ANALYSIS OF DISCLOSURES ABOUT RISK MANAGEMENT AND RISK MEASURES WITHIN THE ANNUAL REPORTS OF MANUFACTURING COMPANIES LISTED ON BORSA ISTANBUL 100 INDEX*

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ABSTRACT

Increasing interaction between businesses and their environment, companies have become more relevant not only economic events that affect them but also social, environmental and all economic events. Within this context, companies that interact more with their environment have encountered more risks that's why risk management become more significant. In this regard, the aim of the study is to specify the risk definitions of companies as practice, give information about how risk committee works and risk management policy of the manufacturing companies which are traded in Istanbul Stock Exchange BIST 100 Index in the years 2015-2016. In our findings, the risk definitions in the annual reports are examined, there is no explanation for amount effects of operational, strategic and hazard risks' other than financial risks. We analyzed the two most defined risk foreign exchange rate risk and interest rate risk and Turkish companies cope with that risks using derivative instruments.

Keywords: Annual Reports, Risk Management, Risk Disclosure

JEL Classification: M00, G32

BORSA İSTANBUL 100 ENDEKSİNDE İŞLEM GÖREN ÜRETİM İŞLETMELERİNİN FAALİYET RAPORLARINDA BELİRLEDİKLERİ RİSK TANIMLARI VE RİSK YÖNETİM POLİTİKALARININ ANALİZİ

ÖZ

İşletmelerin çevresiyle olan etkileşimleri sonucunda, işletmeler sadece kendilerini ilgilendiren ekonomik olaylarla değil, sosyal, çevresel ve tüm ekonomik olaylarla etkileşim halindedirler. Bu

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bağlamda, çevreleriyle daha fazla etkileşim kuran şirketler daha fazla riskle karşı karşıya kalmıştır, bu nedenle risk yönetimi şirketler için önemli bir boyuta gelmiştir. Bu bağlamda, çalışmanın amacı 2015-2016 yıllarında Borsa İstanbul BİST 100 endeksine dahil olan üretim işletmelerinin faaliyet raporlarında tanımladıkları risk tanımları, risk yönetim politikaları ve risk komitesi hakkında bilgi vermektir. Yapılan analizler sonucunda işletmelerin en çok döviz kuru riski ve faiz oranı riski tanımlamaları yaptıkları ve finansal risk dışında diğer riskler için tutarsal açıklama yapmadıkları ve en çok açıklanan risklerden korunmak için türev araçları kullanmaktadırlar gibi sonuçlara ulaşılmıştır.

Anahtar Kelimeler: Faaliyet Raporları, Risk Yönetimi, Risk Tanımlama

JEL Sınıflandırması: M00, G32

1. INTRODUCTION

Modern-day companies have become more relevant not only economic events that affect them but also social, environmental and all economic events. Within this context, companies that interact more with their environment have encountered more risks. For this reason, managing risks and turning into an opportunity have been important factors driving companies one step ahead.

As risk is an important phenomenon, there are various definitions related to risk. Some of them;

"Risk is the measure of probability and the weight of undesired consequences." (Lawrance, 1976)

"Risk equals the product of probability and severity" (Crouch & Wilson, 1982)

"Risk is a situation or event where something of human value (including humans themselves) is at stake and where the outcome is uncertain" (Avena & Rennb, 2009)

"Risk is an uncertain consequence of an event or an activity with respect to something that humans value." (Avena & Rennb, 2009)

"Risk is the effect of uncertainty on objectives" (ISO, 2009)

Competition has become more intense due to globalization. Therefore, companies are obliged to give more value relevant, reliable and comparative financial information to the stakeholders. In this context 'the annual report' is essentially referred to the financial and narrative report prepared by the corporation for the 12 months ended. It comprises many parts and its content is mainly dictated by legislation, accounting rules and stock exchange regulations.

Since risk concept is a major importance for companies, corporate risk also has come into prominence. On behalf of a sustainable company, corporate risks are needed to be manageable. In order to prescribe and manage institutional risks, the business establishes a risk precautionary committee and works on the risks that the committee determines.

In this paper, we analyzed risk definitions and risk measures of the companies which are traded in Istanbul Stock Exchange Bist 100 Index. In our study, examined 42 manufacturing companies' annual reports traded on Istanbul Stock Exchange (BIST) 100 Index for the years 2015 and 2016.

The aim of this study is to compare the risk definitions and risk measures of the enterprises with the world practices and to identify the deficiencies and examine the applications of the risk early diagnosis committee and giving information about what the companies have done about risk management and how the risk management committee Works.

2. CORPORATE RISK MANAGEMENT

When the causes of bankruptcies happened in early 2000's in developed countries (e.g. the United States, Great Britain, Italy) are examined, it is determined that the main reason is inadequate risk management. The Sarbanes Oxley Act, enacted in 2002 after Enron's bankruptcy in the United States, is an important regulatory regime in bringing responsibility for disclosure of risk management at the board of directors level in businesses. Another regulation on risk management in the United States is the COSO Internal Control Framework, launched in 1992 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). COSO's Corporate Risk Management Framework, published by COSO in 2004, covers internal control; as a structure that attaches more importance to risk management. The European Commission has issued Directive 2006/43 / EC. In summary, the Directive states that public interest entities should have an audit committee, at least one of its members must be independent, and that they should have information about the regulation or supervision of financial statements. According to paragraph 6 of Article 39 of the Directive, in the duties of the audit committee, there is a surveillance of the effectiveness of the risk management system.

Companies providing information in terms of transparency and accountability to their stakeholders, predetermine the risks that they will encounter in the operating cycle and manage those risks for their own benefits.

Risk is the probability of occurance of unexpected events in general. Unexpected events are expressed as uncertainty and the risk is to make the uncertainties measurable. For a company, risk is the possibility of developments that may threaten the company's existence, development and continuity. The success of an enterprise depends upon its capacity to anticipate, avoid, accept, mitigate and exploit risks. Their survival strongly depends on their ability of managing corporate risks altogether. Risk management contributes to the value creation process by helping companies actively deal with key underlying events that will create uncertainty in the future and help them react in a manner that will increase the likelihood of being positive and reduce the likelihood of adverse outcomes. Enterprise risk management is, in essence, the latest name for an overall risk management approach to business risks. According to the Casualty Actuarial Society (CAS), enterprise risk management is defined as (CAS, 2003):

"*The process by which organizations in all industries assess, control, exploit, finance and monitor risks from all sources for the pur pose of increasing the organization's short and long term value to its stakeholders*."

The CAS then proceeds to enumerate the types of risk subject to enterprise risk management as:

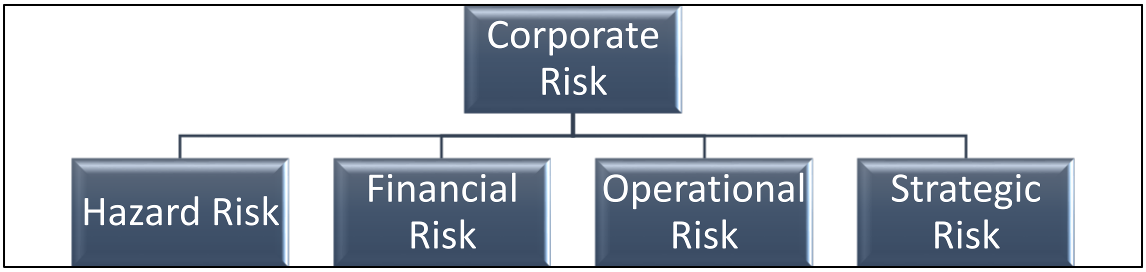


Figure 1: Corporate Risk Groups

Kaynak: (CAS, 2003)

Hazard risks are those risks that have traditionally been addressed by insurers, including fire, theft, windstorm, liability, business interruption, pollution, health and pensions.

Financial risks cover potential losses due to changes in financial markets, including interest rates, foreign exchange rates, commodity prices, liquidity risks and credit risk.

Operational risks cover a wide variety of situations, including customer satisfaction, product development, product failure, trademark protection, corporate leadership, information technology, management fraud and information risk.

Strategic risks include such factors as completion, customer preferences, technological innovation and regulatory or political impediments.

Also CAS specifies that although there can be disagreement over which category would apply to a specific instance, the primary point is that enterprise risk management considers all types of risk an organization faces. (CAS, 2003)

COSO (Committee of Sponsoring Organizations of the Treadway Commission) defined enterprise risk management (ERM) as (COSO, 2004):

"*ERM is a process, affected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives."*

Risk management contributes to the value creation process by helping companies actively deal with key underlying events that will create uncertainty in the future and help them react in a manner that will increase the likelihood of being positive and reduce the likelihood of adverse outcomes. Risk management is essential for the maximization of shareholders' wealth as it aims to maximize profitability while at the same time reducing the probability of financial failure.

3. RISK COMMITEE

Companies have become large, complex organisations involving significant delegation of decision-making and risktaking responsibility. The risk management committee monitors the level of risk the firm is exposed to while keeping in mind the desire to maximise returns. (Tao & Hutchinson, 2013).

Risk Management Committee's (RMC) represent a governance mechanism designed to manage various risks within a firm's risk appetite and to identify potential events that may negatively impact the firm. There is current debate among regulators and practitioners regarding whether the best governance solution related to risk management is for firms to form a stand-alone RMC, as opposed to keeping risk management practices under the sole authority of the audit committee, or with the board as a whole. (Hines & Peters, 2015).

When the tasks of the risk early detection committee are examined, the committee identifies the risks that the company may be affected by the feedback from the functional groups, presents it as a report to the Board of Directors and tries to minimize the risks or trying to turn the risks to opportinuties that might pose a threat to the company through feedback from functional groups.

When we examine the risk committee's location in the organization chart:

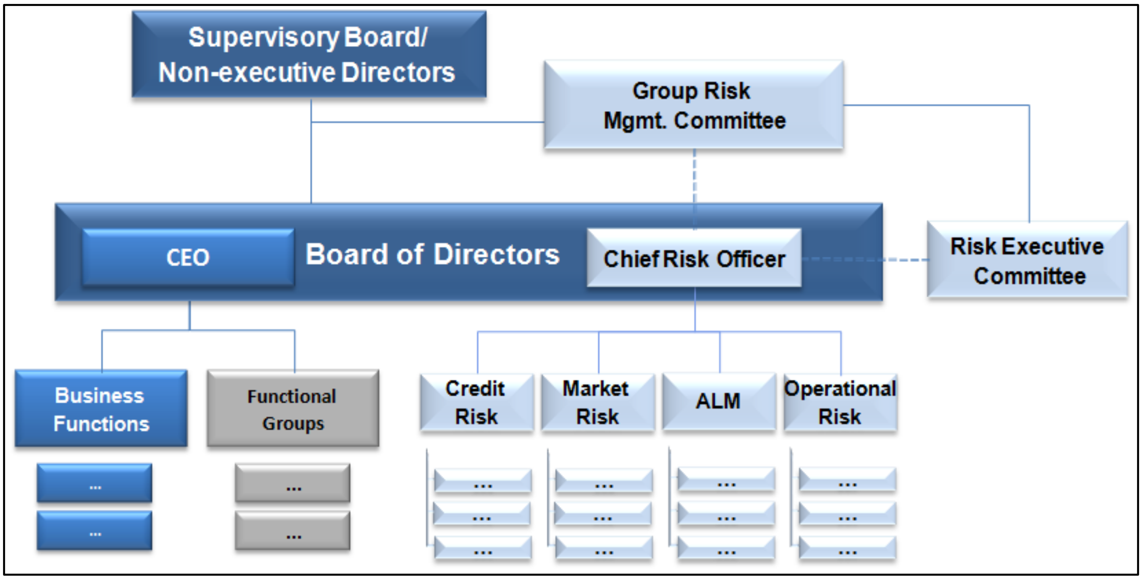


Figure 2: Organization Chart of a Company

Kaynak: GSA Organization Chart

Risk Committee is directly connected to Board of Directors. Risk Comittee defines the corporate risk for the company and works altogether with the Functional Groups and presents as a report the risks.

If we take a look at the duties of the early detection committee (Gacar, 2017):

- To assist the board of directors in establishing and developing corporate risk management in business
- To identify strategies, policies and principles for identifying, evaluating, monitoring and managing the risks that may affect the business,

- To evaluate the effectiveness of the corporate risk management structure and to compliance of applications with the decisions of the board of directors and committees to make surveillance,
- Establishment of risk management culture in business, proposals to the management board for this culture to be adopted by employees and supported by management
- To observe the information about the risk in the annual reports
- Evaluating the results of the independent auditor's report on the issue of risk and taking the necessary precautions and making corrective studies

4. LITERATURE REVIEW

A centralized risk management to be established by the board of directors is responsible for handling all risks in a collective manner. In this context, some of the studies are:

Arena, Arnaboldi and Azzone (2010) examined three companies over a 7 (from 2002 to 2008) year period. In this study they contribute to literature ERM as practice and Show how companies use the ERM in their decision making. In 2009 Majdzik and Okreglicka examined the companies process management to identify their limitations about risk management.

Tekathen and Dechow (2013) observe ERM as IT-based representations and social interpretations. For them ERM rather than to produce a common understanding of corporate affairs, ERM communalizes the process of identifying risks and chances and promotes a quest for accountability. Thus, ERM does not focus on improving performance or compliance.

Ahmad, Ng and McManus (2014) analyzed Top 300 Companies which are traded in Australian Securities Exchange (ASX), and the outcomes of the study show that the majority of the firms involved in the survey not only extensively implement ERM but also extensively embed ERM into their corporate strategic processes.

Lundqvist (2016) analyzed 145 companies about the level of a risk governance in a firm is related to the size of the firm, leverage and dividend payments and the chief executive officer’s influence on the board and how effects the decision making for the company.

In 2017 Callahan and Soileau examined that if Enterprise Risk Management process effects the operating performance and in the findings high level ERM effects operating performance in a positive way.

Florio and Leoni (2017) investigated the relationships between the firm performance and Enterprise Risk Management (ERM), and the results are firms with advanced levels of ERM implementation present higher performance, both as financial performance and market evaluation.

5. TURKISH IMPLEMENTATION OF ENTERPRISE RISK MANAGEMENT

In developing countries such as Turkey, many developing countries are at a serious risk due to reasons such as interest fluctuations, financing of investments with loans only, speculation in foreign exchange prices. Such situations, which are relatively rare in industrialized and stable countries, may bring bankruptcy in the face of Turkish businesses. (Doğrusöz, et al., 2011) It is very important to determine and manage the risks in terms of ensuring the sustainability of the enterprises.

The New Turkish Commercial Code introduces important innovations in business life and includes regulations on committees and risk management systems that will strengthen the continuity and development of companies by taking the necessary precautions by early detection of the hazards they will encounter in business life. (Özsoy, 2012)

With the Turkish Commercial Law numbered 6102, the concept of risk management is included in the commercial code. The regulation on risk and risk management in the Turkish Commercial Law are basically made in Article 378 of the Law. According to this article, "the board of directors is obliged to establish and operate an expert committee, operate and develop the system for the purpose of early detection of the risks, the implementation of the measures and remedies that threaten the company's existence and development in the companies whose shares are traded in the stock exchange."

There is an implicitly manageable risk description on this site. Risk is the existence of the causes that can be managed in case the necessary precautions are taken to jeopardize the company's development. This is the aim of the ruling, to warn board of management against risks and ensure that the necessary decisions are taken in advance. In this context, it was obligatory to establish a system for the early detection and management of the Turkish Commercial Code 6102.

The most important purpose of the establishment of this committee is the implementation of corporate governance principles in companies whose stocks are traded in the stock market.

This committee differs from the audit committee in that the audit committee keeps the administration under surveillance, but this committee focuses only on the risks. In addition, if the audit is a retrospective review, the risk appraisal concerns future and future interpretations.

When we examine the risk committee's location in the organization chart of Turkish Companies:

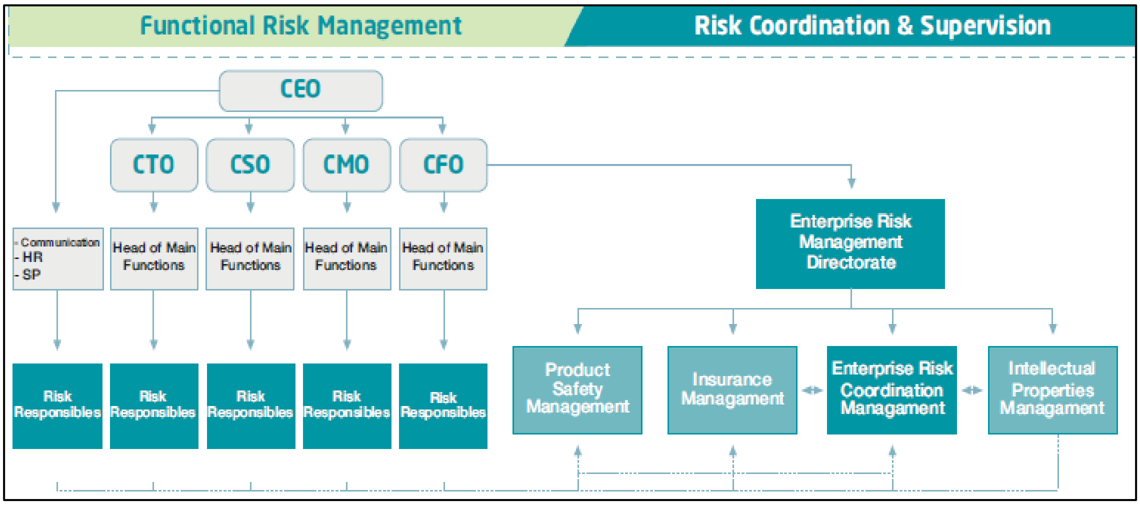


Figure 3: Organization Chart – Risk Committee

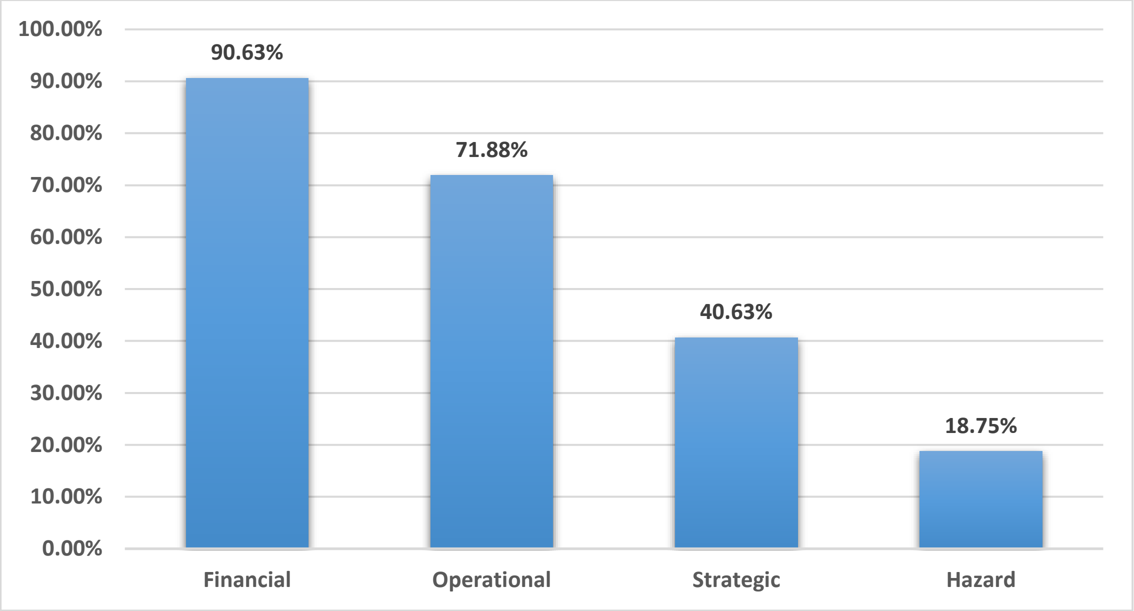
Kaynak: Arçelik A.Ş. 2016 Annual Report

Enterprise risk management committee is connected to the CFO. The CFO is the head of the committee. CFO presents the activities of the Risk Management Committee to the Board of Directors. Committee defines the risks for a company with the feedbacks from Functional groups and manages the risk continuining taking feedbacks from the Functional Groups.

6. ANALYZE AND FINDINGS

In this study, we examined 42 manufacturing companies' annual reports traded on Istanbul Stock Exchange (BIST) 100 Index for the years 2015 and 2016. As 10 companies' annual reports were not available, they were excluded from the data. Therefore, the data set is comprised of 32 manufacturing companies that make company risk identification and give statements about the precautions that they take against the risks. The risks and their definitions disclosed by the 32 manufacturing companies in 2015 and 2016 are given in the Table 1 below.

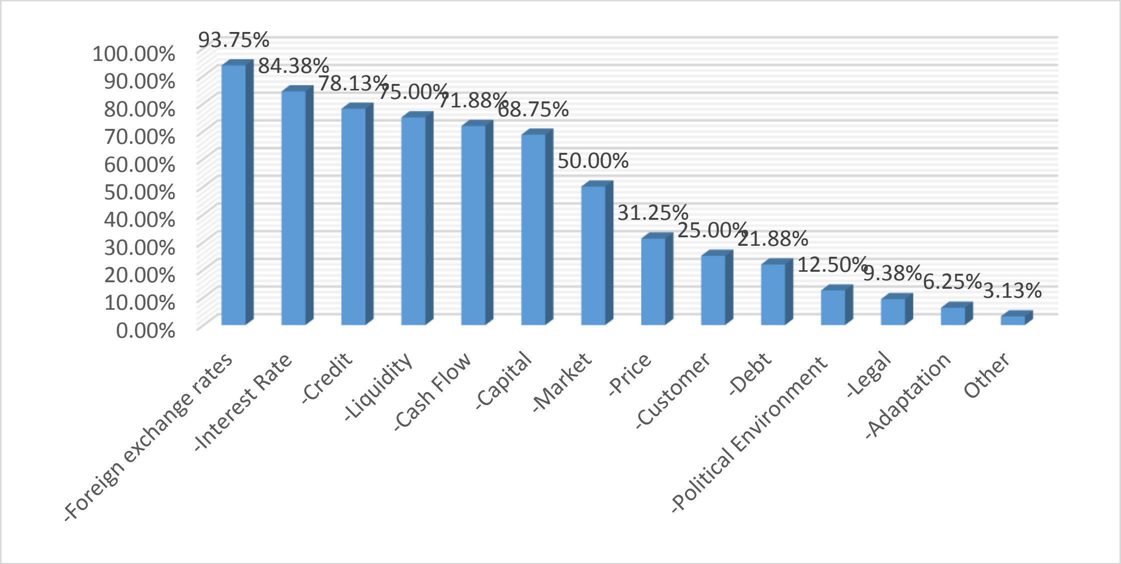
The major risks and their definitions disclosed by the 32 manufacturing companies in 2015 and 2016 are:



Graphic 1: Major Risk Definition

%90,63 percent of the companies defines Financial Risk as a corporate Risk, %71,88 percent of the companies defines Operational Risk as a corporate Risk, %40,63 percent of the companies defines Strategic Risk as a corporate Risk, %18,75 percent of the companies defines Hazard Risk as a corporate Risk.

The subheading risks and their definitions disclosed by the 32 manufacturing companies in 2015 and 2016 are:



Graphic 2: Subheading Risk Definitons

%93,75 percent of the companies defines Foreign Exchange risk as a corporate risk and %84,38 percent of the companies defines Intereset risk as a corporate risk ın subheading risk groups. We focused on the most defined two risks.

When we examine how companies cope with Foreign Exchange Risks, they use derivative instruments, such as forward agreements and hedging to protect the company from foreign Exchange volatility. For Interest rate risk companies making agreements mostly in fixed interest rate and less floating interest rate. Companies make short-term/ long-term" balance within liabilities.

When the risk definitions in the annual reports are examined, there is no explanation for amount effects of operational, strategic and hazard risks' other than financial risks. When we compare the risk definitions of Turkish Companies with the companies which are traded in New York Stock Exchange(NYSE) we reach some amount effects of operational strategic and hazard risk in NYSE companies definitions. Turkish companies just make risk definitions for these sort of three risk. Also we couldn't reach some definitions of risks such as reputation risk. It has been given as a title but there is no explanation about it.

7. CONCLUSION

As we mentioned risk is the probability of occurance of unexpected events in general. Unexpected events means for companies unceartinty and companies try to make unceartinty measurable or find opportunities in the risks. Risk Management is very important for the modern-day companies. In this context companies establish Risk Management Committee for cope with the risk before the become a threat for company.

In this study we try to contribute how companies which are traded in Istanbul Stock Exchange (BIST) 100 Index defines risk as practice, give information about how risk committee works. Also we compare risk definitions of Turkish Companies with NYSE companies and we find that there is no explanation about risk amount of the Strategic, Operational and hazard risks of Turkish companies rather than NYSE companies. Further we analyzed the two most defined risk foreign Exchange rate risk and interest rate risk and Turkish companies cope with that risks using derivative instruments.

Annual reports give stakeholders information about companies within 3 months period and importantly about year. If the purpose of annual report is giving information about company for a year, companies should define their risks more detailed and if it is possible with the amount effect.

For further studies, operational, strategic and hazard risks should be analyzed and the effects on firm performance should be examined.

Table 1: Risk Definitions of Companies

Risk	*Companies defined Risk*	*%*	*Definition of the risk*
Financial	**29**	**90,63%**	**Financial risks cover potential losses due to changes in financial markets, including interest rates, foreign exchange rates, commodity prices, liquidity risks and credit risk.**
-Foreign exchange rates	30	93,75%	The Company is exposed to the exchange rate risk arising from the exchange rate changes due to translation of foreign currency denominated debtor or creditor's sums into Turkish Lira. The exchange rate risk is monitored by analyzing the foreign exchange position. Assets and liabilities denominated in foreign currencies expose the Group to foreign currency risk.
-Interest Rate	27	84,38%	The company is exposed to interest rate risk because of the floating rate loans it uses.
-Credit	25	78,13%	Credit risk is the risk of financial collapse of the other party, who is unable to meet the obligation of one of the parties in relation to a financial intermediary.
-Liquidity	24	75,00%	Liquidity risk is the risk that a company can not meet its funding needs.
-Cash Flow	23	71,88%	Represents the maximum loss to occur in the targeted cash flow due to market conditions at a specified time interval.
-Capital	22	68,75%	Having a good capital structure and debt capacity to sustain its activities in a healthy manner.
-Market	16	50,00%	Market risk, which consists of exchange rate, cash flow and interest rate risks
-Price	10	31,25%	Contrary to the existing view on raw material prices, negative changes can have a potential to increase raw material costs and may have negative effects on margins.
-Debt	7	21,88%	Risk of non-payment of trade receivables
Operational	**23**	**71,88%**	**Operational risks cover a wide variety of situations, including customer satisfaction, product development, product failure, trademark protection, corporate leadership, information technology, management fraud and information risk.**
-Adaptation	2	6,25%	Compliance with legislation, environment, working environment

-Association	1	3,13%	Risks that may arise from the Company's partnerships
-New investment	1	3,13%	The risk of new investments to be made
-Cyber security	1	3,13%	Possible cyber attacks
-External environment	1	3,13%	Environmental risks
Risk	***Companies defined Risk***	***%***	***Definition of the risk***
-Maturity	1	3,13%	Maturity structure of debt and receivables
-Brand	1	3,13%	Risks related to brand reputation
-Consumption	1	3,13%	Political and economic instability can cause consumer confidence to worsen, depending on whether the sales are complete from developing and leading markets.
-Product safety	1	3,13%	The risks that products may experience during the life cycle, Products must be regularly inspected for disposal before they are sold.
-Water	1	3,13%	Use of natural resources
-Reputation	1	3,13%	Risks that may arise in company reliability and brand value
-Purchasing	1	3,13%	A significant portion of the cost of goods sold consists of raw materials and packaging materials, many of which are either sold or priced at commodity prices. prices may fluctuate in the price and supply of these inputs for various reasons.
-Strategic	**13**	**40,63%**	**Strategic risks are structural risks that can prevent achievement of targets set in short, medium or long term in the strategy which is one of the most important elements in preparing for the future.**
-Political Environment	4	12,50%	Political tension in active markets
-Legal	3	9,38%	Legal risks, risk of compliance with existing legislation, regulations, standards
-Customer	8	25,00%	Determining the purchasing limits of the customers and controlling the exceeding limits
Hazard	**6**	**18,75%**	**Hazard risks are those risks that have traditionally been addressed by insurers, including fire, theft, windstorm, liability, business interruption, pollution, health and pensions.**

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