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### **Examining Firms Quoted In Borsa Istanbul IT Index Via Ratio Analysis**

(Borsa İstanbul Bilişim Endeksinde Faaliyet Gösteren İşletmelerin Finansal Performanslarının Oran Analizi İle İncelenmesi)

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### **Keywords**

Ratio Analysis, Borsa Istanbul, IT Index

### **Iel Classification**

L25, M10.

#### **Abstract**

Financial ratio analysis is a vital one since the profitability of an enterprise is directly affected by such decision. The successful selection and use of appropriate financial ratio is one of the key elements of the firm's financial strategy.

The purpose of this study is to perform ratio analysis on the selected 10 companies listed on Borsa Istanbul IT Index (BIST XBLSM) over the four years period from 2010-2013. These financial ratio analyses have huge potentials to help organizations in improving their revenue generation ability as well as minimization of costs. In these analyses 14 ratios have been used and we have an image about the companies' liquidity, leverage, efficiency and profitability based on the ratios.

As a result of the findings acquired, companies should be more concerned about increasing their current assets, it is preferable to control short term debts and head towards long term debts and the inventory turnover in days must be rearranged to meet more efficient and profitable ratios.

### **Anahtar Kelimeler**

Oran Analizi, Borsa İstanbul, Bilişim Endeksi.

### <u>**Iel Sınıflandırması**</u>

L25, M10.

### **Abstract**

Finansal oran analizi kurumsal karlılık alınan kararlardan direkt olarak etkilendiğinden beri hayati bir öneme sahiptir. Uygun finansal oranların başarılı şekilde seçimi ve uygulanması firmanın finansal stratejisinin anahtar elemanlarından birisidir.

Bu çalışmanın amacı Borsa İstanbul İT indeksinde bulunan 10 firmanın 4 yıllık (2010-2013) verileri üzerinden oran analizi uygulamaktır. Bu finansal oran analizleri maliyetlerin minimizasyonunda olduğu kadar karlılığı arttırma noktasında yardım etmek için büyük bir potansiyele sahiptir. Yapılan çalışmada oran kullanılmıştır ve firmaların likiditesi, kaldıraç düzeyi, verimliliği ve karlılığı ile ilgili oran tabanlı bir fikir sahibi olunmuştur.

Elde edilen bulguların sonucu, firmalar dönen varlıklarını arttırma ile daha ilgili olmalıdır. Kısa vadeli borçlar ve uzun vadeli borçların kontrolü tercih edilebilir. Stokların devir hızı daha iyi oranlar ile karşılaşmak için tekrardan ayarlanmalıdır.

### 1. Introduction

The goal of financial management is to maximize the current value per share of the existing stock. Profit generation is best achieved by maximizing firm's value through maximum usage of resources over a period of time and it is a series of decisions, made one after the other, that originate from planned or scientific basis. Profitability ratios are the most frequently used tools of financial ratio analysis to determine the company's outcome. Hence they are important to company managers and owners alike. If a business has outside investors who have put their own money into the company, the primary owner certainly has to show profitability to those equity investors, because profitability ratios indicate company's overall efficiency and performance. But, it is also important to identify financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet, giving us other ratio analyses like liquidity ratios, leverage ratios and efficiency ratios.

The analysis of financial accounts is the collection, interpretation and translation of facts and datas contained in the financial statements. They are used in order to draw a relevant conclusion; therefore, making suggestions as to business operations, financial position and future prospects. In this study ratio analysis is performed on financial accounts of the selected 10 companies which are consistently existed in the Borsa Istanbul IT Index since 2010; ALCTL, ANELT, ARENA, ESCOM, INDES, KAREL, LINK, LOGO, NETAS and PKART.

In our study 14 ratios have been used as current ratio, acid test ratio, cash ratio, total debts to assets, short term debt to total resources, long term debt to total resources, total assets turnover, accounts receivable turnover, inventory turnover, accounts receivable turnover in days, inventory turnover in days, net profit margin, return on equity and return on total assets respectively. Based on these ratios we have an image about the companies' liquidity, leverage, efficiency and profitability, therefore; obtaining a result showing companies' strong and weak points.

Istanbul Stock Exchange has been changed to Borsa Istanbul on 5 April 2013. Istanbul Stock Exchange (IMKB) was used instead of Borsa Istanbul (BIST) in the studies that appears in the literature.

#### 2. Literature

The word "rate" in financial analysis, is the relationship between two or more items using a simple mathematical expression "division". In ratio analysis, we establish a mathematical relationship between financial items to reach a judgement about the companies' profitability and working condition (Akdoğan and Tenker, 2007: 640). Calculating rates is not the main purpose, the purpose is the evaluation of the calculated ratios and an appropriate comment. It is possible to calculate numerous ratios and compare them with each other in the financial statements. However what matters for business managers are ratios calculating solvency of the business, profitability, capital, efficiency, growth rate etc (Akgüç, 2002: 350).

When evaluating businesses by the calculated ratios interpretation, we should pay attention to the following points (Ceylan, 2000: 30):

Instead of calculating large number of ratios, calculate the useful ones, perform proper rate reviews, seasonal and cyclical changes should be emphasized and reflected, it should be noted that inflation may affect the rates and the information provided from various sources should be considered. Comparison with similar businesses within same industry can be done; however, when making comparisons, take into consideration different financial policies and accounting principles.

Pre and post crisis study performed by Aşıkoğlu and Ögel (2006) of İstanbul Stock Exchange (İMKB) on manufacturing companies shows how companies's reduction of the capital share in total assets and financing their assets with the foreign resources has led to a weakening of the financial structure. Especially in times of crisis where uncertainty increases and money becomes more valuable, it is difficult to find long-term and low-interest liabilities which have forced companies to finance short-term and costly foreign sources.

In their work on commercial banks operating in Turkey in terms of banks efficiency studies, Seyrek and Ata (2010) state that the basic variable is Total Loan/Total Deposits ratio and they conclude that banks with a rate more than 102.921 should be regarded as active banks.

In their mutual study; Akyüz and others (2011) examine a company operating in ceramics industry which is listed on Istanbul Stock Exchange. They find out that the results vary in each year and a linear development is suggested to be indicated for the

mentioned company, furthermore; the financial and economic decisions of the company have followed national and international economic developments.

Yılmaz, Türkmen and Çağıl (2012); in the study of Istanbul Stock Exchange, companies in the IT sector such as PKART shows best performance in the period 2007-2010. It is also seen that KAREL and ARENA has consistently shown good performances. ESCOM company despite the poor performance in the first year, improved its financial performance in recent years. In 2007; LINK had shown the lowest performance while capturing a good performance thro in 2008, again in later years low performance has been determined. While LOGO had shown good performances until 2007, after 2007 the company took place in the bottom row.

By analyzing the information technologies in Turkey; Perçin and Karakaya (2012) study companies' performance with fuzzy decision-making process and its effect on the firm's performance and value. In addition, they show the correlation between the firm's value and the performance scores, and how it can be used in investment decisions.

Pubic and private health firms are analyzed by Palamutçu (2013), they interpret the financial statements of the firms listed in this study. The analysis show firms' ability to meet its short-term foreign obligations, highlighting firms liquidity ratios. Palamutçu conclude that the liquidity situation of the analyzed hospitals is lower than the generally accepted liquidity rate.

Credit risk management and financial ratio analysis performed by Kıran (2013), analyze companies that fail to fulfill their obligatios and how it effects the affiliated companies in the same group. Kıran illustrates the effect of the defaulted firms in the consolidated balance sheet and the role of credit risk management to control the loss.

Istanbul Stock Exchange displays information about businesses operating in the field of technology. Tayyar and others (2014) consider LINK the best performing business within the period covered by the study. Considering profitability ratios as the determining criteria shows that LINK remained high levels of profitability compared to the other business, and it is seen that the low performing firms have not reached the overall desired profit level. Tayyar and others (2014) recommend companies whose financial performance in the lower and middle levels; revise financing and sales policies, evaluate rival companies to develop competitive strategies and draw a performance upon the industry average.

## 3. Data ve Methodology

The aim of this study is to perform Ratio Analysis in the 4-year period from 2010 to 2013 via the companies listed on Borsa Istanbul IT Index, the mentioned period is meant to be the "after-crisis" term. There are 14 companies in the mentioned index currently as it is shown below:

**Table 1: Companies Listed on Istanbul Stock Exchange IT Index** 

Share		Involving
Code	Share Name	Dates
	ALCATEL LUCENT	
ALCTL	TELETAȘ	03.07.2000
ANELT	ANEL TELEKOM	26.04.2006
ARENA	ARENA BİLGİSAYAR	16.11.2000
ARMDA	ARMADA BİLGİSAYAR	03.01.2011
DESPC	DESPEC BİLGİSAYAR	03.01.2011
DGATE	DATAGATE BİLGİSAYAR	03.01.2011
ESCOM	ESCORT TEKNOLOJİ	03.08.2000
INDES	İNDEKS BİLGİSAYAR	08.07.2004
KAREL	KAREL ELEKTRONİK	08.11.2006
	KRON	
KRONT	TELEKOMÜNİKASYON	27.05.2011
LINK	LİNK BİLGİSAYAR	09.11.2000
LOGO	LOGO YAZILIM	03.07.2000
NETAS	NETAŞ TELEKOM.	03.07.2000
PKART	PLASTİKKART	26.10.2009

**Source**: www.kap.gov.tr, www.borsaistanbul.com.tr

As it is seen in Table 1; 4 of the companies are added to the index in 2011 so they are excluded from the study due to their involving dates. Hence the companies analyzed in the study are indicated below in Table 2:

**Table 2: Companies Analyzed in the Study** 

Share Code	Share Name	Share Code	Share Name
	ALCATEL LUCENT		ALCATEL LUCENT
ALCTL	TELETAȘ	KAREL	TELETAŞ
ANELT	ANEL TELEKOM	LINK	ANEL TELEKOM
ARENA	ARENA BİLGİSAYAR	LOGO	ARENA BİLGİSAYAR
ESCOM	ESCORT TEKNOLOJİ	NETAS	ESCORT TEKNOLOJİ
INDES	İNDEKS BİLGİSAYAR	PKART	İNDEKS BİLGİSAYAR

Hence; the included companies existed in the index since 2010 consistently; ALCTL, ANELT, ARENA, ESCOM, INDES, KAREL, LINK, LOGO, NETAS and PKART.

Ratio analysis is the analysis of relationships between two or more items on the financial statement and financial ratios are usually expressed in percentage or times. Generally, financial ratios are calculated for the purpose of evaluating aspects of a company's operations and fall into the following categories furthermore; ratios are to be selected for Ratio Analysis as the groups; Liquidity, Leverage, Activity and Profitability ratios. Liquidity ratios measure a firm's ability to meet its current obligations, leverage ratios measure the degree of protection of suppliers of long-term funds and can also aid in judging a firm's ability to raise additional debt and its capacity to pay its liabilities on time. Additionally; Activity or Efficiency ratios provide information about management's ability to control expenses and to earn a return on the resources committed to the business and Profitability ratios measure management's ability to control expenses and to earn a return on the resources committed to the business.

Table 3: Ratio Analysis in the Study

Ratios	Ratios	Ratio Formulas
Groups		
	Current Ratio	Current Assets/Current Liabilities
Liquidity	Acid Test Ratio	(Current Assets-Average
Ratios		Inventory)/Current Liabilities
	Cash Ratio	Cash Equivalents/Current Liabilities
	Total Debts to Assets	Total Debts/Total Assets
Financial	Short Term Debts to Total	Short Term Debts/Total Assets
Leverage	Resources	
Ratios	Long Term Debts to Total	Long Term Debts/Total Assets
	Resources	
	Total Asset Turnover	Net Sales/Total Assets
	Accounts Receivable	Net Sales/Average Receivables
Efficiency	Turnover	
Ratios	Inventory Turnover	Cost of Goods Sold/Average Inventory
	Accounts Receivable	360/Accounts Receivable Turnover
	Turnover in Days	
	Inventory Turnover in Days	360/Inventory Turnover
	Net Profit Margin	Net Income/Net Sales
Profitability	Return on Equity	Net Income/Equity
Ratios	Return on Total Assets	Net Income/Total Assets

# 4. Findings

In this study we performed ratio analysis on 10 companies listed on Borsa Istanbul Index IT through the period 2010-2013, result of the ratio analysis are shown in the following tables:

**Table 4: ALCTL** 

Liquidity Ratios					
2010 2011 2012 2013					
Current Ratio	1,32	1,56	1,78	1,44	
Acid Test Ratio	1,13	1,43	1,60	1,17	
Cash Ratio	0,11	0,36	0,22	0,27	

The current ratios during the period are below the ideal ratio 2 while all the acid test ratios are above 1 which is the ideal value additionally the cash ratios are about 0,2. Therefore; these values indicate that the total current assets are not sufficient however the current assets excluding the inventories are excessing when the amount of cash and cash equivalents are nearly ideal.

Financial Leverage Ratios						
2010 2011 2012 2013						
Total Debts to Assets	0,74	0,81	0,74	0,78		
Short Term Debt to Total	0,71	0,60	0,52	0,60		
Resources						
Long Term Debt to Total	0,02	0,21	0,21	0,17		
Resources						

Total debts to assets rates for all the years are too much comparing to their ideal ratio as short term debt to total sources are extremely high while the long term debts' share is nearly ideal except the year of 2010.

Efficiency Ratio						
2010 2011 2012 2013						
Total Assets Turnover	1,26	1,21	1,57	1,39		
Accounts Receivable	2,08	2,63	2,87	2,94		
Turnover						
Inventory Turnover	8,72	14,86	14,83	8,00		
Accounts Receivable	172,99	136,79	125,05	122,29		
Turnover in Days						
Inventory Turnover in Days	41,282	24,22	24,26	44,99		

The difference between account receivable turnover in days and the inventory turnover in days is so big meaning that accounts receivable turnover rates should be higher similar to inventory turnover rates to be better.

Profitability Ratios				
	2010	2011	2012	2013

Net Profit Margin	-0,007	-0,03	0,04	-0,01
Return on Equity	-0,03	-0,24	0,27	-0,09
Return on Total Assets	-0,009	-0,04	0,07	-0,02

All the profitability ratios in the table are negative indicating that the company sells at loss except 2012.

**Table 5: ANELT** 

Liquidity Ratios					
2010 2011 2012 2013					
Current Ratio	1,02	0,83	1,33	0,81	
Acid Test Ratio	0,91	0,79	1,15	0,81	
Cash Ratio	0,08	0,25	0,17	0,06	

The current ratios are very low during the period meaning that total assets are not sufficient. The acid test ratios are about the ideal rate but cash ratios is only acceptable in the years of 2011 and 2012. Hence; short term liabilities may not be satisfied for the company.

Financial Leverage Ratios						
2010 2011 2012 2013						
Total Debts to Assets	0,82	0,86	0,63	0,71		
Short Term Debt to Total	0,51	0,40	0,18	0,23		
Resources						
Long Term Debt to Total	0,31	0,46	0,44	0,47		
Resources						

Leverage ratios are extremely high for the company during the 4-year period meaning that equities do not meet the debts. Most of the debts are in short term in 2010 hereafter the long terms' share is larger in the following years indicating the shifting.

Efficiency Ratio							
2010 2011 2012 2013							
Total Assets Turnover	0,48	0,44	0,23	0,18			
Accounts Receivable	1,51	2,92	3,10	2,37			
Turnover							
Inventory Turnover	9,78	24,49	5,75	69,07			
Accounts Receivable	237,66	122,99	115,82	151,37			
Turnover in Days							
Inventory Turnover in Days	36,80	14,69	62,51	5,21			

The activity ratios are quite volatile during the period for the company. All the turnover rates are suggested to be higher while turnover in days ratios should be lower.

# **Profitability Ratios**

	2010	2011	2012	2013
Net Profit Margin	-0,11	-0,15	-0,02	-0,41
Return on Equity	-0,32	-0,51	-0,01	-0,27
Return on Total Assets	-0,05	-0,06	-0,005	-0,07

All the proftability ratios in the table are negative showing loss through the whole period.

**Table 6: ARENA** 

Liquidity Ratios				
2010 2011 2012 2013				
Current Ratio	1,49	1,55	1,37	1,46
Acid Test Ratio	0,88	1,13	0,98	1,05
Cash Ratio	0,04	0,12	0,16	0,23

The current ratios are not acceptable; all are below the ideal ratio 2 but above 1, indicating the unsufficient current assets amount. The acid test ratios may suggested to be normal, which are between 0.88 and 1.13. The cash ratios are below the ideal ratio 0,2 except in 2013, so paying all short term liabilities may not be possible during the whole period.

Financial Leverage Ratios						
	2010 2011 2012 2013					
Total Debts to Assets	0,64	0,62	0,71	0,66		
Short Term Debt to Total	0,63	0,61	0,70	0,65		
Resources						
Long Term Debt to Total	0,01	0,01	0,002	0,008		
Resources						

Total debt to assets ratios are all above the ideal ratio as a result of extremely high short term debt ratios. Long term debts to total resources are almost zero. The company should increase the equity amount and shift the short term debts to have lower risk.

Efficiency Ratio				
	2010	2011	2012	2013
Total Assets Turnover	3,62	3,56	2,71	2,58
Accounts Receivable	7,40	6,42	4,93	5,38
Turnover				
Inventory Turnover	8,69	12,96	9,20	8,91
Accounts Receivable	48,59	55,99	72,89	66,79
Turnover in Days				
Inventory Turnover in Days	41,38	27,77	39,09	40,38

The difference between account receivable turnover in days and the inventory turnover in days is not so big, but both turnovers should be enhanced for better results.

Profitability Ratios					
2010 2011 2012 2013					
Net Profit Margin	0,02	0,02	0,01	0,03	
Return on Equity	0,23	0,28	0,11	0,27	
Return on Total Assets	0,08	0,10	0,03	0,09	

All the proftability ratios are positive. Net profit margin ratios slightly changed, reflecting stability except the year of 2012.

**Table 7: ESCOM** 

Liquidity Ratios				
2010 2011 2012 2013				
Current Ratio	0,85	1,30	1,32	1,14
Acid Test Ratio	0,66	0,89	0,95	0,90
Cash Ratio	0,02	0,01	0,05	0,03

The current ratios are quite low than 2 so the management should pay more attention to its current assets' amount while the acid test ratios are slightly below the ideal ratio 1 except in 2010, therefore we can consider them as acceptable. Additionaly; the cash ratios are extremely below than the ideal ratio, as a result the management should be concerned about the amount of total current assets including cash.

Financial Leverage Ratios					
2010 2011 2012 2013					
Total Debts to Assets	0,74	0,52	0,48	0,62	
Short Term Debt to Total	0,73	0,49	0,46	0,61	
Resources					
Long Term Debt to Total	0,002	0,03	0,01	0,01	
Resources					

All the short term debts to total resources ratios are quite above the ideal ratio but long term debt to total resources are extremely low. As a result the leverage ratios are extremely high through the short term debts and the company is in trouble.

Efficiency Ratio				
2010 2011 2012 2013				
Total Assets Turnover	0,69	1,76	1,71	1,63
Accounts Receivable Turnover	1,73	5,31	4,50	4,95
Inventory Turnover	4,49	7,69	8,88	9,86
Accounts Receivable Turnover	207,36	67,79	79,98	72,68

in Days				
Inventory Turnover in Days	80,13	46,76	40,51	36,48

Inventory turnover in days is lower than the receivables turnover in days but for higher efficiency, both inventory and receivable's turnover ratios should be increased.

Profitability Ratios				
2010 2011 2012 2013				
Net Profit Margin	0,01	-0,008	0,02	-0,02
Return on Equity	0,03	-0,03	0,07	-0,10
Return on Total Assets	0,01	-0,01	0,03	-0,04

The proftability ratios are positive in 2010 and 2012 whereas they are negative in 2011 and 2013. Net profit margin is flactuating between loss and gain.

**Table 8: INDES** 

Liquidity Ratios				
2010 2011 2012 2013				
Current Ratio	1,23	1,24	1,21	1,17
Acid Test Ratio	0,92	1,02	0,96	0,93
Cash Ratio	0,06	0,13	0,10	0,12

The current ratios are below the ideal ratio 2 but above 1, so there exists no critical situation. The acid test ratios are slightly below the ideal ratio being 1 except 2011, that those are acceptable. The cash ratios are quite below than 0,2 during the period hence it is prefferable to increase cash and cash equivalents with total current assets.

Financial Leverage Ratios						
	2010 2011 2012 2013					
Total Debts to Assets	0,77	0,78	0,78	0,80		
Short Term Debt to Total	0,75	0,76	0,77	0,79		
Resources						
Long Term Debt to Total	0,01	0,02	0,01	0,008		
Resources						

He leverage rates are extremely high indicating that equities are not able to meet the debts moreover nearly all of them are in short term.

Efficiency Ratio				
	2010	2011	2012	2013
Total Assets Turnover	2,28	2,39	2,07	2,14
Accounts Receivable Turnover	3,89	3,75	3,43	3,61
Inventory Turnover	9,05	13,60	9,90	10,40
Accounts Receivable Turnover	92,38	95,89	104,88	99,69
in Days				
Inventory Turnover in Days	39,73	26,46	36,34	34,60

The turnover rates should be increased while accounts receivable and inventory turnover values must be similar.

Profitability Ratios					
2010 2011 2012 2013					
Net Profit Margin	0,01	0,01	0,006	0,01	
Return on Equity	0,11	0,15	0,06	0,15	
Return on Total Assets	0,02	0,03	0,01	0,03	

All the profitability ratios in the table are positive consequently it is better comparing to the other companies above.

**Table 9: KAREL** 

Liquidity Ratios				
2010 2011 2012 2013				
Current Ratio	1,99	2,12	2,08	1,74
Acid Test Ratio	1,63	1,37	1,42	1,21
Cash Ratio	1,03	0,43	0,65	0,53

The current ratios are around the ideal ratio 2 so these ratios are normal. The acid test ratios are above the ideal ratio 1 which is very good. The cash ratios are all above the ideal ratio 0,2, hence no problem at all.

Financial Leverage Ratios					
2010 2011 2012 2013					
Total Debts to Assets	0,56	0,39	0,43	0,46	
Short Term Debt to Total	0,41	0,34	0,35	0,41	
Resources					
Long Term Debt to Total	0,14	0,05	0,08	0,05	
Resources					

Total debts to asset are all below the ideal ratio. Whereas short term debts to total resources are high and long term debts to total resources are low.

Efficiency Ratio					
2010 2011 2012 2013					
Total Assets Turnover	0,52	0,71	0,69	0,64	
Accounts Receivable Turnover	2,27	2,46	2,72	2,42	
Inventory Turnover	2,56	2,10	2,32	2,17	
Accounts Receivable Turnover	157,92	145,96	132,04	148,20	
in Days					
Inventory Turnover in Days	140,61	170,75	155,07	165,33	

The difference between account receivable turnover in days and the inventory turnover in days is normal.

# **Profitability Ratios**

	2010	2011	2012	2013
Net Profit Margin	0,14	0,07	0,07	0,07
Return on Equity	0,17	0,09	0,09	0,09
Return on Total Assets	0,07	0,05	0,05	0,04

All the proftability ratios in the table are all positive, we have a gain through the whole period.

Table 10: LINK

Liquidity Ratios				
2010 2011 2012 2013				
Current Ratio	16,17	18,62	16,17	9,78
Acid Test Ratio	16,17	18,62	16,17	9,77
Cash Ratio	14,15	17,38	14,17	7,54

All the liquidity ratios of the company are extra ordinary high; they are all about its cash ratios because the company has no inventory during the first three years. Nearly all the assets are cash and cash equivalents due to its different nature.

Financial Leverage Ratios						
	2010 2011 2012 2013					
Total Debts to Assets	0,06	0,05	0,06	0,09		
Short Term Debt to Total	0,04	0,04	0,04	0,07		
Resources						
Long Term Debt to Total	0,01	0,01	0,01	0,01		
Resources						

In this table there is almost no debt because there is no inventory Exchange. In addition nearly all the debts are short term debts.

Efficiency Ratio					
2010 2011 2012 2013					
Total Assets Turnover	0,25	0,21	0,25	0,40	
Accounts Receivable Turnover	3,17	4,48	3,07	2,39	
Inventory Turnover	622394	513795	622394	111,77	
Accounts Receivable Turnover	113,22	80,34	117,13	150,56	
in Days					
Inventory Turnover in Days	0,0005	0,0007	0,0005	3,22	

The difference between account receivable turnover in days and the inventory turnover in days is huge due to the business nature. Inventory does not exist in order to be turn overed.

Profitability Ratios				
2010 2011 2012 2013				
<b>Net Profit Margin</b> -0,34 2,49 -0,34 0,17				

Return on Equity	-0,09	0,56	-0,09	0,07
Return on Total Assets	-0,08	0,53	-0,08	0,07

The proftability ratios are negative in 2010 and 2012 whereas they are positive in 2011 and 2013. Net profit margin is flactuating between loss and gain.

**Table 11: LOGO** 

Liquidity Ratios				
2010 2011 2012 2013				
Current Ratio	2,53	2,10	2,22	1,87
Acid Test Ratio	2,50	2,08	2,21	1,86
Cash Ratio	1,02	0,58	0,70	0,49

The current ratios are high except 2013. The acid test ratios are above the ideal ratio 1 and the cash ratios quite higher than the norm. As a result the companies liquidity is not suggested to be bad.

Financial Leverage Ratios					
2010 2011 2012 2013					
Total Debts to Assets	0,15	0,31	0,32	0,52	
Short Term Debt to Total	0,12	0,17	0,22	0,31	
Resources					
Long Term Debt to Total	0,03	0,13	0,10	0,21	
Resources					

Short term debt to total sources and long term debts to total sources are all lower than the ideal ratio like the leverage ratios only 2013's debts are thought to be ideal.

Efficiency Ratio				
	2010	2011	2012	2013
Total Assets Turnover	0,55	0,62	0,73	0,56
Accounts Receivable Turnover	3,13	2,43	2,26	1,33
Inventory Turnover	6,03	6,43	12,06	20,28
Accounts Receivable Turnover	114,65	147,79	158,97	268,89
in Days				
Inventory Turnover in Days	59,68	55,90	29,83	17,75

The activity ratios are not suggested to be efficient in total besides the difference between account receivable turnover in days and the inventory turnover in days is so big. Hence inventory turnover rates should be higher similar to account receivables turnover rates to be better.

Profitability Ratios					
2010 2011 2012 2013					
<b>Net Profit Margin</b> -0,02 0,10 0,23 0,27					
Return on Equity	-0,01	0,09	0,25	0,32	

Return on Total Assets	-0,01	0,06	0,16	0,15
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All the proftability ratios in the table are positive except in 2010. Gradual increase in profitability is seen through the given period.

**Table 12: NETAS** 

Liquidity Ratios				
2010 2011 2012 2013				
Current Ratio	2,44	1,71	1,94	1,42
Acid Test Ratio	2,24	1,50	1,80	1,29
Cash Ratio	0,88	0,15	0,38	0,08

The current ratios of the company is volatile whereas it is suggested to be ideal in 2012 besides all the acid test ratios are quite high and all the cash ratios are extremely high except 2011.

Financial Leverage Ratios					
2010 2011 2012 201					
Total Debts to Assets	0,27	0,34	0,48	0,62	
Short Term Debt to Total	0,24	0,31	0,45	0,59	
Resources					
Long Term Debt to Total	0,02	0,03	0,03	0,03	
Resources					

Total debts to assets are lower than the ideal ratio except in 2013 it is higher. All long term debts to total resources are almost zero but in 2012 short term debts to total resources grew sharply reaching 0.59 in 2013 which results in above the ideal leverage ratio.

Efficiency Ratio					
	2010	2011	2012	2013	
Total Assets Turnover	0,66	0,61	0,91	0,81	
Accounts Receivable Turnover	2,48	1,77	1,76	1,34	
Inventory Turnover	12,13	7,80	12,84	9,57	
Accounts Receivable Turnover	144,91	203,05	204,15	267,39	
in Days					
Inventory Turnover in Days	29,65	46,10	28,01	37,60	

The inventory turnover in days is preffered to be higher and level the receivable turnover in days for a better performance.

Profitability Ratios					
2010 2011 2012 2013					
Net Profit Margin	0,31	0,23	0,004	0,08	
Return on Equity 0,28 0,22 0,008 0,17					
Return on Total Assets	0,20	0,14	0,004	0,06	

All the profitability rates are positive in the table but it must be noticed that in 2012 the rates are dropped almost to zero additionally the rates are declining throughout the period.

**Table 13: PKART** 

Liquidity Ratios					
2010 2011 2012 2013					
Current Ratio	8,89	9,50	10,45	8,39	
Acid Test Ratio	5,71	6,17	7,30	5,82	
Cash Ratio	2,64	3,32	3,98	3,75	

The liquidity ratios are all way above their ideal value which may indicate that current assets and its components are unsufficiently used.

Financial Leverage Ratios						
	2010 2011 2012 2013					
Total Debts to Assets	0,15	0,14	0,10	0,10		
Short Term Debt to Total	0,06	0,06	0,06	0,08		
Resources						
Long Term Debt to Total	0,08	0,07	0,04	0,01		
Resources						

Total debts to assets are much lower than the ideal due to very low long and short term debts due to companies nature.

Efficiency Ratio					
	2010	2011	2012	2013	
Total Assets Turnover	1,29	1,76	1,93	1,75	
Accounts Receivable Turnover	7,03	10,53	9,06	10,50	
Inventory Turnover	5,35	6,90	8,06	6,79	
Accounts Receivable Turnover	51,16	34,15	39,71	34,28	
in Days					
Inventory Turnover in Days	67,22	52,11	44,62	52,95	

The difference between account receivable turnover in days and the inventory turnover in days is small. If both turnovers were higher, more efficiency would be achieved.

Profitability Ratios					
2010 2011 2012 2013					
Net Profit Margin	0,006	0,03	0,03	0,03	
<b>Return on Equity</b> 0,009 0,07 0,06 0,07					
Return on Total Assets	0,008	0,06	0,06	0,06	

All the proftability ratios in the table are all positive and slighty change along the given period except in 2010 we nearly have no profitability then.

#### 5. Conclusion

After performing ratio analysis on 10 companies listed on Istanbul Stock Exchange IT Index for the period of 2010-2013, following results are observed:

Within liquidity ratios; Current Ratios are below while Acid Test Ratios are above the ideal ratio in general whereas Cash Ratios are fluctuating above and below the ideal rate. Also it is noticed that LINK and KAREL showed extremely high liquidity ratios due to their business nature. As a result; companies should be more concerned about increasing their current assets and arranging the components to meet their obligations. Financial structure analyses show that Long Term Debts to Total Resources ratios are usually below the ideal rate on the other hand Total Debts to Total Resources and the Short Term Debts to Total Resources are generally higher than the expected value. Consequently, the higher rates of short term debts lifted Total Debts to Total Assets Ratio. LINK and PKART are exceptions with extremely low debts, close to zero. According to these ratios, it is prefferable to control short term debts and head towards long term debts.

Talking about efficiency ratios, Accounts Receivable Turnover in Days are bigger then Inventory Turnover in Days except in KAREL and PKART. These results highlights the need to rearrange the businesses' inventory cycle to increase the efficiency.

Coming to profotability ratios, LOGO recorded a gradual increase in its profitability ratios throughout the analyzed period. PKART and KAREL's profitability ratios are all positive and show stability. Additionally; the volatility of LINK's profitability ratios is highlighted, recording negative profitability ratios in 2010, the ratios jumped extremely high ones in 2011, to fall down again in 2012 to exactly the same results of 2010, finally to rise again in 2013 all positive ratios.

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