Crossref doi: 10.26579/jocrebe-7.2.10

Year: 2017
Volume: 7
Issue: 2

Journal of Current Researches on Business and Economics
(JoCReBE)
ISSN: 2547-9628

www.stracademy.org/jocrebe

Capital Structure and Its Impact on Profitability: A Study of Listed Food Manufacturing Companies in Borsa Istanbul

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Keywords
Capital Structure, Debt Structure, Return of Equity, Return of Assets, Food Manufacturing Firms.

Abstract
The capital structure is one of the most complex areas of financial decision making due to its interrelation with other financial decision variables. It is a composition of debt and equity that comprise a firm's financing assets. In this study we investigated the impact of capital structure on profitability of Turkish food manufacturing firms listed on Borsa Istanbul (BIST) during the six years period from 2008 to 2013. The study used Return on Equity (ROE) and Return on Asset (ROA) as dependent variables. In addition, short-term debt, long-term debt and total debt were used as independent variables. The data was analyzed by using panel data methodology. According to the results, there is a significant relationship between independent variables and ROE of the food manufacturing firms. It showed a significant negative relationship between short-term debt and ROE. The results also revealed a significant negative relationship between ROE and long-term debt. This implies that the long-term debt have been relatively expensive, thus employing long-term debt is associated with descending profitability. It also implies that the cost of using long-term debt risk exceeded the tax benefits. On the other hand the results revealed a significant positive relationship between total debt and ROE.

1. Introduction

Capital structure is the most important element to establish a company, and the choice of a firm's mixture of sources of financing, that made up of debt and equity financing. Ross, Westerfield and Jordan (2001, p. 367) defined a firm's capital structure decision as *'the choice of how much debt a firm should have relative to equity'.* These scholars have argued that capital structure is a reflection of a firm's borrowing policy. Capital is a *'mix of different securities'* (Abor 2005). The above definitions have one thing in common, which is the firm's capital structure decision is its choice of debt-equity ratio. At the heart of capital structure decision is the search for the optimal capital structure which is the level of capital that maximizes profitability and shareholders' value.

The work for the optimal capital structure has led to theories like the trade-off,

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pecking order and agency theories. Up to now, there is still no agreement on what the optimal capital structure must be. In his study Abor (2005, p. 438) accepted that when he said, *'Despite the theoretical appeal of capital structure, researchers in financial management have no found the optimal capital structure'*.

In this study the terms “firm value', “shareholders' value”, “shareholders' wealth” and “profitability” will be used interchangeably as they all constitute measures that depict wealth creation for shareholders. For instance, profitable firms are usually more beneficial to shareholders than loss-making firms. Similarly, a change in firm value results a change in shareholders' value. Ross and his friends (2009, p. 432) supported this idea when they made this statement *'managers should choose the capital structure that they believe will have the highest firm value, because this capital structure will be most beneficial to the firm's shareholder'*.

As the decision is essential for firm's activities, poor decision of capital structure can affect a firm's profitability, then will lead to a decrease in shareholders' value and vice versa. The primary objective of financial decisions is to maximize the wealth of shareholders. According to Ross, Westerfield and Jordan (2001, p.12) good financial decision increases the market value of the owners’ equity and poor financial decisions decrease it. As the profitability measures wealth creation for shareholders it is worth to examine how the capital structure relates to the profitability of the firm.

Up to date, theoretical predications yield no constant conclusions for the correlation between profitability and leverage. Trade-off model argue that profitable firms have greater needs to shield income from corporate tax and should borrow more than less-profitable firms, whilst Pecking Order Theory suggests an opposite relationship between profitability and level of debt. In general, firms are assumed to prefer internal financing to external financing in a pecking order framework. This preference leads firms to use retaining earnings first as investment funds and move to external financing only when retaining earnings are insufficient. When facing the choice between bonds and equity, firms will prefer debt issue to equity issue. In this case, profitable firms are expected to have less debt. Agency-based models give predictions upon this issue in the following ways:

According to Jensen (1986) about the free cash flow theory, defines debt as a discipline tool to enforce managers to payout profits as a result the cash flow wasted in empire-building is reduced. Therefore, a positive correlation between profitability and leverage is implied; in a signaling framework, profitable firms are assumed to use debt as a signal of the firm's quality, this theory also predicts a positive relationship. However, most empirical studies confirm the negative correlation between profitability and leverage (Titman and Wessels (1988), Rajan and Zingales (1995), Wald (1999) etc.) While positive relationship is rarely supported by empirical studies. Although many studies have been done on this topic, yet there is no consensus about the optimal capital structure. Hence, there is a strong need for further research on the subject to determine the relationship between capital structure and profitability.

2. Literature Review

Since the publication of the Modigliani and Miller's (1958) "Irrelevance of Capital Structure", the theory of corporate capital structure has been a study of interest to financial managers.

With the passage of time different types of theories emerged which diverge from the assumption of perfect capital markets under which the "Irrelevance Model" is working. The trade-off theory is the first theory and assumes that firms trade-off the benefits and costs of debt and equity financing and find an "optimal" capital structure after. The second is the Pecking Order Theory (Myers, 1984, Myers & Majluf, 1984) arguing that firms follow a financing hierarchy to minimize the problem of information asymmetry between the firm's managers-insiders and the outsiders-shareholders.

Thus, inconsistency between trade-off theory and the observed pecking order of financing, they proposed a new theory, called the Signaling, or Asymmetric Information Theory. Baker and Wurgler (2002) have come up with a new theory of capital structure: The "Market Timing Theory of Capital Structure". This theory states that the current capital structure is the cumulative of past outcome of past attempts to time the equity market. Market timing implies that firms issue new shares when they see they are overvalued and that firms repurchase their own shares when they consider these to be undervalued. Market timing issuing behavior has been well established empirically by others already, but Beker and Wurgler demonstrate that the impact of market timing on capital structure is highly persistent.

The theory of business finance in a modern sense begins with the Modigliani and Miller (1958) *Capital Structure Irrelevance Proposition*. Before them, there was no generally accepted theory of capital structure. Modigliani and Miller start by assuming that the firm has a particular set of expected cash flows.

When the firm chooses a certain proportion of debt and equity to finance its assets, all that it does is to divide up the cash flows among investors. Investors and firms are assumed to have equal access to financial markets, which allows for homemade leverage. Modigliani and Miller (MM) in their original proposition advocated that the relationship between leverage and cost of capital is explained by net income approach.

Also the term *Trade-off Theory* is used by different authors to describe a family of related theories. In all of these theories, a decision maker running a firm evaluates the various costs and benefits of alternative leverage plans. Often it is assumed that an interior solution is obtained so that marginal costs and marginal benefits are balanced. There are two types of Trade-off Theory: (i) Static Theory and (ii) Dynamic Theory.

The *Static Trade-off Theory* states that firms have optimal capital structures, which they determine by trading-off the costs against the benefits of the use of debt and equity. One of the benefits of the use of debt is the advantage of a debt tax shield. One of the disadvantages of debt is the cost of potential financial distress, especially when the firm relies on too much debt. Already, this leads to a trade-off

between the tax benefit and the disadvantage of higher risk of financial distress.

In a dynamic model, the correct financing decision typically depends on the financing margin that the firm anticipates in the next period. Some firms expect to pay out funds in the next period, while others expect to raise funds. If funds are to be raised, they may take the form of debt or equity. More generally, a firm undertakes a combination of these actions.

An important precursor to modern *Dynamic Trade-off Theories* was Stiglitz (1973), who examines the effects of taxation from a public finance perspective. Stiglitz's model is not a trade-off theory since he took the drastic step of assuming away uncertainty. The first dynamic models to consider the tax savings versus bankruptcy cost trade-off are Kane and his friends (1984) and Brennan and Schwartz (1984). Both analyzed continuous time models with uncertainty, taxes, and bankruptcy costs, but no transaction costs. Since firms react to adverse shocks immediately by rebalancing costlessly, firms maintain high levels of debt to take advantage of the tax savings.

The *Pecking Order Theory* is another theory that does not take an optimal capital structure as a starting point, but instead asserts the empirical fact that firms show a distinct preference for using internal finance (as retained earnings or excess liquid assets) over external finance. If internal funds are not enough to finance investment opportunities, firms may or may not acquire external financing, and if they do, they will choose among the different external finance sources in such a way as to minimize the costs of asymmetric information. The latter costs basically reflect the “lemon premium” (Akerlof, 1970) that outside investors ask for the risk of failure for the average firm in the market.

The approaches dealing with capital structure are not limited with these theories. The Market Timing Theory, Agency Cost Theory and Free Cash Flow Theory also can be introduced as different approaches that take this issue on board.

The *Market Timing Theory* of capital structure argues that firms time their equity issues in the sense that they issue new stocks when the stock price is perceived to be overvalued, and buy back own shares when there is undervaluation. Consequently, fluctuations in stock prices affect firm's capital structures.

Agency Cost Theory is concerned with diverging interest when the firm ownership and management are separated. The theory argues about the relationship between the agent (e.g. the manager), and the principle (e.g. the shareholders). The major assumption of this theory is that the separation of ownership and management creates conflicts among principles and agents. Emergence of the conflicts in the firm creates tensions and results high agency cost.

And *Free Cash Flow Theory* says that high debt levels will increase value, despite the threat of financial distress, when a firm's operating cash flow significantly exceeds its profitable investment opportunities (Myer 2001). Thus the profit earning capacity increases the value of the firm despite the threat of financial distress. Firms with positive free cash flows use these cash flows to lower their debt ratios. Firms with negative free cash flows increase their debt ratios to respond to the lack of internal funds. The percentage adjustment is smaller for

firms with relatively more debt than for firms with relatively lower debt.

3. Research Material and Methodology

The study examines the listed firms in Borsa Istanbul, particularly, the food manufacturing firms over a period of 2008-2013. The financial data used in the study has been obtained from the web sites of Borsa Istanbul (www.borsaistanbul.com) and Public Disclosure Platform (www.kap.org.tr). However, not all of the listed firms are involved in this empirical research due to two reasons: The unavailability of financial data and the discontinuous listing in Borsa Istanbul over the period of 2008-2013. Although there are actually 30 firms listed, only 19 are eligible and can be used for the research.

In detail, financial reports during this five-year period are collected to obtain necessary financial figures of the firms. Then, the data has been transformed into variable's data. The variable's data is classified based on the following independent variables: Long-Term Debt (LTD), Short-Term Debt (STD), and Total Debt (TD), and dependent variables are Return on Equity (ROE) and Return on Asset (ROA).

3.1. Measurement of Variables

Two dependent variables have been used to measure the firms' profitabilities in the study. These are Return on Equity and Return on Asset. Return on Equity is used to calculate a firm's profitability by revealing how much profit a firm generates with money invested by shareholders, and its formula is given below:

Return on Equity = Net Profit Attributed to Shareholders /Total Shareholder's Equity

Return on Asset also measures the profitability of the firms. It explains how efficient the firm management is at using its assets for generating earnings. The formula of ROA is calculated as following:

Return on Asset = Operating Income / Total Assets

To resolve the challenge of omitted variables, three most widely used and accepted debt ratios in the extant profitability/debt policy literature have been employed in the study as independent variables. These are the ratio of Short-Term Debt to Total Assets, the ratio of Long-Term Debt to Total Assets, and the ratio of Total Debt to Total Capital.

The ratio of Short-Term Debt to Total Assets is the first leverage ratio employed in the study as one of the explanatory variables. It sought to determine the extent to which food manufacturing firms in Turkey use short-term debt to finance their operations and how this category of debt associates with firm's profitability for the chosen period of the study.

The ratio of Long-Term Debt to Total Assets is another debt ratio used in the study as an explanatory variable. It is supposed to determine the extent to which food manufacturing firms in Turkey use long-term debt to finance their operations and how this category of debt associates with firm's profitability for the chosen period of the study.

The ratio of Total Debt to Total Assets which can also be expressed as the ratio of Total Liabilities to Total Assets is basically an addition of both short-term debt and

long-term debt of the firms to their total assets. This ratio is supposed to explain the extent to which operations of the firms have been funded with total debt relative to equity and also to see how leverage associates with firms' profitability in Turkey's food manufacturing sector.

3.2. Model Specification

The data used is comprised of financial information of 19 firms during the period of 2008-2013. The nature of this data is cross-sectional and time-series, which is also called the panel data. Therefore, it is feasible to employ panel data analysis because this analytical method is widely used by social scientists as it provides the inclusion of data for N cross-section, i.e., firms, individuals, and the time period (such as years, quarters, months).

A simple mode for panel analysis can be given as follows:

$y_{it} = a + bx_{it} + \varepsilon_{it}$

Where *y* stands for the dependent variable, *x* is for the independent variable, while, *a* and *b* are two coefficients, *i* and *t* represent are individuals and time and ε for the error term (Asteriou & Hall 2011, 417).

4. Analysis and Results

As it is mentioned in the previous part, and as a requirement of applying this methodology, Panel Data Methodology was employed in the study. After establishing and analyzing the results of the Fixed Effect and Random Effect Models individually, their results have been compared with the help of Hausman Test. The major findings of the study are summarized below.

4.1. Fixed Effect Model Results

Firstly, Fixed Effect Models are established for ROE and ROA by Panel Least Square Method with the help of Eviews7 in the study. The results of these models are shown on Table1 and Table 2.

Table 1. Return on Asset (ROA) effect on dependent variable using Fixed Effect Model

Variable	Coefficient	Relationship	Std. Error	t-Statistics	Prob.	Result(*)
C	0.324468		0.198473	1.634823	0.1055	
STD	-44.75155	Negative (-)	7.681757	-5.825692	0.0000	Significant
LTD	-45.45591	Negative (-)	7.663809	-5.931243	0.0000	Significant
TD	44.49231	Positive (+)	7.702568	5.776296	0.0000	Significant
R-squared: 0.448552				F-statistics: 3.56351		

(*) Prob. > 0.05 = Insignificant

The results of the fixed effect model show that STD has a negative coefficient (-44.75155) with ROE. Moreover, its probability (0.0000) is much more less than the significant level (0.05); which implies high significance in variable STD's result. With regards to the relationship between STD and ROE, the regression result indicates a significantly negative association. This means when STD increases, the profitability of the firm measured by ROE decreases.

Similarly, LTD has a negative coefficient (-45.45591) with the dependent variable, at the same time the probability value (0.0000) is less than the significant level (0.05). This means that STD significantly interprets the dependent variable.

Meanwhile, TD has a positive coefficient (44.49231) with ROE variable, and it is reported to have significant result since its probability is lower than the significant level (0.05). TD is significant and positively related to the ROE variable. This means that as leverage increases in the food manufacturing sector of Turkey, profitability expressed as ROE falls. On the other hand, this approach achieves 45% (0.45) in R-square and 3.56 in F-statistics. It means that, this model has high explanatory power and its result is reliable.

Table 2. Return on Equity (ROE) effect on dependent variable using Fixed Effect Model

Variable	Coefficient	Relationship	Std. Error	t-Statistics	Prob.	Result(*)
C	-0.609737		0.214562	-2.841771	0.0055	
STD	-8.986454	Negative (-)	8.304486	-1.082120	0.2820	Insignific.
LTD	-7.620327	Negative (-)	8.285083	-0.919765	0.3601	Insignific.
TD	9.451039	Positive (+)	8.326984	1.134989	0.2593	Insignific.
R-squared: 0.308714				F-statistics: 1.956443		

(*) Prob. > 0.05 = Insignificant

From Table 2 it can be observed that short-term debt, long-term debt, and total debt are not important in determining ROA in the food manufacturing sector of Turkey. They are all insignificant as their P values are more than 5 percent (0.2820 for STD, 0.03601 for LTD and 0.2593 for TD). This means that debt-ROA hypothesis do not exist in the food manufacturing sector of Turkey for the period under this study.

4.2. Random Effect Model Results

As the second step, a Random Effect Model is established by Panel Least Square Method with the help of Eviews7 in the study. The results of this model is shown on Table 3.

Table 3. Return on Equity (ROE) effect on dependent variable using Random Effect Model

Variable	Coefficient	Relationship	Std. Error	t-Statis.	Prob.	Result(*)
C	-0.011029		0.074893	-0.147257	0.8832	
STD	-45.81919	Negative (-)	7.079833	-6.471790	0.0000	Significant
LTD	-46.08740	Negative (-)	7.072453	-6.516467	0.0000	Significant
TD	45.86248	Positive (+)	7.086391	6.471909	0.0000	Significant
R-Squared: 0.292152				F-Statistics: 15.13352		

(*) Prob. > 0.05 = Insignificant

According to this approach's results, there is no much difference from the previous model. STD has a negative coefficient (-45.81919) with the dependent variable which is ROE. Moreover, its probability (0.0000) is much more less than the significant level (0.05); which implies the high significance in variable STD's result.

Similarly, LTD variable has a negative coefficient (-46.08740) with the dependent variable, at the same time its probability (0.0000) is less than the significant level (0.05), this means that LTD significantly interprets the dependent variable. However, the TD has showed a positive coefficient (45.86248) with ROE variable, and it is also reported to have significant result since its probability is lower than the significant level (0.05).

Nonetheless, this approach achieves 29% (0.29) in R-Square and 15.13 in F-Statistics. This implies that, although it is just below the required level of R-Square

(0.50), which does not mean it is bad, unworthy of being interpreted, or useless. This approach is reliable and its result has a high explanatory power.

In analogy to Fixed Effect Model results Table 4 below depicts that short-term debt, long-term debt, and total debt do not have a significant impact on ROA in the food manufacturing sector of Turkey. They are all insignificant as their P value are more than 5 percent (0.2890 for STD, 0.03368 for LTD and 0.2874 for TD). These findings strengthens the result that debt-ROA hypothesis do not exist in the food manufacturing sector of Turkey at least for the period under study.

Table 4. Return on Asset (ROA) effect on dependent variable using Random Effect Model

Variable	Coefficient	Relationship	Std. Error	t-Statistics	Prob.	Result(*)
C	-0.136088		0.071538	-1.902315	0.0597	
STD	-7.987174	Negative (-)	7.497089	-1.065370	0.2890	Insignific.
LTD	-7.225281	Negative (-)	7.489265	-5.964752	0.3368	Insignific.
TD	8.022180	Positive (+)	7.503844	1.069076	0.2874	Insignific.
R-Squared: 0.218341				F-Statistics: 10.24211		

(*) Prob. > 0.05 = Insignificant

4.3. Hausman Test for Return on Equity

Both Fixed and Random Effect Models established for ROE are found to have significant results. At this point the question is out of these two models which one is more appropriate to accept. Hausman Test could give the answer to this question. The Hausman Test is a test performed on a panel data prior to running a panel data regression to determine whether the researcher should choose the fixed effect or the random effect in his/her model estimation.

In the Hausman Test, the null hypothesis states that random effect model is appropriate, while, the alternative hypothesis indicates the related fixed effect model. If the probability of the Hausman Test is lower than 0.05, the null hypothesis is rejected. Whereas, if the probability is higher than 0.05, the null hypothesis is accepted. Table 5 indicates the probability of 0.0988, so the Random Effect Model is more appropriate. Therefore, its result is valid and the Random Effect Model must be used.

Table 5. Results of Hausman Test

Test Summary	Chi-Sq. Statistics	Chi-Sq. d.f.	Prob.
Cross-Section Random	6.278834	3	0.0988

Note: Correlated Random Effects-Hausman Test; Test Cross-Section Random Effects; EVIEWS7

5. Discussion and Conclusions

The study has investigated the impact of capital structure on profitability of Turkish food manufacturing firms during the six years period from 2008 to 2013. Using panel data methodology, short-term, long-term, and total debts have been found significant in explaining the ROE for the food manufacturing industry of Turkey. The results have revealed that, there was a significant negative relationship between short-term debt and ROE (profitability based on equity).

The results have also showed a significant negative relationship between ROE and long-term debt. This implies that the long-term debt have been relatively expensive, thus employing long-term debt is associated with falling profitability. It

also implies that the risk of using long-term exceeds the tax benefits. The lack of required long-term capital, unfavorable economic conditions as well as the specific industry characteristics have all contributed to the increased risk for the food manufacturing sector during the period of the study.

There are some other studies which show the same results as we have presented; and seems to be consistent with the Pecking Order Theory. These studies found a negative relationship between profitability and debt. Within this framework, Titman and Wessels (1988) argued that firms with high profit levels, all things being equal, would maintain relatively lower debt levels since they can realize such funds from internal sources. Furthermore, Cassar and Holmes (2003), and Hall et al. (2004) all found negative relationships between profitability and both long-term debt and short-term debt ratios. Rajan and Zingales (1995) also confirm a significantly negative correlation between profitability and leverage in their study.

According to Fama and French (1998), debt usage does not necessarily grant tax benefits; high leverage may rather generate agency problems among shareholders and debt-holders that predict a negative relationship between leverage and profitability. Also Graham (2000) argued in his work that big and profitable companies present low debt levels.

Finally, the results have revealed a significant positive relationship between total debt and ROE (profitability based on equity). Some authors have gone through this idea after they conducted their studies. Such authors like Petersen and Rajan (1994), Ooi (1999), Scherr et al. (1993), Roden and Lewellen (1995), Abor (2005) found a positive relationship between profitability and debt levels. There also exists a positive association between debt and ROE of firms provided that, the earnings power of the firm's assets outweighs the average interest cost of the debt (Hutchinson, 1995).

Using the same methodology, it has been discovered that short-term, long-term, and total debts are insignificant in determining ROA in the food manufacturing industry of Turkey. This can be attributed to increased cost of doing the business of food manufacturing industries in Turkey.

It is crucial for us to note that whether debt would have a significant impact on ROA depends to a large extent on what the debt is used for. In general rule increased debt has the potential to lower revenues as more money is spent servicing that debt. If it is spent to increase production and production leads to significantly increased revenues, increased debt may increase ROA. That depends on whether the debt burden is so costly it cuts into net income. If revenues rise as a result of debt financing of production, but net income falls due to increased expense, ROA declines.

The reason for insignificance of debt (short-term, long-term and total) in influencing ROA could be a result of increasing costs in doing the business. The consequence of this is that it reduces profits which could have gone to shareholders. These costs include increasing employees' salaries, investment in information technology, acquisition and maintenance of premises.

Another reason could be unlike other profitability ratios, such as ROE, ROA

measurement include all of a business's assets—those which arise out of liabilities to creditors as well capital paid in by investors. Total assets are used rather than net assets. Thus, for instance, the cash holdings of a company have been borrowed and are thus balanced by a liability. Similarly, the company's receivables are definitely accepted an asset but are balanced by its payables, a liability. For this reason, ROA is usually of less interest to shareholders than some other financial ratios; stockholders are more interested in return on their input.

6. Recommendations

Based on the literature review of capital structure, it is clear that the ideal capital structure from any firm is the optimal capital structure because the optimal capital structure is the level of debt/equity ratio that maximizes the firm's value. However, the optimal capital structure is far from being conclusive because the elements of capital structure are difficult to measure precisely. It is also obvious that the issue of taxes and costs of financial distress are very important for determining the optimal capital structure. In this case it is worth noting that the recommendations in relation to the tax benefits and the costs are associated with financial distress.

It is also possible to recommend that, taxpaying firms should explore the benefits of using debt to finance their operations in order to take advantage of the tax benefits. However, loss making firms and firms with high tax credits may not find debt capital very useful and so should use it with extreme care and when it is really necessary to do so. This should be the case in order to avoid the risk associated with using debt exceeding the benefits. Generally the higher the tax rate, the more beneficial it will be to use debt financing but the authors advice caution always as too much use of debt increases risk.

It is also recommended that companies, specially the profitable ones and the government, should contribute more stimulate growth of Turkey's capital market by issuing more long-term bonds to the general public rather than focusing on short-term bank loans. When this happens, it would also stimulate more trading in long-term bonds and hence the growth of the Turkish Capital Market.

Finally, the variations could be well do to different manufacturing sectors, different time periods for making comparisons with the findings of this study and reaching some generalizations about the attitudes towards capital structure.

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Appendix: Firms covered in the study

Firm's Name	Firm's Code	Kind of Business
ALTINYAG	ALYAG	Produces vegetable oils, a part of Art Yatirim Holding.
ANADOLU EFES	AEFES	Brewer and bottler.
COCA COLA ICECEK	CCOLA	Makes bottling operation owned by Efes Beverage Group and The Coca-Cola Company.
DARDANEL	DARDL	Produces canned tuna and other dish and vegetable food products.
ERSU GIDA	ERSU	Fruit and fruit juice processor.
FRIGO PAK GIDA	FRIGO	Produces drinks, fruit juices and canned foods under the Sunpride brand.
KENT GIDA	KENT	Turkish subsidiary of confectionery group, Mondelēz International.
KERVITAS GIDA	KERVT	Frozen food producer in owned by Yıldız Holding.
KONFRUT GIDA	KNFRT	Fruit juice concentrate producer, a subsidiary of Döhler.
KRISTAL COLA	KRSTL	Soft drink manufacturer of Ihlas Holding.
MERKO GIDA	MERKO	Produces fruits and vegetables, tomato paste, diced tomatoes, sauces, syrups, mayonnaise, ketchup, mustard.
PINAR ET VE UN	PETUN	A brand with a wide variety of products meeting different consumer needs in dairy, meat and drinking water product ranges.
PINAR SU	PINSU	Produces drinking water and bottle.
PINARSUT	PNSUT	Works in the dairy products sector.
SELCUK GIDA	SELGD	Manufactures, processes, and exports dried fruits (figs, apricots, sour cherries, tomatoes, pine kernels, and sultanas).
SEKER PILIC	SKPLC	Produces and exports chicken, cook ready, delicatessen, and collective consumption.
TUKAS	TUKAS	Produces tomato and pepper paste, canned, delicatessen, sauces, ketchups and mayonnaises, sour/pickles and more.
T. TUBORG	TBORG	Engaged in the manufacture of beer, malt liquor and energy drinks under Carlsberg, Tuborg, Skol, Corona, Troy and Venus brand names.
ULKER BISKUVI	ULKER	Produces and exports biscuits, cookies, crackers, and chocolates.

E-ISSN:
2547-9628