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## The Evaluation of Working Capital in Airline Companies Which Proceed in Bist

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*Abstract. The working capital like cash and liquid assets runs the facilities and supports daily activities of firms. This kind of capital is essential to continuity of activities, increase of volume, maintain credibility, reduce impacts of risks and to overcome with extraordinary situation. The working capital management is very important for making profits from activities, especially for dynamic sectors like aviation. The aviation industry which airline companies operate is a very dynamic sector. In this sector working capital has to be managed very professionally and carefully by airline companies. This study aims to assess the airline companies' working capital in terms of effectiveness. Airline companies which shares traded on BIST will be sample of this study.*

**Keywords:** Working capital, airline companies, BIST.

**Jel Codes:** G14, G19

### 1. Introduction

The working capital which managers focused on its importance and try to manage successfully has become an important concept for all corporations, because a management's success or failure is evaluated with the activity of working capital.

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Making profit is located among prior targets of all corporations. They are planning all their activities to gain this goal. But, managements are not acting in a stable environment. In a becoming global world economy, corporations try to adapt changing and developing conditions. Therefore, they have to manage and finance the activities very well to obtain their objectives. Even though the conditions are difficult, the corporations can achieve their goals and take leading positions on the market with an effective management of working capital.

## 2. The Concept of Working Capital

The corporations give special attention to the fixed assets during the installation phase. They make the investments which needed to complete installation activities, regarding to the characteristics of the products or services they will offer. After completion of the installation process, they switch to the production of goods or services and want to make the business work. From the moment of business started, corporations need working capital in order to continue their activities at every stage.

For corporations, the working capital is essential for continuity of activities, maintaining the highest performance, increasing the production volume, keeping the credibility steady, reducing impacts of risks and dealing with the extraordinary situations. (Akgüç, 1998: 201).

The elements of working capital are located under named current assets such as; liquid assets (cash, banks, etc.), marketable securities which can be converted to cash at any time (share certificates, bonds, etc.), short term receivables (customers, notes receivables, etc.), inventories (products, raw materials etc.) and prepaid expenses (Aydın and others, 2004: 116).

### 2.1 The Importance of Working Capital Management

The working capital management is essential for all corporations (no matter which size) to survive and develop. It includes the policies about current assets investments and payments of liabilities during one year period. Due to the importance of the working capital management for corporations, the managers spend a lot of time to deal with it (Baghiyan, 2013: 13) but, it is possible to increase liquidity and profitability through a successful working capital management. Thus, the time spent can be recovered (Rehn, 2012: 6).

The working capital management provides managers to keep the investments in balance between liquid assets which can convert into cash in one year and fixed assets which will stay more than one year (Çelik ve Boyacıoğlu, 2013: 81). The administrators manage working capital very cautiously. Because it can be vary depending on; the size of the investments in current assets, increases in the business volume, incurred risks and desired profits. The decisions can lead the market value through positive or negative directions (Akgüç, 1998: 204-205). For example, investments in working capital (current assets) more than needed, increase financing costs.

Especially financial resources which obtained from liabilities increase financing costs because of the interest payments. Financing with shareholders equity may be deprived from incomes which come from other using areas of equities. Therefore, keeping a high amount of working capital may affect profitability



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negatively. If working capital is less than required, causes disruption of production due to lack of raw materials, products in stock and cash. Because of corporation cannot operate at full capacity, costs of the product may increase and profit may decreases. The orders may not be delivered in time. This situation has some consequences such as loss of customers and reputation. The risk of not being paid on maturity of the liabilities may also arise. For this reasons, institutions like banks or vendors, and investors who will receive company's stocks or bonds are engaged in business-related assessments to scrutinize the adequacy of working capital (Aydin and others, 2004: 116-118).

The business success is obtained by managing effectively the main items of working capital such as cash, receivables, and inventories. Because of the working capital directly affects the liquidity and profitability, it carries as a key feature for finance and accounting department (Ammons and others, 2012: 12).

However, the working capital management should consider not only these departments' but also the entire organization's characteristics and needs. Administrators should be informed about current issues constantly during the production, and educated about new technologies and developments. The research should be done on finding new resources. In addition, through regular and timely payments it is possible that making low cost sale agreements with suppliers for new orders, with the new low costs higher profits can be possible. Inventories should be exactly what the business needs, should not be incomplete or more than necessary. In collecting receivables facilitating and encouraging recommendations should be presented for customers (Bartram, 2013: 42-43). Through these and similar applications, changing liquidity and profitability ratios in a positive way is possible with increasing the effectiveness and efficiency of working capital.

## 2.2 Working Capital Policies

Due to directly effects on company's financial structure, various approaches have been developed on financing strategies of working capital, such as; conservative, aggressive and moderate working capital policies (Apak ve Demirel, 2013: 216).

In aggressive working capital policy, less current assets investments are made, liquidity is kept at low level, and high profitability is targeted by taking higher risks. Long term assets are financed with long term liabilities, current assets are financed with short term liabilities. Current ratio is less than 1. In conservative working capital policy, more current assets investments are made, liquidity is kept at high level, and profitability is targeted by taking lower risks. Equities and long term liabilities are preferred for working capital financing. The risk and profitability are low; cost is high in this financing form. Current ratio is more than 2. In moderate working capital policy, managers identify a target level in the middle of the other strategies, and stay at this "optimum" level. Current ratio is between 1 and 2 (Aydin and others, 2004: 118-121).



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### 3. Literature Review

The various studies have been made in literature in order to identify relationship between working capital management and profitability.

In a study conducted by Lizaridis and Tryfonidis (2006), the data of 131 firms which traded on the Athens Stock Exchange, between years 2001-2004, were evaluated. It is stated that corporations held the optimum level of working capital items can increase profitability.

In another study conducted by Coşkun and Kök (2001), relationships between profitability and working capital policies in 74 companies, which traded on Istanbul Stock Exchange between years 1991-2005, were examined. According to this study, if the inventory and receivables collection period are reduced, and the debt payment period is increased, the aggressive working capital policy could increase the firm's profitability.

A study by Şahin (2011), the data of 140 companies between the years of 2005-2010 in the Turkish manufacturing sector and listed on the Istanbul Stock Exchange were analyzed that based on the working capital policy. Especially, the years of 2008-2010 were assessed as crises period and the crisis factors were included in the analysis. According to this study, whether or not in period of crisis in manufacturing sector, it was evaluated that increasing the business performance by conservative working capital is possible.

Another study by Aygün (2012), 107 companies' data between years 2000-2009 in the Turkish manufacturing sector and listed on the Istanbul Stock Exchange were examined. The impact of working capital on business performance was analyzed in this study. It is identified that the long cash conversion cycle of the firms can reduce the profitability and performance. The author expressed that managers who want to increase profitability should lessen the cash conversion period.

The study by Muhammad and his colleagues (2012) based on 25 textile companies which traded in Pakistan's Karachi Stock Exchange between 2001- 2006. It is stated that there is a positive relation between profitability and accounts receivable and negative relation between profitability and liabilities. Additionally, the raises in cash, inventories and receivables increase the profitability of the companies. Therefore, effective working capital management could increase the profitability.

Poyraz (2012) studied the impacts of working capital on profitability. He examined data of a firm which is operating in banking sector between 1998-2011 years. As a result of conducted analysis, it is identified that changes in short-term liabilities payments effect on the profitability of firm. A moderate working capital policy is useful for firms in banking sector to stay away from risky transactions.

In another study conducted by Saldanlı (2012), relationships between profitability and working capital policies in manufacturing sector companies, which traded on Istanbul Stock Exchange, were examined. As a result of this study, the optimum working capital should be low enough to not reduce profitability, but should be high enough to maintaining activities without any problems.



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In a study conducted by Baghiyan (2013), the data of 134 companies from 2005 to 2011, were evaluated. It is stated that there is a meaningful relationship between working capital management and business performance, and evaluated that the selection of aggressive working capital policy can contribute to the development of business.

Another study conducted by Caballero and his colleagues (2014) based on companies in UK, indicates that optimal working capital policy has a significant effect on companies. It increases market value of the firms by balancing their revenues and costs.

According to obtained results from literature review, most of the researchers found similar results and conclusion that there is a meaningful correlation between working capital and profitability. The changes in working capital directly effect on profitability. Managers should take into consideration this fact while they are making decision and producing policy on working capital.

#### **4. Study Purpose, Scope and Method**

The findings of existing studies in the literature review demonstrate that working capital has an important impact on the profitability. The conducted data of researches on these analyses were generally preferred companies from manufacturing sector. However, the airline companies (THY & Pegasus) in the service industry were preferred for this study to obtain appropriate and meaningful data.

Airline companies are operating in a very dynamic sector. They are affected very quickly by economic crises and terrorist incidents. Especially, terrorist attacks such as Gulf crisis, and September 11<sup>th</sup> in U.S. Furthermore, increases in fuel prices all over the world increase constantly the cost of airline companies (Morrell, 2007:1). Because of high costs, the working capital must be managed carefully and professionally in order to sustain its operations, to overcome the effects of crisis without trouble and to gain profit.

The relation between working capital and profitability of Turkish Airlines Inc. and Pegasus Airlines Inc. which are traded in Istanbul Stock Exchange (BIST) are examined in this research. The data was obtained from the financial statements between the years 2009-2013. It was desired to measure the liquidity of corporations by using current ratio (%), acid test ratio and cash ratio (%). The accounts receivable turnover (days), inventory turnover (days), net working capital turnover rate, and return on assets indicators were used to measure the effectiveness of the working capital management.

##### **4.1 The Ratios Used**

The ratios and formulas, which are used in this study to measure the efficiency of liquidity and working capital management, are mentioned on following paragraphs. (Akgüç, 1998: 28-59), (Türko, 1999: 104-114), (Ercan ve Ban, 2005: 37-47):

- Current Ratio: It shows the ability to pay short-term liabilities with current assets of the business. It is the ratio that indicates whether having adequacy for sustaining its operations or not, in case of



unexpected situations occurs. It is desirable that the ratio is 2:1. However, this ratio is close to 1.5:1 in developing countries because liquidity is not too high. Therefore, it is considered sufficient.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Short Term Liabilities}}$$

- **Acid Test Ratio:** It shows the ability to pay short-term liabilities with current assets but without inventories. Usually 1:1 is better for the companies but below 1:1 is also acceptable because of the economic conditions.

$$\text{Acid Test Ratio} = \frac{\text{Current Assets - Inventories}}{\text{Short Term Liabilities}}$$

- **Cash Ratio:** It points out the ability to pay short term liabilities when the sales stop, receivables not collect.

$$\text{Cash Ratio (\%)} = \frac{\text{Liquid Assets + Marketable Securities}}{\text{Short Term Liabilities}} \times 100$$

- **Accounts Receivable Turnover:** It shows the ability of collecting debts of the business. A high ratio is wanted. But, a low accounts receivable turnover in days is desirable.

$$\text{A.R. Turnover} = \frac{\text{Net Sales}}{\text{Average Accounts Receivable}} \quad \text{A.R. Turnover (Days)} = \frac{365}{\text{A.R. Turnover}}$$

- **Inventory Turnover:** It shows how effective companies' inventories. The time of conversion into cash is calculated by 365 days divided by inventory turnover.

$$\text{Inventory Turnover} = \frac{\text{Cost of the Sales}}{\text{Average Inventory}} \quad \text{Inventory Turnover (Days)} = \frac{365}{\text{Inventory Turnover}}$$



- Net Working Capital Turnover: This ratio is used to evaluate the working capital efficiency. A high rate is desirable.

$$\text{Net Working Capital Turnover} = \frac{\text{Net Sales}}{\text{Average Working Capital}}$$

- Return on Assets: This ratio reflects the company's efficiency at using the assets to generate earnings.

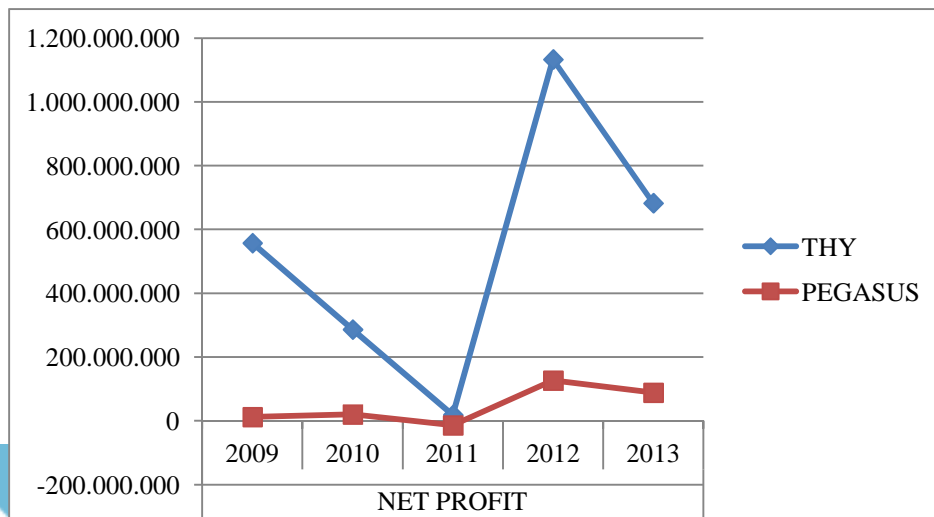
$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Average Total Assets}} \times 100$$

## 5. The Analysis and Comments

This study is based on the financial statements of the Turkish Airlines and Pegasus Airlines Inc.'s, which are traded at Istanbul Stock Exchange (BIST), between 2009 and 2013 (five years).

Graphics on the basis of the net profit of the airlines are generated as follows:

	NET PROFIT				
	2009	2010	2011	2012	2013
<b>THY</b>	557,506,884	286,443,361	18,516,632	1,133,367,233	682,707,427
<b>PEGASUS</b>	12,102,999	20,237,310	-14,085,900	126,303,516	88,312,006





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When analyzing the graph of the net profit, there can be seen similar fluctuations. It can be demonstrated as a reason that the aviation industry operates worldwide and all kinds of global crisis can affect the sector. Especially in 2011, it was observed that airlines were affected significantly from the economic crisis, which affects the whole world. However, the effects of this crisis are reduced in subsequent years and increase the profitability of the businesses with sales that are seen.

In terms of the profitability of corporations, to measure the efficiency of the working capital; the current ratio, acid test ratio, cash ratio, accounts receivable turnover (days), inventory turnover (days), net working capital turnover and return on assets are calculated from the financial statements. The tables are obtained from the calculated data in order to evaluate the effectiveness of the working capital.

	TURKISH AIRLINES				
	2009	2010	2011	2012	2013
<b>Current Ratio</b>	1,44	1,37	1,03	0,86	0,68
<b>Acid Test Ratio</b>	1,36	1,31	0,97	0,80	0,63
<b>Cash Ratio (%)</b>	56,23	32,03	39,21	29,90	20,13
<b>Accounts Receivable Turnover (Days)</b>	21	22	21	19	19
<b>Inventory Turnover (Days)</b>	9	9	8	8	7
<b>Net Working Capital Turnover</b>	7,74	9,35	22,02	-54,96	-13,57
<b>Return on Assets (%)</b>	6,50	2,69	0,11	6,03	2,69

	PEGASUS AIRLINES				
	2009	2010	2011	2012	2013
<b>Current Ratio</b>	0,25	0,28	0,36	0,63	1,76
<b>Acid Test Ratio</b>	0,25	0,28	0,35	0,63	1,75
<b>Cash Ratio (%)</b>	2,57	12,61	3,51	39,06	129,49
<b>Accounts Receivable Turnover (Days)</b>	12	9	12	12	18
<b>Inventory Turnover (Days)</b>	0,1	0,1	0,1	0,3	0,6
<b>Net Working Capital Turnover</b>	-7,21	-4,20	-4,63	-6,88	15,26
<b>Return on Assets (%)</b>	1,76	1,64	-0,77	3,61	2,52





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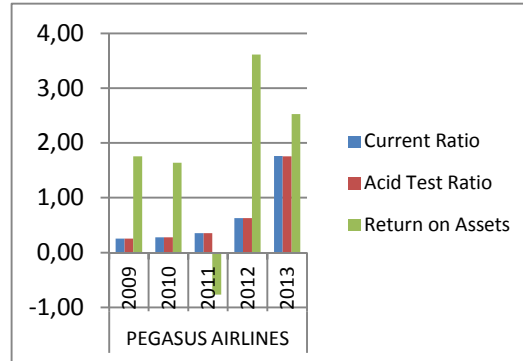
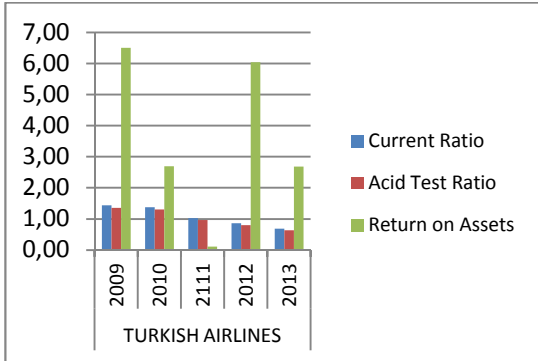
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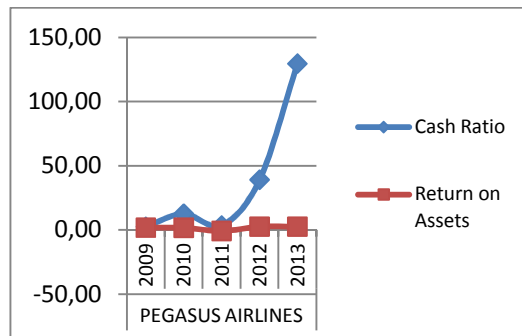
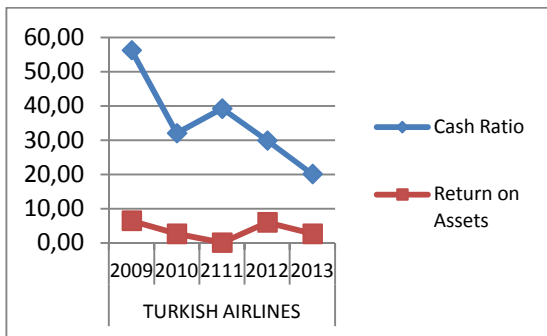
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### Current Ratio and Acid Test Ratio:



When considering the current ratio and acid-test ratio, THY has a declining trend and there is an increasing trend for Pegasus. The reason of decreasing trend in the return on assets ratio of THY is the increasing rate of short term liabilities is higher than current assets. In view of Pegasus, current assets growth rate is faster than short-term liabilities. The current ratios are less than 2 for both companies. It shows that aggressive working capital policy is applied. Considering the high costs to be effective in the aviation industry, both of the company's working capital management is considered efficient and companies can maintain the activities without experiencing any debt payment difficulties.

### Cash Ratio:



Analyzing the graphs, the cash ratio of Turkish Airlines (THY) is descending, on the other hand, shows the increasing trend for the Pegasus. It is interesting that the cash ratio of both companies was over 20% in years, the aviation industry obtains loans from banks in order to meet the high cost due to the fact that high cash ratio has been evaluated and accepted as ordinary.

It is pointed out that THY carried out the optimum ratio of cash in 2013. The high cash rate (129.49%) of Pegasus in 2013 is related to the public offering during the year as to be thought. When considering cash ratio on the basis of 2013, in case of unable to make sales and collect receivables for both companies, it was assessed that they have ability to pay short-term liabilities.



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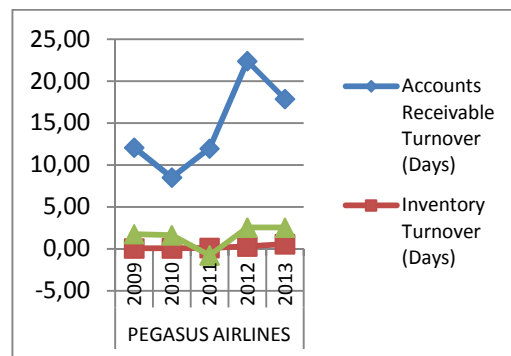
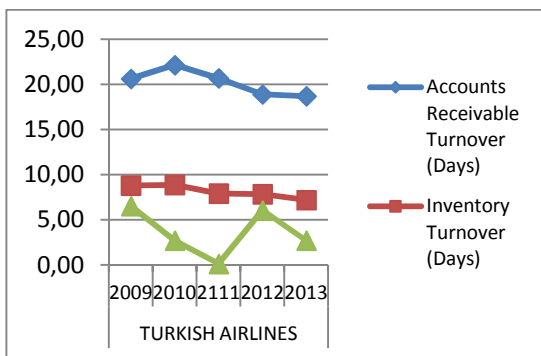
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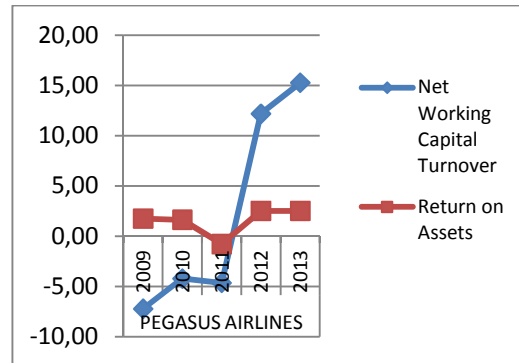
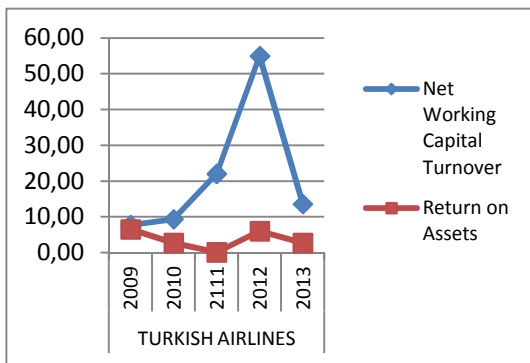
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### Accounts Receivable Turnover and Inventory Turnover:



It is seen that the accounts receivable turnover in days of two airline companies did not exceed; 22 days for THY and 18 days for Pegasus. This is an indication that the accounts receivable are managed with great manner. As the number of days of inventory turnover rate is low, this is a requirement of a service sector. Both companies are kept in stock in small quantities and immediately involved in the production.

### Net Working Capital Turnover:



When the graphs were analyzed in terms of net working capital turnover rate of THY, there is an increase until 2011, decrease in 2012 and then later appears an upward trend in 2013 over again. Similar evaluation was revealed for the Pegasus, the working capital turnover rate is increasing until 2011, declining slightly in 2011 and then again appearing an increasing trend. The increasing sales are considered that the cause of upward trend. However, the negative values took part in the net working capital turnover rates of both companies; it indicates that the short-term liabilities of companies are higher than current assets. This point out that the long term assets of companies are financed with the short-term liabilities

The negative value of the net working capital shows the liquidity problem that come into prominence. However, the current ratio and the acid test ratio point out that these companies do not have debt payment difficulty. Therefore, even during periods of net working capital is negative; these companies



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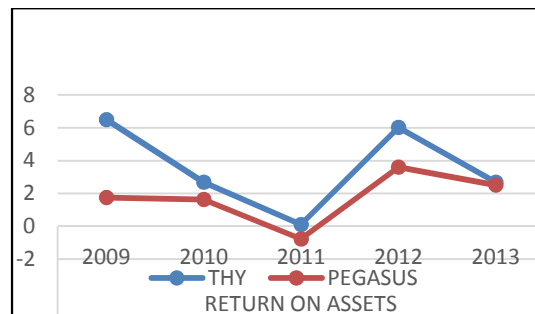
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could not face with liquidity problem because of the upward trend of ticket sales, and the short collection time of receivables.

### **Return on Assets:**



When analyzing the return on assets ratios, in both companies it decreased from 2009 to 2011, increased from 2011 to 2012 and seemed to a descending trend from 2012 to 2013 again. A similar trend is seen through different rates for both companies. Being in a dynamic structure like the aviation industry; the negative impact of economic crisis on sales, costs of personnel salaries, high fuel costs that are considered as influence of reducing the profitability. Giving the impression of this perspective, lower return on assets rate indicates that profit from the current assets is not too high. It is noticeable that accounts receivable turnover ratio and net working capital turnover is negatively associated with each other.

## **6. Conclusion**

The working capital has an important role in sustaining company's activities if it is managed effectively, that increases the profitability of the business and makes a positive impact. Airline companies which operate in the aviation industry, cope with changing economic conditions by effective working capital management policies.

In this study, the financial statements, between years 2009-2013, of two airline companies (Turkish Airlines and Pegasus Airlines) which traded on Istanbul Stock Exchange were studied. The working capital efficiency was evaluated by calculating current ratio, acid test ratio, cash ratio (%), accounts receivables turnover (days), inventory turnover (days), net working capital turnover rate, and return on assets.

As worldwide operating airline companies, Turkish Airlines and Pegasus Airlines had overcome the significant impacts of 2011 economic crisis which were felt all over the world (even THY makes profit), in following years, they succeeded in sustaining their profitability. According to the evaluated analysis, these companies managed working capital effectively and indicated a tendency to increase their profitability. These companies have high credibility in the market, and taken part in BIST with reliability that already taken attention.



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## 7. References

- [1] Akgüç, Öztin. 1998, *Finansal Yönetim*, İstanbul: Avcıol Basım-Yayın.
- [2] Ammons, Janice L. Martin L. Gosman. 2012, "Cautions When Using Working Capital Metrics to Assess Firms' Financial Health", *Journal of the International Academy for Case Studies*, V.18, N.3, pp.11-14.
- [3] Apak, Sudi. Engin Demirel. 2013, *Finansal Yönetim Cilt 2: Finansal Tablolar Analizi ve Yatırım Yönetimi*, İstanbul: Papatya Yayıncılık.
- [4] Aydın, Nurhan. Coşkun, Metin. Bakır, Hasan. Ceylan, Ali. Başar, Mehmet. 2004, *Finansal Yönetim*, Eskişehir: Anadolu Üniversitesi Yayınları.
- [5] Aygün, Mehmet. 2012, "Firma Performansı Üzerinde Çalışma Sermayesinin Etkisi: Türk İmalat Sektörü Üzerine Bir Uygulama", *Ege Akademik Bakış*, V.12, pp.215-223.
- [6] Baghiyan, Fatemeh. 2013, "The Impact of Working Capital Management on Management Performance." *Journal of Behavioural Economics Finance Entrepreneurship Accounting and Transport*, V:1(1), pp.13-14.
- [7] Bartram, Peter. 2013, "8 Ways to Improve Working Capital", *Financial Management*, July/August 2013, pp.42-43.
- [8] Caballero, Sonia Banos. Pedro J. Garcia Teruel. Pedro Martinez Solano. 2014, "Working Capital Management, Corporate Performance and Financial Constraints", *Journal of Business Research*, V.67 (3), pp:332-338.
- [9] Coşkun, Ender. Dündar Kök. 2011, "Çalışma Sermayesi Politikalarının Karlılık Üzerine Etkisi: Dinamik Panel Uygulaması", *Ege Akademik Bakış*, V.11, pp.75-85.
- [10] Çelik, İsmail. Namıka Boyacıoğlu. 2013, "The Impact of Fixed Assets Expenditures On Working Capital Management: An Application On Manufacturing Cooperations In Istanbul Stock Exchange", *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, Y.1, V:17 pp.81-99.
- [11] Ercan, Metin. Ünsal Ban. 2005, *Değere Dayalı İşletme Finansı*, *Finansal Yönetim*, Ankara: Gazi Kitabevi.
- [12] Garanti Bankası, Report Para Garanti, "Mali Tablolar",  
Source: [http://report.paragaranti.com/malitable/MaliTablolar\\_3.aspx?hisse=PGSUS](http://report.paragaranti.com/malitable/MaliTablolar_3.aspx?hisse=PGSUS) (Accessed on: 28 March 2014).
- [13] Kamuyu Aydınlatma Platformu (KAP), "Finansal Tablolar", Kaynak: <http://www.kap.gov.tr/> (Accessed on: 28 March 2014).
- [14] Lazaridis, Ioannis. Tryfonidis, Dimitrios. 2006, "Relationship Between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange", *Journal of Financial Management and Analysis*, V.19(1), pp.26-35.
- [15] Morrell, Peter. 2007, *Airline Finance*, Oxon: Ashgate Publishing.



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e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

- [16] Muhammad, Malik. Wasseem Ullah Jan. Kifayat Ullah. 2012, "Working Capital Management and Profitability an Analysis of Firms of Textile Industry of Pakistan", *Journal of Managerial Sciences*, V. 6 N. 2, pp.155-165.
- [17] Poyraz, Erkan. 2012, "İşletme Sermayesi Finanslama Stratejilerinin Karlılık Oranları Üzerindeki Etkisi (Akbank T.A.Ş. Uygulaması)", *Dokuz Eylül Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, V:27, N.1, pp.47-56.
- [18] Rehn, Eric. 2012, *Effects of Working Capital Management on Company Profitability*, Helsinki: Department of Accounting Hanken School of Economics.
- [19] Saldanlı, Arif. 2012, "Likidite ve Karlılık Arasındaki İlişki-İMKB 10 İmalat Sektörü Üzerine Ampirik Bir Çalışma", *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* V.16 (2), pp.167-176.
- [20] Şahin, Osman. 2011, "İMKB'ye Kayıtlı İmalat Şirketlerinde Çalışma Sermayesi Politikaları ve Firma Performans İlişkileri", *EskişehirOsmangazi Üniversitesi İİBF Dergisi*, V.6(2), pp.123-141.
- [21] Türko, R.Metin. 1999, *Finansal Yönetim*, İstanbul: Alfa Basım Yayım Dağıtım.  
[http://report.paragaranti.com/malitable/MaliTablolar\\_3.aspx?hisse=PGSUS](http://report.paragaranti.com/malitable/MaliTablolar_3.aspx?hisse=PGSUS) (Accessed on: 28 March 2014).  
<http://www.kap.gov.tr/> (Accessed on: 28 March 2014).

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