Data of Food&Beverage Sector*

| FIRM | YEAR | PROFITABILITY | PROFITABILITY_LOG | PROFITABILITY_LOG_D1 | ROTA'S | SOLVENCY |
|-------|------------|---------------|-------------------|----------------------|--------|-------------|
| AEFES | 2012-01-01 | 0,1775 | -5,633802817 | #N/A | 0,05 | 0,573333333 |
| AEFES | 2013-01-01 | 0,2325 | -4,301075269 | 1,332727548 | 0,13 | 0,556666667 |
| AEFES | 2014-01-01 | 0,1175 | -8,510638298 | -4,209563029 | -0,02 | 0,566666667 |
| AEFES | 2015-01-01 | 0,1265 | -7,90513834 | 0,605499958 | 0,006 | 0,583333333 |
| AEFES | 2016-01-01 | 0,1175 | -8,510638298 | -0,605499958 | 0,006 | 0,573333333 |
| AEFES | 2017-01-01 | 0,1225 | -8,163265306 | 0,347372992 | 0,01 | 0,626666667 |
| ALYAG | 2012-01-01 | -0,305 | 3,278688525 | #N/A | -0,2 | 0,47 |
| ALYAG | 2013-01-01 | 0,0175 | -57,14285714 | -60,42154567 | 0,04 | 0,483333333 |
| ALYAG | 2014-01-01 | 0,0125 | -80 | -22,85714286 | -0,02 | 0,536666667 |
| ALYAG | 2015-01-01 | 0,0025 | -400 | -320 | -0,04 | 0,776666667 |
| ALYAG | 2016-01-01 | 0,0375 | -26,66666667 | 373,3333333 | 0,06 | 1,11 |
| ALYAG | 2017-01-01 | 0,0925 | -10,81081081 | 15,85585586 | 0,04 | 6,633333333 |
| AVOD | 2012-01-01 | 0,0325 | -30,76923077 | #N/A | 0,02 | 0,573333333 |

| | | | | | | |
|-------|------------|--------|--------------|--------------|--------|-------------|
| AVOD | 2013-01-01 | 0,0265 | -37,73584906 | -6,966618287 | -0,004 | 0,666666667 |
| AVOD | 2014-01-01 | 0,0525 | -19,04761905 | 18,68823001 | 0,01 | 0,723333333 |
| AVOD | 2015-01-01 | 0,0635 | -15,7480315 | 3,299587552 | 0,02 | 0,62 |
| AVOD | 2016-01-01 | 0,0765 | -13,07189542 | 2,676136071 | 0,006 | 0,53 |
| AVOD | 2017-01-01 | 0,0653 | -15,31393568 | -2,242040257 | 0,0005 | 0,606666667 |
| BANVT | 2012-01-01 | 0,0425 | -23,52941176 | #N/A | 0,01 | 1,753333333 |
| BANVT | 2013-01-01 | 0,0225 | -44,44444444 | -20,91503268 | -0,06 | 2,813333333 |
| BANVT | 2014-01-01 | 0,06 | -16,66666667 | 27,77777778 | -0,02 | 3,6 |
| BANVT | 2015-01-01 | 0,064 | -15,625 | 1,041666667 | 0,09 | 1,59 |
| BANVT | 2016-01-01 | 0,1025 | -9,756097561 | 5,868902439 | 0,06 | 1,076666667 |
| BANVT | 2017-01-01 | 0,205 | -4,87804878 | 4,87804878 | 0,19 | 0,726666667 |
| CCOLA | 2012-01-01 | 0,17 | -5,882352941 | #N/A | 0,09 | 0,743333333 |
| CCOLA | 2013-01-01 | 0,16 | -6,25 | -0,367647059 | 0,07 | 0,813333333 |

| CCOLA | 2014-01-01 | 0,1425 | -7,01754386 | -0,76754386 | 0,05 | 0,713333333 | |
|-------|------------|----------|--------------|--------------|-------|--------------|--|
| CCOLA | 2015-01-01 | 0,12 | -8,333333333 | -1,315789474 | 0,01 | 0,723333333 | |
| CCOLA | 2016-01-01 | 0,11375 | -8,791208791 | -0,457875458 | 0,002 | 0,696666667 | |
| CCOLA | 2017-01-01 | 0,12 | -8,333333333 | 0,457875458 | 0,02 | 0,816666667 | |
| DARDL | 2012-01-01 | 0,335 | -2,985074627 | #N/A | 0,16 | -0,043333333 | |
| DARDL | 2013-01-01 | 4,2575 | -0,234879624 | 2,750195003 | 6,8 | -0,076666667 | |
| DARDL | 2014-01-01 | -0,0925 | 10,81081081 | 11,04569044 | -0,2 | -0,166666667 | |
| DARDL | 2015-01-01 | -0,01075 | 93,02325581 | 82,212445 | 0,03 | -0,113333333 | |
| DARDL | 2016-01-01 | 0,175 | -5,714285714 | -98,73754153 | 0,6 | -0,1 | |
| DARDL | 2017-01-01 | 0,0575 | -17,39130435 | -11,67701863 | 0,26 | -0,096666667 | |
| ERSU | 2012-01-01 | 0,0285 | -35,0877193 | #N/A | 0,001 | 0,416666667 | |
| ERSU | 2013-01-01 | 0,0125 | -80 | -44,9122807 | -0,01 | 0,5 | |
| ERSU | 2014-01-01 | 0,01 | -100 | -20 | -0,03 | 0,453333333 | |
| ERSU | 2015-01-01 | 0,01765 | -56,6572238 | 43,3427762 | -0,02 | 0,45 | |
| ERSU | 2016-01-01 | 0,05185 | -19,28640309 | 37,37082071 | 0,001 | 0,396666667 | |

| | | | | | | |
|-------|------------|---------|---------------|--------------|-------|-------------|
| ERSU | 2017-01-01 | 0,0965 | -10,3626943 | 8,923708785 | 0,02 | 0,416666667 |
| ETILR | 2012-01-01 | 0,1275 | -7,843137255 | #N/A | -0,06 | 0,41 |
| ETILR | 2013-01-01 | 0,0725 | -13,79310345 | -5,949966193 | -0,06 | 0,393333333 |
| ETILR | 2014-01-01 | -1,105 | 0,904977376 | 14,69808082 | -1,36 | 0,413333333 |
| ETILR | 2015-01-01 | 0,32 | -3,125 | -4,029977376 | 0,07 | 0,496666667 |
| ETILR | 2016-01-01 | 0,3975 | -2,51572327 | 0,60927673 | 0,18 | 0,63 |
| ETILR | 2017-01-01 | -0,09 | 11,11111111 | 13,62683438 | -0,14 | 0,64 |
| FRIGO | 2012-01-01 | 0,0075 | -133,33333333 | #N/A | -0,04 | 0,903333333 |
| FRIGO | 2013-01-01 | -0,0725 | 13,79310345 | 147,1264368 | -0,11 | 1,233333333 |
| FRIGO | 2014-01-01 | 0,015 | -66,66666667 | -80,45977011 | -0,04 | 1,333333333 |
| FRIGO | 2015-01-01 | -0,0175 | 57,14285714 | 123,8095238 | -0,09 | 1,673333333 |
| FRIGO | 2016-01-01 | 0,0125 | -80 | -137,1428571 | -0,04 | 1,583333333 |
| FRIGO | 2017-01-01 | 0,0625 | -16 | 64 | 0,02 | 1,186666667 |
| KENT | 2012-01-01 | 0,09 | -11,11111111 | #N/A | 0,03 | 0,53 |
| KENT | 2013-01-01 | 0,0925 | -10,81081081 | 0,3003003 | -0,03 | 0,53 |

| KENT | 2014-01-01 | 0,14 | -7,142857143 | 3,667953668 | 0,04 | 0,526666667 | |
|-------|------------|---------|--------------|--------------|--------|--------------|--|
| KENT | 2015-01-01 | 0,1575 | -6,349206349 | 0,793650794 | 0,09 | 0,49 | |
| KENT | 2016-01-01 | 0,06 | -16,66666667 | -10,31746032 | -0,02 | 0,573333333 | |
| KENT | 2017-01-01 | 0,1325 | -7,547169811 | 9,119496855 | 0,07 | 0,513333333 | |
| KERVT | 2012-01-01 | 0,0785 | -12,7388535 | #N/A | -0,003 | -2,37 | |
| KERVT | 2013-01-01 | -0,0035 | 285,7142857 | 298,4531392 | -0,12 | -5,776666667 | |
| KERVT | 2014-01-01 | 0,0575 | -17,39130435 | -303,1055901 | -0,04 | -8,993333333 | |
| KERVT | 2015-01-01 | -0,0075 | 133,3333333 | 150,7246377 | -0,13 | 8,366666667 | |
| KERVT | 2016-01-01 | 0,01 | -100 | -233,3333333 | -0,12 | 4,356666667 | |
| KERVT | 2017-01-01 | 0,075 | -13,33333333 | 86,66666667 | 0,02 | 1,51 | |
| KNFRT | 2012-01-01 | 0,0825 | -12,12121212 | #N/A | 0,08 | 0,64 | |
| KNFRT | 2013-01-01 | 0,0975 | -10,25641026 | 1,864801865 | 0,05 | 0,613333333 | |
| KNFRT | 2014-01-01 | 0,2425 | -4,12371134 | 6,132698916 | 0,18 | 0,4 | |
| KNFRT | 2015-01-01 | 0,1095 | -9,132420091 | -5,008708751 | 0,1 | 0,376666667 | |
| KNFRT | 2016-01-01 | 0,15475 | -6,462035541 | 2,67038455 | 0,11 | 0,416666667 | |

| | | | | | | |
|-------|------------|----------|--------------|--------------|-------|-------------|
| KNFRT | 2017-01-01 | 0,2175 | -4,597701149 | 1,864334392 | 0,14 | 0,44 |
| KRSTL | 2012-01-01 | -0,015 | 66,66666667 | #N/A | -0,02 | 0,353333333 |
| KRSTL | 2013-01-01 | 0,0425 | -23,52941176 | -90,19607843 | 0,03 | 0,383333333 |
| KRSTL | 2014-01-01 | 0,0235 | -42,55319149 | -19,02377972 | 0,004 | 0,45 |
| KRSTL | 2015-01-01 | 0,035 | -28,57142857 | 13,98176292 | 0,07 | 0,423333333 |
| KRSTL | 2016-01-01 | 0,07 | -14,28571429 | 14,28571429 | 0,03 | 0,46 |
| KRSTL | 2017-01-01 | 0,02 | -50 | -35,71428571 | 0,02 | 0,526666667 |
| MERKO | 2012-01-01 | 0,06 | -16,66666667 | #N/A | 0,01 | 1,323333333 |
| MERKO | 2013-01-01 | 0,0375 | -26,66666667 | -10 | -0,04 | 1,64 |
| MERKO | 2014-01-01 | 0,1525 | -6,557377049 | 20,10928962 | 0,22 | 0,583333333 |
| MERKO | 2015-01-01 | 0,06175 | -16,19433198 | -9,636954935 | 0,008 | 1,043333333 |
| MERKO | 2016-01-01 | -0,00175 | 571,4285714 | 587,6229034 | -0,06 | 1,236666667 |
| MERKO | 2017-01-01 | -0,05325 | 18,77934272 | -552,6492287 | -0,14 | 2,09 |
| PENGD | 2012-01-01 | 0,058 | -17,24137931 | #N/A | 0,01 | 0,713333333 |
| PENGD | 2013-01-01 | -0,1175 | 8,510638298 | 25,75201761 | -0,13 | 0,896666667 |

| | | | | | | |
|-------|------------|--------|--------------|--------------|-------|-------------|
| PENGD | 2014-01-01 | -0,01 | 100 | 91,4893617 | -0,07 | 1,026666667 |
| PENGD | 2015-01-01 | 0,063 | -15,87301587 | -115,8730159 | 0,02 | 1,076666667 |
| PENGD | 2016-01-01 | -0,005 | 200 | 215,8730159 | -0,05 | 1,433333333 |
| PENGD | 2017-01-01 | -0,025 | 40 | -160 | -0,07 | 2,09 |
| PETUN | 2012-01-01 | 0,0975 | -10,25641026 | #N/A | 0,07 | 0,433333333 |
| PETUN | 2013-01-01 | 0,11 | -9,090909091 | 1,165501166 | 0,09 | 0,443333333 |
| PETUN | 2014-01-01 | 0,1 | -10 | -0,909090909 | 0,1 | 0,43 |
| PETUN | 2015-01-01 | 0,12 | -8,333333333 | 1,666666667 | 0,13 | 0,426666667 |
| PETUN | 2016-01-01 | 0,11 | -9,090909091 | -0,757575758 | 0,11 | 0,433333333 |
| PETUN | 2017-01-01 | 0,1075 | -9,302325581 | -0,21141649 | 0,09 | 0,43 |
| PINSU | 2012-01-01 | 0,1205 | -8,298755187 | #N/A | 0,001 | 0,506666667 |
| PINSU | 2013-01-01 | 0,0645 | -15,50387597 | -7,205120782 | -0,07 | 0,593333333 |
| PINSU | 2014-01-01 | 0,115 | -8,695652174 | 6,808223795 | 0,02 | 0,69 |
| PINSU | 2015-01-01 | 0,085 | -11,76470588 | -3,069053708 | -0,06 | 0,926666667 |
| PINSU | 2016-01-01 | 0,015 | -66,66666667 | -54,90196078 | -0,1 | 1,073333333 |

| | | | | | | |
|-------|------------|----------|---------------|--------------|--------|-------------|
| PINSU | 2017-01-01 | 0,06325 | -15,81027668 | 50,85638999 | -0,08 | 1,283333333 |
| PNSUT | 2012-01-01 | 0,1125 | -8,8888888889 | #N/A | 0,09 | 0,47 |
| PNSUT | 2013-01-01 | 0,12 | -8,3333333333 | 0,5555555556 | 0,1 | 0,473333333 |
| PNSUT | 2014-01-01 | 0,1075 | -9,302325581 | -0,968992248 | 0,11 | 0,49 |
| PNSUT | 2015-01-01 | 0,09 | -11,11111111 | -1,80878553 | 0,07 | 0,503333333 |
| PNSUT | 2016-01-01 | 0,085 | -11,76470588 | -0,653594771 | 0,06 | 0,533333333 |
| PNSUT | 2017-01-01 | 0,0675 | -14,81481481 | -3,050108932 | 0,04 | 1,283333333 |
| SELGD | 2012-01-01 | 0,0975 | -10,25641026 | #N/A | 0,07 | 0,47 |
| SELGD | 2013-01-01 | 0,0385 | -25,97402597 | -15,71761572 | 0,07 | 0,526666667 |
| SELGD | 2014-01-01 | 0,0015 | -666,6666667 | -640,6926407 | -0,004 | 0,663333333 |
| SELGD | 2015-01-01 | 0,015 | -66,66666667 | 600 | 0,05 | 0,516666667 |
| SELGD | 2016-01-01 | -0,05325 | 18,77934272 | 85,44600939 | -0,04 | 0,573333333 |
| SELGD | 2017-01-01 | 0,0825 | -12,12121212 | -30,90055484 | 0,02 | 0,543333333 |
| TATGD | 2012-01-01 | 0,05 | -20 | #N/A | -0,01 | 0,856666667 |
| TATGD | 2013-01-01 | 0,0575 | -17,39130435 | 2,608695652 | -0,02 | 0,853333333 |

| | | | | | | |
|-------|------------|---------|--------------|--------------|-------|-------------|
| TATGD | 2014-01-01 | 0,17 | -5,882352941 | 11,50895141 | 0,23 | 0,633333333 |
| TATGD | 2015-01-01 | 0,1125 | -8,888888889 | -3,006535948 | 0,1 | 0,516666667 |
| TATGD | 2016-01-01 | 0,13 | -7,692307692 | 1,196581197 | 0,09 | 0,5 |
| TATGD | 2017-01-01 | 0,095 | -10,52631579 | -2,834008097 | 0,08 | 0,53 |
| TBORG | 2012-01-01 | 0,2525 | -3,96039604 | #N/A | 0,12 | 0,746666667 |
| TBORG | 2013-01-01 | 0,29 | -3,448275862 | 0,512120178 | 0,18 | 0,653333333 |
| TBORG | 2014-01-01 | 0,3175 | -3,149606299 | 0,298669563 | 0,18 | 0,62 |
| TBORG | 2015-01-01 | 0,2925 | -3,418803419 | -0,26919712 | 0,17 | 0,593333333 |
| TBORG | 2016-01-01 | 0,2975 | -3,361344538 | 0,057458881 | 0,18 | 0,573333333 |
| TBORG | 2017-01-01 | 0,2975 | -3,361344538 | 0 | 0,19 | 0,536666667 |
| TUKAS | 2012-01-01 | -0,05 | 20 | #N/A | -0,09 | 0,87 |
| TUKAS | 2013-01-01 | -0,1325 | 7,547169811 | -12,45283019 | -0,18 | 1,843333333 |
| TUKAS | 2014-01-01 | -0,16 | 6,25 | -1,297169811 | -0,21 | 0,98 |
| TUKAS | 2015-01-01 | 0,14075 | -7,104795737 | -13,35479574 | 0,14 | 0,743333333 |

| | | | | | | |
|-------|------------|----------|--------------|--------------|-------|-------------|
| TUKAS | 2016-01-01 | 0,0845 | -11,83431953 | -4,72952379 | 0,05 | 0,723333333 |
| TUKAS | 2017-01-01 | 0,0325 | -30,76923077 | -18,93491124 | 0,02 | 0,876666667 |
| ULKER | 2012-01-01 | 0,0975 | -10,25641026 | #N/A | 0,06 | 0,973333333 |
| ULKER | 2013-01-01 | 0,1075 | -9,302325581 | 0,954084675 | 0,07 | 0,83 |
| ULKER | 2014-01-01 | 0,105 | -9,523809524 | -0,221483942 | 0,07 | 0,863333333 |
| ULKER | 2015-01-01 | 0,1125 | -8,888888889 | 0,634920635 | 0,07 | 0,796666667 |
| ULKER | 2016-01-01 | 0,1125 | -8,888888889 | 0 | 0,04 | 0,983333333 |
| ULKER | 2017-01-01 | 0,125 | -8 | 0,888888889 | 0,05 | 1,036666667 |
| VANGD | 2012-01-01 | -0,35625 | 2,807017544 | #N/A | -0,25 | 0,383333333 |
| VANGD | 2013-01-01 | -0,0175 | 57,14285714 | 54,3358396 | 0,03 | 0,433333333 |
| VANGD | 2014-01-01 | 0,02 | -50 | -107,1428571 | 0,09 | 0,423333333 |
| VANGD | 2015-01-01 | 0,035 | -28,57142857 | 21,42857143 | -0,03 | 0,386666667 |
| VANGD | 2016-01-01 | -0,2425 | 4,12371134 | 32,69513991 | -0,18 | 0,523333333 |
| VANGD | 2017-01-01 | 0,675 | -1,481481481 | -5,605192822 | 0,03 | 0,483333333 |

Table 62 *Data of Food&Beverage Sector*

| FIRM | YEAR | SOLVENCY_LOG | SOLVENCY_LOG_D1 | TAST |
|-------|------------|--------------|-----------------|------|
| AEFES | 2012-01-01 | 0,573333333 | #N/A | 0,55 |
| AEFES | 2013-01-01 | 0,556666667 | -0,016666667 | 0,41 |
| AEFES | 2014-01-01 | 0,566666667 | 0,01 | 0,5 |
| AEFES | 2015-01-01 | 0,583333333 | 0,016666667 | 0,46 |
| AEFES | 2016-01-01 | 0,573333333 | -0,01 | 0,41 |
| AEFES | 2017-01-01 | 0,626666667 | 0,053333333 | 0,44 |
| ALYAG | 2012-01-01 | 0,47 | #N/A | 1,22 |
| ALYAG | 2013-01-01 | 0,483333333 | 0,013333333 | 0,77 |
| ALYAG | 2014-01-01 | 0,536666667 | 0,053333333 | 0,78 |
| ALYAG | 2015-01-01 | 0,776666667 | 0,24 | 0,55 |
| ALYAG | 2016-01-01 | 1,11 | 0,333333333 | 0,92 |
| ALYAG | 2017-01-01 | 6,633333333 | 5,523333333 | 1,16 |
| AVOD | 2012-01-01 | 0,573333333 | #N/A | 0,52 |

| | | | | |
|-------|------------|-------------|--------------|------|
| AVOD | 2013-01-01 | 0,666666667 | 0,093333333 | 0,52 |
| AVOD | 2014-01-01 | 0,723333333 | 0,056666667 | 0,93 |
| AVOD | 2015-01-01 | 0,62 | -0,103333333 | 0,8 |
| AVOD | 2016-01-01 | 0,53 | -0,09 | 0,67 |
| AVOD | 2017-01-01 | 0,606666667 | 0,076666667 | 0,65 |
| BANVT | 2012-01-01 | 1,753333333 | #N/A | 1,53 |
| BANVT | 2013-01-01 | 2,813333333 | 1,06 | 1,7 |
| BANVT | 2014-01-01 | 3,6 | 0,786666667 | 1,96 |
| BANVT | 2015-01-01 | 1,59 | -2,01 | 1,9 |
| BANVT | 2016-01-01 | 1,076666667 | -0,513333333 | 1,74 |
| BANVT | 2017-01-01 | 0,726666667 | -0,35 | 1,89 |
| CCOLA | 2012-01-01 | 0,743333333 | #N/A | 0,97 |
| CCOLA | 2013-01-01 | 0,813333333 | 0,07 | 0,74 |

| | | | | |
|-------|------------|--------------|--------------|------|
| CCOLA | 2014-01-01 | 0,713333333 | -0,1 | 0,83 |
| CCOLA | 2015-01-01 | 0,723333333 | 0,01 | 0,75 |
| CCOLA | 2016-01-01 | 0,696666667 | -0,026666667 | 0,67 |
| CCOLA | 2017-01-01 | 0,816666667 | 0,12 | 0,64 |
| DARDL | 2012-01-01 | -0,043333333 | #N/A | 0,98 |
| DARDL | 2013-01-01 | -0,076666667 | -0,033333333 | 2,91 |
| DARDL | 2014-01-01 | -0,166666667 | -0,09 | 1,92 |
| DARDL | 2015-01-01 | -0,113333333 | 0,053333333 | 3,78 |
| DARDL | 2016-01-01 | -0,1 | 0,013333333 | 4,38 |
| DARDL | 2017-01-01 | -0,096666667 | 0,003333333 | 4,05 |
| ERSU | 2012-01-01 | 0,416666667 | #N/A | 0,46 |
| ERSU | 2013-01-01 | 0,5 | 0,083333333 | 0,46 |
| ERSU | 2014-01-01 | 0,453333333 | -0,046666667 | 0,56 |
| ERSU | 2015-01-01 | 0,45 | -0,003333333 | 0,28 |
| ERSU | 2016-01-01 | 0,396666667 | -0,053333333 | 0,17 |

| | | | | |
|-------|------------|-------------|--------------|------|
| ERSU | 2017-01-01 | 0,416666667 | 0,02 | 0,18 |
| ETILR | 2012-01-01 | 0,41 | #N/A | 0,6 |
| ETILR | 2013-01-01 | 0,393333333 | -0,016666667 | 0,19 |
| ETILR | 2014-01-01 | 0,413333333 | 0,02 | 0,39 |
| ETILR | 2015-01-01 | 0,496666667 | 0,083333333 | 0,25 |
| ETILR | 2016-01-01 | 0,63 | 0,133333333 | 0,36 |
| ETILR | 2017-01-01 | 0,64 | 0,01 | 0,21 |
| FRIGO | 2012-01-01 | 0,903333333 | #N/A | 0,81 |
| FRIGO | 2013-01-01 | 1,233333333 | 0,33 | 0,65 |
| FRIGO | 2014-01-01 | 1,333333333 | 0,1 | 0,78 |
| FRIGO | 2015-01-01 | 1,673333333 | 0,34 | 0,77 |
| FRIGO | 2016-01-01 | 1,583333333 | -0,09 | 0,88 |
| FRIGO | 2017-01-01 | 1,186666667 | -0,396666667 | 0,82 |
| KENT | 2012-01-01 | 0,53 | #N/A | 1,04 |
| KENT | 2013-01-01 | 0,53 | 0 | 1,09 |

| | | | | |
|-------|------------|--------------|--------------|------|
| KENT | 2014-01-01 | 0,526666667 | -0,003333333 | 1,19 |
| KENT | 2015-01-01 | 0,49 | -0,036666667 | 0,93 |
| KENT | 2016-01-01 | 0,573333333 | 0,083333333 | 1,09 |
| KENT | 2017-01-01 | 0,513333333 | -0,06 | 1,19 |
| KERVT | 2012-01-01 | -2,37 | #N/A | 0,96 |
| KERVT | 2013-01-01 | -5,776666667 | -3,406666667 | 0,72 |
| KERVT | 2014-01-01 | -8,993333333 | -3,216666667 | 0,72 |
| KERVT | 2015-01-01 | 8,366666667 | 17,36 | 0,58 |
| KERVT | 2016-01-01 | 4,356666667 | -4,01 | 0,76 |
| KERVT | 2017-01-01 | 1,51 | -2,846666667 | 0,71 |
| KNFRT | 2012-01-01 | 0,64 | #N/A | 1,02 |
| KNFRT | 2013-01-01 | 0,613333333 | -0,026666667 | 0,78 |
| KNFRT | 2014-01-01 | 0,4 | -0,213333333 | 1,16 |
| KNFRT | 2015-01-01 | 0,376666667 | -0,023333333 | 0,75 |
| KNFRT | 2016-01-01 | 0,416666667 | 0,04 | 0,51 |

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|-------|------------|-------------|--------------|------|
| KNFRT | 2017-01-01 | 0,44 | 0,023333333 | 0,67 |
| KRSTL | 2012-01-01 | 0,353333333 | #N/A | 0,33 |
| KRSTL | 2013-01-01 | 0,383333333 | 0,03 | 0,63 |
| KRSTL | 2014-01-01 | 0,45 | 0,066666667 | 0,68 |
| KRSTL | 2015-01-01 | 0,423333333 | -0,026666667 | 0,94 |
| KRSTL | 2016-01-01 | 0,46 | 0,036666667 | 1,13 |
| KRSTL | 2017-01-01 | 0,526666667 | 0,066666667 | 0,89 |
| MERKO | 2012-01-01 | 1,323333333 | #N/A | 0,82 |
| MERKO | 2013-01-01 | 1,64 | 0,316666667 | 0,92 |
| MERKO | 2014-01-01 | 0,583333333 | -1,056666667 | 2,44 |
| MERKO | 2015-01-01 | 1,043333333 | 0,46 | 0,86 |
| MERKO | 2016-01-01 | 1,236666667 | 0,193333333 | 0,77 |
| MERKO | 2017-01-01 | 2,09 | 0,853333333 | 1 |
| PENGD | 2012-01-01 | 0,713333333 | #N/A | 0,43 |
| PENGD | 2013-01-01 | 0,896666667 | 0,183333333 | 0,46 |

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|-------|------------|-------------|--------------|------|
| PENGD | 2014-01-01 | 1,026666667 | 0,13 | 0,59 |
| PENGD | 2015-01-01 | 1,076666667 | 0,05 | 0,55 |
| PENGD | 2016-01-01 | 1,433333333 | 0,356666667 | 0,6 |
| PENGD | 2017-01-01 | 2,09 | 0,656666667 | 0,74 |
| PETUN | 2012-01-01 | 0,433333333 | #N/A | 1,01 |
| PETUN | 2013-01-01 | 0,443333333 | 0,01 | 1,09 |
| PETUN | 2014-01-01 | 0,43 | -0,013333333 | 1,24 |
| PETUN | 2015-01-01 | 0,426666667 | -0,003333333 | 1,13 |
| PETUN | 2016-01-01 | 0,433333333 | 0,006666667 | 1,17 |
| PETUN | 2017-01-01 | 0,43 | -0,003333333 | 1 |
| PINSU | 2012-01-01 | 0,506666667 | #N/A | 0,84 |
| PINSU | 2013-01-01 | 0,593333333 | 0,086666667 | 0,85 |
| PINSU | 2014-01-01 | 0,69 | 0,096666667 | 1,08 |
| PINSU | 2015-01-01 | 0,926666667 | 0,236666667 | 0,97 |
| PINSU | 2016-01-01 | 1,073333333 | 0,146666667 | 0,8 |

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|-------|------------|-------------|--------------|------|
| PINSU | 2017-01-01 | 1,283333333 | 0,21 | 0,8 |
| PNSUT | 2012-01-01 | 0,47 | #N/A | 1,18 |
| PNSUT | 2013-01-01 | 0,473333333 | 0,003333333 | 1,19 |
| PNSUT | 2014-01-01 | 0,49 | 0,016666667 | 1,21 |
| PNSUT | 2015-01-01 | 0,503333333 | 0,013333333 | 1,14 |
| PNSUT | 2016-01-01 | 0,533333333 | 0,03 | 1,14 |
| PNSUT | 2017-01-01 | 1,283333333 | 0,75 | 1,03 |
| SELGD | 2012-01-01 | 0,47 | #N/A | 0,44 |
| SELGD | 2013-01-01 | 0,526666667 | 0,056666667 | 0,61 |
| SELGD | 2014-01-01 | 0,663333333 | 0,136666667 | 0,65 |
| SELGD | 2015-01-01 | 0,516666667 | -0,146666667 | 0,48 |
| SELGD | 2016-01-01 | 0,573333333 | 0,056666667 | 0,45 |
| SELGD | 2017-01-01 | 0,543333333 | -0,03 | 0,67 |
| TATGD | 2012-01-01 | 0,856666667 | #N/A | 1,3 |
| TATGD | 2013-01-01 | 0,853333333 | -0,003333333 | 1,4 |

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|-------|------------|-------------|--------------|------|
| TATGD | 2014-01-01 | 0,633333333 | -0,22 | 1,23 |
| TATGD | 2015-01-01 | 0,516666667 | -0,116666667 | 1,39 |
| TATGD | 2016-01-01 | 0,5 | -0,016666667 | 1,42 |
| TATGD | 2017-01-01 | 0,53 | 0,03 | 1,37 |
| TBORG | 2012-01-01 | 0,746666667 | #N/A | 0,97 |
| TBORG | 2013-01-01 | 0,653333333 | -0,093333333 | 1,01 |
| TBORG | 2014-01-01 | 0,62 | -0,033333333 | 0,89 |
| TBORG | 2015-01-01 | 0,593333333 | -0,026666667 | 0,82 |
| TBORG | 2016-01-01 | 0,573333333 | -0,02 | 0,75 |
| TBORG | 2017-01-01 | 0,536666667 | -0,036666667 | 0,74 |
| TUKAS | 2012-01-01 | 0,87 | #N/A | 0,56 |
| TUKAS | 2013-01-01 | 1,843333333 | 0,973333333 | 0,63 |
| TUKAS | 2014-01-01 | 0,98 | -0,863333333 | 0,51 |
| TUKAS | 2015-01-01 | 0,743333333 | -0,236666667 | 0,6 |

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|-------|------------|-------------|--------------|------|
| TUKAS | 2016-01-01 | 0,723333333 | -0,02 | 0,69 |
| TUKAS | 2017-01-01 | 0,876666667 | 0,153333333 | 0,64 |
| ULKER | 2012-01-01 | 0,973333333 | #N/A | 0,74 |
| ULKER | 2013-01-01 | 0,83 | -0,143333333 | 0,87 |
| ULKER | 2014-01-01 | 0,863333333 | 0,033333333 | 0,91 |
| ULKER | 2015-01-01 | 0,796666667 | -0,066666667 | 0,78 |
| ULKER | 2016-01-01 | 0,983333333 | 0,186666667 | 0,71 |
| ULKER | 2017-01-01 | 1,036666667 | 0,053333333 | 0,58 |
| VANGD | 2012-01-01 | 0,383333333 | #N/A | 0,22 |
| VANGD | 2013-01-01 | 0,433333333 | 0,05 | 0,2 |
| VANGD | 2014-01-01 | 0,423333333 | -0,01 | 0,22 |
| VANGD | 2015-01-01 | 0,386666667 | -0,036666667 | 0,11 |
| VANGD | 2016-01-01 | 0,523333333 | 0,136666667 | 0,13 |
| VANGD | 2017-01-01 | 0,483333333 | -0,04 | 0,01 |