

Performance Evaluation of Corporate Governance Index in Turkey

Huseyin Dagli
Karadeniz Technical University

Kemal Eyuboglu
Karadeniz Technical University

Hasan Ayaydin
Gumushane University

Corporate governance is a considerably modern managerial approach in all over the world. Capital Markets Board of Turkey (CMB) has formed the Corporate Governance Principles in Turkey. After the regulations of CMB Corporate Governance Principles in Turkey, Istanbul Stock Exchange (ISE) has also started to calculate "Corporate Governance Index" by rating the compliance of the corporate governance principles to support the application of these principles in publicly held companies listed in ISE. The aim of the paper is to evaluate 2007 September-2009 November period corporate governance index in terms of risk-return in Turkey. In the paper, commonly used Sharpe, Treynor and Jensen performance indexes are ranked. According to each three performances index, the most successful index is ISE 30 Index; Corporate Governance Index is at the middle ranks.

INTRODUCTION

Corporate governance has been a modern managerial approach for last 20 years. By the time financial crises had begun, this subject gained importance in the international scope and the quality of corporate governance was taken into consideration, since it was important as financial performance in the decision of investments.

As regards to Turkey, corporate governance gained its importance in 2000-2001 crises. Poor management of the companies and deficiency of auditing systems have been the first reasons of these crises.

In recent years, companies were under pressure in order to enlarge their activities in international markets because of dramatic increase of the globalization. Additionally, globalization implemented important managerial changes including structures, strategies and the environment of business management. Complications in the international enlargement and the difficulties in measuring the products provided by globalization have contributed to the importance of corporate governance in the global companies.¹

In order to increase the value of a company in longer term, corporate governance is a managerial approach which provides a resolution without endangering the sustainability of the company and the conflict of interests between the companies and the people who are related with the company. On the one

hand, corporate governance solves the conflicts of interest in the company by convention; on the other hand, it determines strategic targets of the company, takes precautions for staff to work efficiently and it decreases the operational risk of the company to the lowest level by providing efficiency in internal and external controls.²

Well-organized corporate governance practices provide important benefits to companies and countries. When it is looked on the point of companies, high level of corporate governance means decrease in the cost of capital, increase in the opportunities of financing and increase in liquidity. It also means that crises may easily gotten over and well-managed companies may no longer been externalized from stock markets. When it comes to country's point of view, corporate governance means increase in the image of the country, preventing capital flights and attraction of foreign capitals. It also means that competitiveness of economy and capital markets will increase, crises will be getting over in a minimum damage, sources will be distributed more effectively and high welfare will be provided and maintained.³

Scientific researches show that international investors regard corporate governance practices in the companies as significant as financial performances and it also shows that investors are thinking this subject is much more important for the countries that need reforms on the decisions of investment. They are ready for paying a higher price for the companies which have well-organized in corporate governance implementation. Furthermore, it sets forth that companies which are governed well, have more financial success than other companies and investors are ready to pay much higher price for the shares of companies which have high corporate governance rating.⁴

The paper has aimed to evaluate ISE Corporate Governance Index 2007 September - 2009 November period in terms of risk and return. Sharpe, Treynor and Jensen performance indexes (widely used in portfolio performance indexes) are used in the paper, and performance ranking of indexes, which take place in each working scope, have been set forth.

CORPORATE GOVERNANCE NOTION AND CORPORATE GOVERNANCE PRINCIPALS IN TURKEY

Organization for Economic Co-operation and Development (OECD) defines corporate governance the distribution of rights and responsibilities among different participants in the company, such as managers, shareholders and other interested parties, specifying the rules and procedures for making decisions on company's affairs.⁵

According to Barrass (2007), corporate governance is a system of internal controls and procedures by which individual companies are managed. Luo (2005) sees corporate governance as relations between the company and its stakeholders, which expresses controls and the performance of the company. Aguilera (2005), defines corporate governance as a system, provides mechanisms for the companies to be governed effectively. It also provides mechanisms in order to ensure to maximize the values of shareholders and stakeholders. Claessens (2003) expresses corporate governance as the rules of capital market, which regulates investments of shares in publicly held companies. According to Sloan (2001), corporate governance is a mechanism, which reveals the differentiation between managerial and financial scope in the business, and it also contributes to solve the problems that influence performance of the company negatively. La Porta et al. (2000), defines corporate governance as a set of mechanisms through which outside investors protect themselves against expropriation by the insiders. According to Gillan and Starks (1998), define corporate governance as the system of laws, rules, and factors that control operations at a company. Shleifer and Vishny (1997) define corporate governance as the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment. Zingales (1997), defines governance systems as the complex set of constraints that shape the ex post bargaining over the quasi-rents generated by the company.

Lots of researches had been studied in the world in terms of corporate governance, and it has been still going on. These exercises strongly emphasize that one single model of corporate governance cannot be valid for every country. When corporate governance models are examined, it is seen that the main purpose is to provide transparent, apparent, consistent and explainable process of management and

controlling by reassuring the shareholders. Thus the model, which will be formed, should pay attention to the conditions peculiar to the country.

After OECD's publishing the principles of corporate governance in 1999, CMB published "Principles of The Corporate Governance" by considering the legal and economic qualifications of Turkey and these principles was firstly published in 2003; however in 2005, some attachments were added with the aim of completing the gap in the corporate governance scope. Although there are similarities between OECD's and CMB's principles, there has been dissimilarity in the context. On the one hand, OECD's principles of corporate governance consist of 2 criteria and 12 categories; on the other hand CMB's principles consist of 4 criteria and 27 categories.

Initially, principles had been prepared for publicly held companies. However, it has been thought that these principles will find a scope of application by other publicly held companies, which are active in state and private sector. Within the framework of CMB's regulations, rating institutions that make assessments, will determine the practiced manner of these principles. Principles do not constitute any exception for available regulations. Besides, principles have criteria up from available regulations and they are prepared for fulfilling the deficiencies in available legislation and practice in terms of corporate governance. In this sense, principles present a leading function for the future regulations. These principles consist of 4 main criteria; shareholders, public disclosure and transparency, stakeholders and board of directors.⁶

In the first part, it is explained that shareholders; such as the rights of getting information and observation, rights of attending to the general board and voting, rights of getting dividends and the rights of minorities. Furthermore, keeping the records related to shareholders, takeover and selling of the shares have been observed in the first part.

Additionally, in the second part, it has been determined that companies have been forming principles for the shareholders related to the information politics, and by sticking to these rules, some principles have been determined for transparency to the public.

The third part is about the stakeholders. Stakeholders, related to the company include the staff, payees, clients, providers, labor unions, non-governmental organizations, the government and even the potential investors, who are thinking to make an investment to the company. In this section, there is the criteria which to the arrangement of relations between the company and stakeholders.

In the fourth part, there is criteria regarding the functions, duties, responsibilities, activities, formation of the board of directors and it also includes the criteria related to the committees and directors that will be established in order to assist the activities of board of directors.

Activities of rating the compliance to the corporate governance principles in Turkey; are executed by rating institutions, approved by CBM for rating activity, domestic and foreign-oriented institutions, which are approved by CMB for rating activity in Turkey.

Corporate governance rating⁷ is calculated as a company score of four main criteria (shareholders %25, public disclosure and transparency %35, stakeholders %15, board of directors %25) indicated of CMB corporate governance principles. By September 2011, there are four domestic institutions and one foreign-oriented institution for rating activity, which are approved by CMB. These institutions are, TCR Corporate Governance and Credit Rating, SAHA Corporate Governance and Credit Rating, Kobirate International Credit Rating and Corporate Governance Services, JCR Eurasia Rating, ISS Corporate Services.

ISE CORPORATE GOVERNANCE INDEX

Correspondingly to developments in the scope of corporate governance implementations in Turkey, a Corporate Governance Index (XKURY) are started to calculate in ISE. The Index consists of the shares of companies listed in ISE markets which have the minimum required corporate governance rating. The Index started to calculate on 31.08.2007 with the initial value of 48.082,17. ISE Corporate Governance Index aims to measure the price and return performances of companies listed in ISE Markets (except companies in Watchlist Market) with a corporate governance rating of minimum 7 over 10. For

companies listed in ISE Corporate Governance Index, the annual registration fee is applied as 50% of the tariff for the first two years, 75% of the tariff for the following two years and then continues as 90% of the tariff.⁸ Table 1 shows the total number of listed companies in the index by September 2011.

TABLE 1
COMPANIES IN THE ISE CORPORATE GOVERNANCE INDEX (BY SEPTEMBER 2011)

Companies	The First Corporate Governance Rating, Date, Rating Institution	The Last Corporate Governance Rating, Date, Rating Institution
1. Doğan Yayın	8.12, April 2006, ISS	8.87, August 2011, ISS
2. Vestel Elektronik	7.60, March 2007, ISS	8.58, February 2011, ISS
3. Y&Y GYO	7.88, April 2007, SAHA	8.55, April 2011, SAHA
4. Tofaş	7.57, May 2007, SAHA	8.41, November 2011, SAHA
5. Türk Traktör	7.52, August, 2007, SAHA	8.50, August 2011, SAHA
6. Hürriyet	8.0, September 2007, ISS	8.46, September 2010, ISS
7. Tüpraş	7.91, October 2007, SAHA	8.55, October 2010, SAHA
8. Asya Katılım Bankası	7.56, July 2008, SAHA	8.25, July 2011, SAHA
9. Otocar	7.94, March 2008, SAHA	8.46, March 2011, SAHA
10. Şekerbank	8.14, February 2009, ISS	8.76, February 2011, ISS
11. Dentaş Ambalaj	7.08, May 2008, SAHA	8.02, August 2010, SAHA
12. Anadolu Efes	8.10, June 2008, SAHA	8.54, June 2011, SAHA
13. YapıKredi Bankası	8.02, December 2008, SAHA	8.77, December 2010, SAHA
14. Vakıf Y.O.	7.81, January 2009, TCR	8.41, January 2011, Kobirate
15. Coca Cola	8.30, July 2009, SAHA	8.49, July 2011, SAHA
16. Arçelik	8.21, July 2009, SAHA	8.59, August 2011, SAHA
17. TAV	8.33, September 2009, ISS	9.09, August 2011, ISS
18. TSKB	8.77, October 2009, SAHA	8.91, October 2010, SAHA
19. Doğan Holding	8.26, November 2009, SAHA	8.42, November 2010, SAHA
20. Petkim	7.71, November 2009, TCR	8.19, August 2011, Kobirate
21. Logo	8.05, December 2009, SAHA	8.71, December 2010, SAHA
22. İş Gen. Fin. Kiralama	8.02, December 2009, SAHA	8.37, December 2010, SAHA
23. Türk Prysman	7.76, December 2009, SAHA	8.07, December 2010, SAHA
24. Türk Telekom	8.01, December 2009, SAHA	8.26, December 2010, SAHA
25. Turcas Petrol	7.52, March 2010, Kobirate	8.12, March 2011, Kobirate
26. Park Elektrik	8.64, June 2010, SAHA	8.66, June 2011, SAHA
27. Aygaz	8.46, June 2010, SAHA	8.49, June 2011, SAHA
28. Albaraka Türk	8.14, October 2010, JCR	
29. Yazıcılar Holding	8.04, November 2010, SAHA	
30. İhlas Holding	7.71, December 2010, JCR	
31. İhlas Ev Aletleri	7.12, December 2010, JCR	
32. Dogus Otomotiv	7.70, February 2011, TCR	
33. Mensa	7.59, June 2011, SAHA	

Source: Corporate Governance Association of Turkey, <http://www.tkyd.org/tr/content.asp?PID={A1F2B135-4F80-49FA-85C5-01FB00593720}>, 08.09.2011.

PERFORMANCE EVALUATION OF CORPORATE GOVERNANCE INDEX IN TURKEY

Data and Methodology

In the evaluation of Corporate Governance Index, in terms of risk-return 2007 September – 2009 November period in Turkey, daily data are used, data about return of indexes are acquired from ISE monthly journals, data about risk-free interest rate are acquired from Central Bank of the Republic of Turkey monthly statistics. As risk-free interest rate, Treasury bill daily average interest rate per 3 month has been used.

In the evaluation; for the measuring the performances, Sharpe portfolio performance index, which considers total risk of portfolio, Treynor and Jensen performance indexes, which consider systematic risk of the portfolio are used.

Sharpe used this equality below for measuring the portfolio's performance⁹:

$$S_i = (R_i - RF) / \sigma_i$$

where S_i is Sharpe index of i portfolio, R_i is average rate of return of i portfolio, RF is risk-free interest rate, σ_i is total risk of i portfolio. $R_i - RF$ is named as risk premium of portfolio.

Improved index by Treynor, for measuring portfolio performances has similarity with Sharpe portfolio performance index. But Treynor chose Beta coefficient which is a systematic risk indication instead of standard deviation, which is a total risk indication. Treynor¹⁰ is formulated like this:

$$T_i = (R_i - RF) / \beta_i$$

where T_i is performance index of i portfolio; R_i is average rate of return of i portfolio; RF is risk-free interest rate and β_i is Beta coefficient of the i portfolio.

Capital asset pricing model was improved for calculating risk-adjusted return in the mids of 1960 and used by financial economists for calculating risk-adjusted return. Jensen (1968) improved another important model for measuring portfolio performance from in this model. This performance measurement is known as a Jensen¹¹ alpha can be calculated like this:

$$\alpha_i = R_i - (RF + \beta_i (R_m - RF))$$

where α_i is Jensen performance index of i portfolio, R_i is rate of return of i portfolio, RF is risk-free interest rate, β_i is systematic risk of i portfolio, R_m is expected rate of return of market portfolio.

In the paper, ISE Corporate Governance, ISE 100, ISE 50, ISE 30, ISE All, ISE Second National Market and ISE New Economy Indexes are applied performance ranking between each other according to calculated performance indexes for each.

Furthermore, rank correlation coefficients are calculated for the purpose of determining whether they have close ranking results to different indexes or not.¹²

In the analysis as a market portfolio, ISE All Index is used, which is thought more comprehensive than other indexes. In the paper, this equality has been used for calculating the rate of return:

$$R_m = (E_t - E_{t-1}) / E_{t-1}$$

where R_m is daily return rate of the market portfolio; E_t is t daily closing value of ISE All Index; E_{t-1} is $t-1$ daily closing value ISE All Index. Similarly, rates of returns of other indexes have been calculated like this:

$$R_i = (E_{it} - E_{i(t-1)}) / E_{i(t-1)}$$

where R_i is daily return rate of i index, E_{it} is t daily closing value index; $E_{i(t-1)}$ is $t-1$ daily closing value of i index.

Findings

In Table 2, the statistical data of indexes, which are analyzed at the research period, are shown. Risk premiums ($R_i - RF$) of all indexes have negative values included the market portfolio. Therefore it is inferred from, companies that are listed in these indexes, don't provide any returns to investors, even cause potential profit lose (when investing to risk-free investments). When it is considered there is a direct positive correlation between risk and return, it can be concluded that poor managed portfolios have negative risk premium.

TABLE 2
STATISTICAL DATA OF INDEXES IN 2007 SEPTEMBER- 2009 NOVEMBER PERIOD

Indexes	R_i	$\bar{\sigma}_i$	R^2	β_i	$(R_i - RF)$
ISE 100 Index	0,00041	0,02321	0,99828	1,04757	-0,00103
ISE 50 Index	0,00041	0,02395	0,99454	1,07848	-0,00102
ISE 30 Index	0,00046	0,02518	0,98665	1,12947	-0,00097
ISE Corporate Governance Index	0,00013	0,02222	0,71958	0,85234	-0,00130
ISE Second National Market Index	-0,0002	0,02201	0,47671	0,68715	-0,00162
ISE New Economy Index	-0,0001	0,02349	0,37234	0,64845	-0,00156
Market Portfolio (ISE All Index)	0,00042	0,02214	1	1	-0,00101

Considering that beta coefficients, which show relations of each indexes with market portfolio, ISE 100 Index, ISE 50 Index and ISE 30 Index beta is bigger than 1,0. So one unit change in return of ISE All Index, causes more than one unit changes in these returns of indexes, so there is a risk, to invest companies, which are listed in ISE 100, ISE 50 and ISE 30 Indexes. On the other hand, betas of ISE Corporate Governance Index, ISE New Economy Index and ISE Second National Market Index are lower than 1,0. It shows that there is less risk to invest shares of companies that are listed in these indexes. When it is evaluated by this way, ISE 30 Index has the lowest beta coefficient and ISE New Economy Index has the highest beta coefficient.

On the other hand, it is seen determination coefficient (R^2) which is a determining indicator of diversification levels of funds, is too high for some indexes and too low for some indexes. Low determination coefficients mean funds aren't well diversified. ISE 100 Index has the highest determination coefficient and ISE New Economic Index has the lowest determination coefficient.

Table 3 shows calculated performance values of the analyzed indexes and rankings according to Sharpe, Treynor and Jensen performance indexes. According to each three performance indexes, the most successful index is ISE 30 Index. Corporate Governance Index is at the middle ranks (rank 4). According to t values of Jensen, none of the indexes have significant results.

TABLE 3
PERFORMANCE RANKING OF INDEXES IN 2007 SEPTEMBER-2009 NOVEMBER PERIOD

Index Name	Sharpe	Rank	Treynor	Rank	Jensen	Rank	t value
ISE 100 Index	-0,0443	3	-0,00098	3	0,00003	3	0,724
ISE 50 Index	-0,0426	2	-0,00095	2	6,9E-05	2	0,903
ISE 30 Index	-0,0385	1	-0,00086	1	0,00012	1	1,371
ISE Corporate Governance Index	-0,0585	4	-0,00152	4	-0,0004	4	-0,859
ISE Second National Market Index	-0,0734	6	-0,00235	5	-0,0009	6	-1,335
ISE New Economy Index	-0,0662	5	-0,00239	6	-0,0009	5	-1,116
Market Portfolio (ISE All Index)	-0,0457		-0,00101				

CONCLUSION

2007 September – 2009 November period, risk and return of corporate governance index in Turkey, for the aim of evaluating performance with other indexes in the paper and as a result of evaluation with daily data; it can be concluded that, companies in the analyzed indexes don't provide any returns to investors, even it causes potential profit lose (when investing to risk-free financial instruments). When considering that a direct positive correlation between risk and return, it can be concluded poor management for the related portfolios does not provide exact diversification. It is thought that global financial crisis had an effect on this result.

Beta (β_i) coefficients, showing the relations of each index with market portfolio, the betas of ISE Corporate Governance Index, ISE New Economy Index and ISE Second National Market Index are lower than 1,0. So it can be concluded that it is less risky to invest the companies, which are listed in ISE Corporate Governance, ISE New Economy and ISE Second National Market Indexes, because of the fact that there is less than one unit change in returns of these indexes opposite to one unit change at market portfolio return. On the other hand, it is seen that the betas of ISE 100 Index, ISE 50 Index and ISE 30 Index are higher than 1,0. So that there is a risk of investing to the companies listed in ISE 100, ISE 50 and ISE 30 Indexes because they cause bigger changes than one unit opposite to one unit change of market portfolio return. On the other hand, determination coefficients are too high for some indexes and for some indexes are too low. Corporate Governance Index determination coefficient is low, and it means that the index hasn't well diversified.

As a result of Sharpe, Treynor and Jensen performance indexes, the most successful index is ISE 30 Index. Corporate Governance Index has a middle rank success, which is calculated at performance ranking. Similar findings were obtained by Buyuksalvarcı and Abdioglu (2010); Carikci et al. (2009); Core et al. (2006); Yen (2005) who studied the correlation between corporate governance and returns. All of them concluded that well-organized corporate governance implementations do not cause higher returns.

For the purpose of showing the correlation of calculated performance rankings which is consisted of Sharpe, Treynor and Jensen performance indexes, the calculated rank correlation coefficients have high correlation levels. Consequently, rank correlation coefficients of the each three performance indexes have almost the same results.

ENDNOTES

1. See Musteen et al. (2009) for details relation between corporate governance and globalization.
2. See Corporate Governance Principles of Capital Markets Board of Turkey (2005) for details of importance of corporate governance in companies and countries.
3. See Corporate Governance Principles of Capital Markets Board of Turkey (2005) for details of importance of corporate governance in companies and countries.
4. See Corporate Governance Principles of Capital Markets Board of Turkey (2005) for details of importance of corporate governance in companies and countries.
5. See OECD Principles for details of corporate governance.
6. See Corporate Governance Principles of Capital Markets Board of Turkey (2005) for details of corporate governance applications in Turkey.
7. For a detailed definition of ratings, see Appendix A.
8. See ISE website for details of ISE Corporate Governance Index, <http://www.ise.org/Index/StockIndexesHome/CorporateGovernanceIndex.aspx?sfopl=true>.
9. See Sharpe (1966) for details of measuring performances.
10. See Treynor (1965) for details of measuring performances.
11. See Jensen (1968) for details of Jensen's alpha.
12. For the calculated rank correlation matrix of performance indexes, see Appendix B.

REFERENCES

- Aguilera, R. V. (2005). Corporate Governance and Director Accountability: An Institutional Comparative Perspective. *British Journal of Management*. Vol 16. 39-53.
- Barrass, J. (2007). Corporate Governance and Ethics: Why They Matter. Head, Europe, Middle East, Africa, *CFA Centre for Financial Market Integrity*. Bank of Garanti Istanbul 17 March 2007 Presentation.
- Buyuksalvarci, A. & Abdioglu, H. (2010). Corporate Governance, Financial Ratios and Stock Returns: An Empirical Analysis of Istanbul Stock Exchange (ISE), *International Research Journal of Finance and Economics*, ISSN 1450-2887, Issue 57 (2010), <http://www.eurojournals.com/finance.htm>. 70-81.
- Capital Markets Board of Turkey. (2005). Corporate Governance Principles amended in February 2005, <http://www.spk.gov.tr/displayfile.aspx?action=displayfile&pageid=66&fn=66.pdf&submenuheader=null>, 20.06.2009.
- Carikci, H.I., Kalayci, S. & Gok, I. Y. (2009). The Relationship Between Corporate Governance and Firm Performance: An Empirical Analysis on ISE Corporate Governance Index, *Alanya İşletme Fakültesi Dergisi (International Journal of Alanya Faculty of Business)*, 1/1(2009). 51-72. (In Turkish).
- Claessens, S. (2003). Corporate Governance and Development, Washington D.C., *Global Corporate Governance Forum*.
- Core, J. E., Wayne, R. G., & Tjommme, O. R. (2006). Does Weak Governance Cause Weak Stock Returns? An Examination of Firm Operating Performance and Investors' Expectations. *Journal of Finance*. 61:655-87.
- Gillan, S.L. & Starks, L.T. (1998). A Survey of Shareholder Activism: Motivation and Empirical Evidence. *Contemporary Finance Digest*, Vol 2 (3). 10-34.
- Jensen, M.C. (1968). The Performance of Mutual Funds in the Period 1945-1964. *Journal of Finance*, Vol. 23. No. 2. 389-416,

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R. (2000). Investor Protection and Corporate Governance. *Journal of Financial Economics*. Vol 58. 3-27.

Luo, Y. (2005). Corporate Governance and Accountability in Multinational Enterprises: Concepts and Agenda. *Journal of International Management*. 11. 1-8.

Musteen, M., Deepak K. D., & Hermann, P. (2009). Ownership Structure and CEO Compensation: Implications for the Choice Foreign Market Entry Modes. *Journal of International Business Studies*. Vol 40. 321-338.

OECD. (1999). Principles of Corporate Governance, Organization for Economic Co-operation and Development, http://www.bestpractices.cz/praktiky/ETIKA_V_PODNIKANI/p2003_oecd_principles_of_corporate_governance.pdf, 11.02.2011

Sharpe, W.F. (1966). Mutual Fund Performance. *Journal of Business*. Vol 39.No: 1.119-138.

Shleifer, A. & Vishny, R. (1997). A Survey of Corporate Governance. *Journal of Finance*, Vol 52. 737–775.

Sloan, R. G. (2001). Financial Accounting and Corporate Governance: A Discussion, *Journal of Accounting and Economics*. Vol 32. 335-347.

Treynor, J. L. (1965). How to Rate Management of Investment Funds, *Harvard Business Review*. Vol 43. No 1. 63-75.

Yen, S. (2005). Are Well Governed Firms Safe Investments? <http://ssrn.com/abstract=648401>.
<http://www.ise.org/Indexes/StockIndexesHome/CorporateGovernanceIndex.aspx?sfopl=true>, 14.05.2010.

Zingales, L. (1997). Corporate Governance. P. Newman (Ed.), *The New Palgrave Dictionary of Economics and the Law*.

<http://www.ise.org/Indexes/StockIndexesHome/CorporateGovernanceIndex.aspx?sfopl=true>, 14.05.2010.

http://www.saharating.com/liste_goster.asp?bolum=11&id=120. 10.02.2011.

<http://www.tkyd.org/tr/content.asp?PID={A1F2B135-4F80-49FA-85C5-01FB00593720}>, 08.09.2011.

APPENDIX A

DEFINITIONS OF CORPORATE GOVERNANCE RATINGS

9-10	The company performs very well in terms of Capital Markets Board's corporate governance principles. It has, to varying degrees, identified and actively managed all significant corporate governance risks through comprehensive internal controls and management systems. The company's performance is considered to represent best practice, and it had almost no deficiencies in any of the areas rated.
7-8	The company performs well in terms of Capital Markets Board's corporate governance principles. It has, to varying degrees, identified all its material corporate governance risks and is actively managing the majority of them through internal controls and management systems. During the rating process, minor deficiencies were found in one or two of the areas rated.
6	The company performs fair in terms of Capital Markets Board's corporate governance principles. It has, to varying degrees, identified the majority of its material corporate governance risks and is beginning to actively manage them. Management accountability is considered in accordance with national standards but may be lagging behind international best practice. During the ratings process, minor deficiencies were identified in more than two of the areas rated.
4-5	The company performs weakly as a result of poor corporate governance policies and practices. The company has, to varying degrees, identified its minimum obligations but does not demonstrate an effective, integrated system of controls for managing related risks. Assurance mechanisms are weak. The rating has identified significant deficiencies in a number (but not the majority) of areas rated.
<4	The company performs very weakly and its corporate governance policies and practices are overall very poor. The company shows limited awareness of corporate governance risks, and internal controls are almost non-existent. Significant deficiencies are apparent in the majority of areas rated and have led to significant material loss and investor concern.

Source: http://www.saharating.com/liste_goster.asp?bolum=11&id=120, 10.02.2011.

APPENDIX B

RANK CORRELATION MATRIX OF SHARPE, TREYNOR, JENSEN PERFORMANCE INDEXES

	Sharpe	Treynor	Jensen
Sharpe	1,000		
Treynor	0,943(*)	1,000	
Jensen	1,000	0,943(*)	1,000

(*) significance level at 0,01.