

Summative Assessment

[Writer's Name]

[Supervisor's Name]

[Course]

Table of Contents

1	Introduction	3
2	Literature Review	3
3	Methodology.....	6
4	Results	6
5	Discussion.....	12
6	Conclusion.....	14
7	References	15
8	Appendix A – Calculations (Ratios and Board composition indicators).....	20
9	Appendix B – 5years Averages of Variables.....	24

1 Introduction

The effectiveness of the board depends upon the number of meetings it conducts which effectively and significantly contributes for the improvement of companies' performance. Board's activity is directly proportional with the performance of the company. It means if the board conducts more meetings, the performance of the company is also higher. A large number of meetings generates surveillance and control activity and leads to interest convergence of interests between the employees, management and the shareholders. However, as far as the significance of the board's size is concerned, it does not have a significant impact on firm's performance. This variable neither proves resource dependency theory predictions nor those of the agency theory.

This paper focuses on the board's composition, independence, structure and characteristics and firm's performance. Before embarking on the exploration of this interaction, it is useful to emphasize that the results of this relationship are, more often than not, contingent or even partial.

2 Literature Review

Lefort and Urzúa (2014) confirm the fact that mechanism of board's composition is the most important issue because, being the mechanism of monitoring malpractices and ensuring good and ethical practices to be adopted which will monitor the interests of all concerned parties. Theoretically, Hermalin and Weisbach (2011) opined that board is an economic institution, accepting the mission of reducing agency problems between shareholders and managers. Along these lines, Crespi et al. (2012) pointed out that the proper functioning of internal mechanisms

leads to ethical working of the company. Nam (2012) agrees with these conclusions and stipulates that the board is the main instrument of corporate governance.

Bhagat and Bolton (2014) and Agrawal and Knoeber (2006) all lead to the same result according to which the board's independence is negatively linked to the corporate performance. Only Rosenstein and Wyatt (2005) were able to observe that the company's share value increases with number of external directors in the board.

The studies by Yermack (2006) and Dalton et al. (2008) failed to determine a substantial connection in company's performance indicators, such as the operating ratio per total asset or sales per asset and board's independence. According to the study by Dalton et al. (2008), the duality of the president does not seem to affect the firm's profitability and performance; whereas the study of Bhagat and Bolton (2014) highlights a negative relationship and significant difference between the performance of the firm and the board's Chairman's duality. However in their study, Iyengan and Zampelli (2015), did not find any noteworthy connection between firm's performance and the board's president duality.

Anderson et al. (2014) analysed the connection of audit committee on debt's cost and the directors of the board characteristics. However, researchers fail to establish a robust and meaningful relationship between the cost of debt and the presence of a finance professional in the audit committee. This result joins those of Defond et al. (2011) who studied the market reaction to the presence of a finance professional within the audit committee found that the market reaction is . mixed and above all conditional on solid corporate governance in general.

The study by Anderson et al. (2014) is limited to the presence of a professional, audit committee and board's independence and size. They are only interested in the cost of debt while

other research uses the cost of capital which makes it possible to detect an overall risk premium for the company as well as the cost of its equity.

By examining in depth the work of Fama and Jenson (2003), one can see that external directors, of independent nature, favourably contribute to an effective control of the managers and this, comes from their incentive to exercise that control. Along these lines, Fama (2001) suggests that having external directors is good for the company because they always work in the interest of the company. Rosenstein and Waytt (2005) launch the call that the announcement of having additional external directors increases the wealth of shareholders. They argue this conclusion by the fact that this announcement necessarily leads to increasing the share price of the firm in the days that follow this action undertaken by the board of directors. Liang and Li (2009) favourably share this junction and approve by analysing 228 Chinese companies that having external directors in the board is good for monitoring the interests of both, shareholders and stakeholders and thus, reduces the agency cost. Hence, it contributes the emergence of the performance measured by accounting measures. Black et al. (2012) reach a similar conclusion in Korea. Still in this context, Lefort&Urzúa (2014), by conducting an application on 160 Chilean companies, further corroborate this idea and postulate that the presence of external directors in the board is good for firm's performance. Dahya et al. (2014) agree with this thesis and approve, by carrying out a study on a panel of 799 companies in 22 countries.

According to Kaymak and Bektas (2014), board's independence is not the only catalyst to encourage increased performance for the company. A review of the reference works of Fama and Jenson (2003) shows that the latter strongly criticize the duality of the board. Fama and Jenson (2003) argue that the board is ineffective in its mission of control and advice and this turnover is

highlighted to please the choices of the CEO. Pi and Timme (2006) by investigating the American banking sector, approve that the return on assets (ROA) is, of a very low nature in banks governed by a CEO who is himself the president of the board. This result is already proven by Rechner and Dalton (2005).

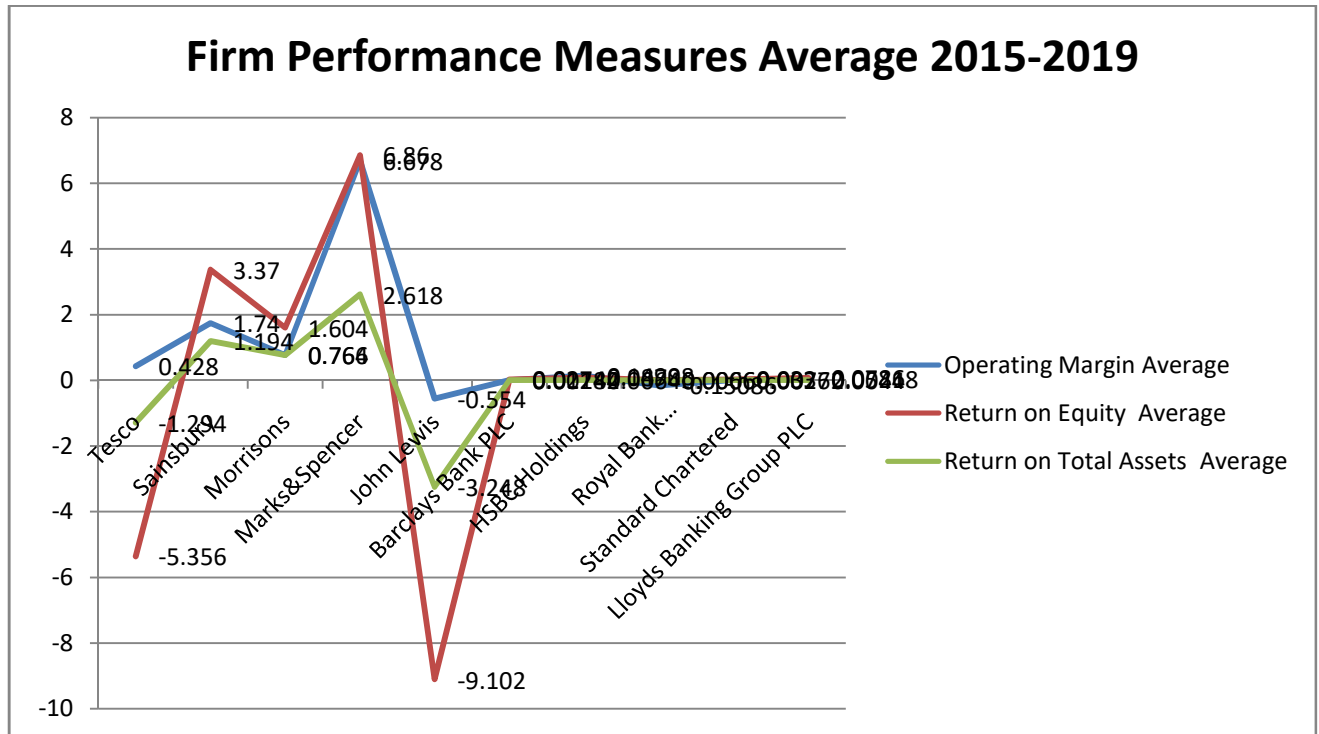
3 Methodology

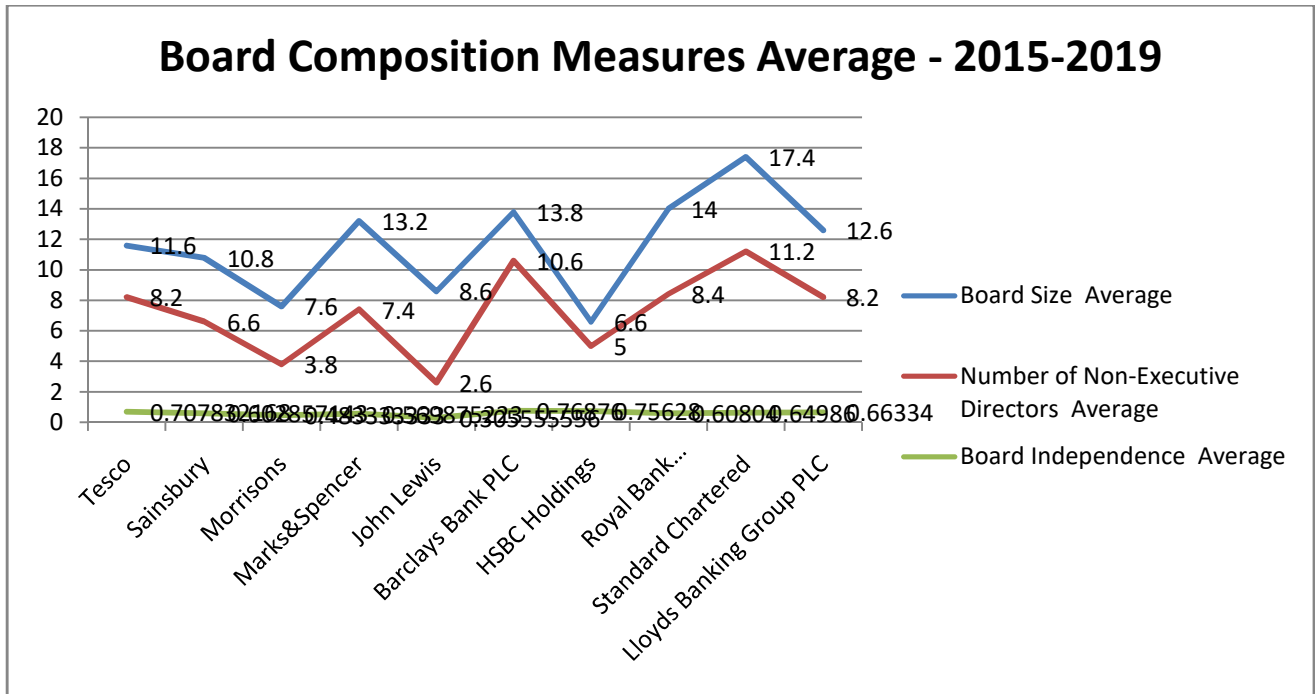
In order to assess the impact of board composition on firm performance this study collected performance data of five retailers and five UK banks. The data has been collected from Morningstar website which is an independent source of data, providing ratios free of cost and updated information can be obtained. In addition, the data about board composition was collected directly from annual statements of all firms included in the sample. The data is collected for this research study from five retailers and five banks for the period 2015-2019. For the operationalisation of firm performance, operating margin, return on assets, and return on equity were calculated. To operationalise board composition, this study used board size, number of executive directors, and board independence (non-executive director/board size) (see Appendix A). These indicators have been chosen following Arulvel and Pratheepkanth, (2019).

The researcher used correlation technique to analyse the nature and strength of relationship. In order to simplify the analysis, average of five years values of each variable were calculated (see Appendix B) and then SPSS was used to calculate correlation for each sector separately.

4 Results

This section presents results of quantitative analysis. First descriptive statistics and trends analysis are presented for each organisation in both sectors. In case of retail sector, following trends in descriptive statistics were obtained:





It can be observed that there is no discernible pattern in the operating margin of the retail sector with some having high margins (Marks&Spencer = 6.6) while others having low (John Lewis = -0.5). Similar is the case of banking sector (HSBC = 0.15 and Royal bank = -0.15). Furthermore, comparing the return on equity, the retail sector shows that Tesco and John Lewis has very low ratios due to high level of equity as compared sales while remaining have positive ratios indicating higher sales as compared to equity. In case of banking the return on equity ratio indicate some degree of similarity as they all are less than 1 but there is no pattern. In case of return on assets the retail sector shows return varies from 2.68 for Marks&Spencer the highest and -3.25 for John Lewis the lowest. The return on asset for banking there is very low return on asset with 0.006 for HSBC and 0.003 for Barclays.

The board composition measures of retail sector indicate that the average Board size for Marks&Spencer is 13.2 highest and 7.6 for Morrisons lowest. As compared to banking industry the highest board size is 17.4 of Standard Chartered and lowest size is 6.6 of HSBC. The highest

average for number of non-executive board members is reflected by Tesco with 8.2 and the lowest number belongs to Morrisons. In case of banking sector, the highest number of non-executive board members exist in 11.2 Standard Chartered and lowest number exist in HSBC holding. Finally, the board independence average in retail sector shows that highest average belongs to Tesco 0.71 and lowest is 0.31 John Lewis. Finally, the board independence ratios in banking sector are similar and close to one another with highest ratio for Barclays .077 and lowest ratio for Royal Bank .61.

Table below shows coefficient of Pearson's correlation among all of the indicators used for both board composition and corporate performance:

		Correlations					
		Retail-Operating Margin	Retail-Return on Equity	Retail-Return on Assets	Retail-Board Size	Retail-Non-Executive Directors	Retail-Board Independence
Retail-Operating Margin	Pearson Correlation	1	.813	.817	.743	.514	.305
	Sig. (2-tailed)		.095	.091	.150	.375	.618
	N	5	5	5	5	5	5
Retail-Return on Equity	Pearson Correlation	.813	1	.994**	.437	.421	.391
	Sig. (2-tailed)	.095		.001	.461	.480	.515
	N	5	5	5	5	5	5
Retail-Return on Assets	Pearson Correlation	.817	.994**	1	.479	.493	.472
	Sig. (2-tailed)	.091	.001		.414	.398	.422
	N	5	5	5	5	5	5
Retail-Board Size	Pearson Correlation	.743	.437	.479	1	.873	.651
	Sig. (2-tailed)	.150	.461	.414		.053	.234
	N	5	5	5	5	5	5
Retail-Non-Executive Directors	Pearson Correlation	.514	.421	.493	.873	1	.938
	Sig. (2-tailed)	.375	.480	.398	.053		.018
	N	5	5	5	5	5	5
Retail-Board Independence	Pearson Correlation	.305	.391	.472	.651	.938	1
	Sig. (2-tailed)	.618	.515	.422	.234	.018	
	N	5	5	5	5	5	5

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

It can be reported that in case of the retail sector positive and high coefficients of correlation exist between operating margin and board size ($r=.743$, $p=0.095$), number of non-executive directors ($r=.514$, $p=0.375$) and board independence ($r=.305$, $p=0.618$); however, none

of the correlation is statistically significant. Exactly same results have been obtained for correlations between return on equity and board size ($r=.437$, $p=0.461$), number of non-executive directors ($r=.421$, $p=0.480$) and board independence ($r=.391$, $p=0.515$) as well as return on assets and board size ($r=.479$, $p=0.414$), number of non-executive directors ($r=.493$, $p=0.398$) and board independence ($r=.472$, $p=0.422$).

Furthermore, in case of the banking sector following table summarises the correlation coefficients;

		Correlations					
		Banking-Operating Margin	Banking-Return on Equity	Banking-Return on Assets	Banking-Board Size	Banking-Non-Executive Directors	Banking-Board Independence
Banking-Operating Margin	Pearson Correlation	1	.894*	.971**	-.630	-.463	.708
	Sig. (2-tailed)		.041	.006	.255	.432	.181
	N	5	5	5	5	5	5
Banking-Return on Equity	Pearson Correlation	.894*	1	.956*	-.712	-.665	.428
	Sig. (2-tailed)	.041		.011	.177	.221	.472
	N	5	5	5	5	5	5
Banking-Return on Assets	Pearson Correlation	.971**	.956*	1	-.773	-.653	.641
	Sig. (2-tailed)	.006	.011		.125	.232	.243
	N	5	5	5	5	5	5
Banking-Board Size	Pearson Correlation	-.630	-.712	-.773	1	.937*	-.552
	Sig. (2-tailed)	.255	.177	.125		.019	.334
	N	5	5	5	5	5	5
Banking-Non-Executive Directors	Pearson Correlation	-.463	-.665	-.653	.937*	1	-.231
	Sig. (2-tailed)	.432	.221	.232	.019		.709
	N	5	5	5	5	5	5
Banking-Board Independence	Pearson Correlation	.708	.428	.641	-.552	-.231	1
	Sig. (2-tailed)	.181	.472	.243	.334	.709	
	N	5	5	5	5	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

**.. Correlation is significant at the 0.01 level (2-tailed).

The results showed that operating margin has negative correlations with board size ($r=-.630$, $p=0.255$) and number of non-executive directors ($r=-.463$, $p=0.432$) but positive correlation with board independence ($r=.708$, $p=0.181$); however, none of the correlation is statistically significant. Exactly same results have been obtained for correlations between return on equity and board size ($r=-.712$, $p=0.177$), number of non-executive directors ($r=-.665$, $p=0.221$) and

board independence ($r=.428$, $p=0.472$) as well as return on assets and board size ($r= -.773$, $p=0.125$), number of non-executive directors ($r= -.653$, $p=0.232$) and board independence ($r=.641$, $p=0.243$).

Furthermore, this study also analysed the difference between the two sectors using independent t-test statistics. The aim is to compare the sectors with respect correlations identified in previous section. First the study analysed whether correlations between board composition indicators and operating margins differ between retail and banking sector. The results are as followed:

Regarding the operating margin, SPSS results indicate that there is significant difference between retail and banking with respect to impact of board composition on operating margin. Therefore the null hypotheses that there is no difference in the correlations is rejected ($t=1.14$, $p=.214$)

Group Statistics					
Operating Margin-Group		N	Mean	Std. Deviation	Std. Error Mean
Operating Margin-Correlations	Retail	3	.5207	.21908	.12648
	Banking	3	-.1283	.72908	.42094

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Operating Margin-Correlations	Equal variances assumed	6.260	.067	1.477	4	.214	.64900	.43953	-.57133	1.86933
	Equal variances not assumed			1.477	2.358	.259	.64900	.43953	-.99184	2.28984

Similarly, regarding the return on equity, the results show that there is significant difference between retail and banking with respect to impact of board composition on return on equity. Hence the null hypotheses is rejected ($t=1.96$, $p=.121$) meaning that there is statistically significant difference between correlations between board composition and return on equity in retail and banking sectors.

Return on Equity-Group		N	Mean	Std. Deviation	Std. Error Mean
Return on Equity-Correlations	Retail	3	.4163	.02335	.01348
	Banking	3	-.3163	.64504	.37241

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Return on Equity-Correlations	Equal variances assumed	14.716	.019	1.966	4	.121	.73267	.37266	-.30200	1.76733
	Equal variances not assumed			1.966	2.005	.188	.73267	.37266	-.86674	2.33207

Finally, with respect to impact of board composition, on return on assets, there is also significant difference. The results show that the null hypotheses is rejected ($t=1.641$, $p=0.176$). Therefore it can be opined that in case of correlation between board composition and return on assets, there is statistically different means in retail and banking sector.

Return on Total Assets-Group		N	Mean	Std. Deviation	Std. Error Mean
Return on Total Assets-Correlations	Retail	3	.4813	.01069	.00617
	Banking	3	-.2617	.78403	.45266

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Return on Total Assets-Correlations	Equal variances assumed	14.799	.018	1.641	4	.176	.74300	.45270	-.51390	1.99990
	Equal variances not assumed			1.641	2.001	.242	.74300	.45270	-1.20413	2.69013

5 Discussion

The results above show consistency with Song et al. (2017) who also assessed the effects of board composition on corporate performance and focused on the restaurant industry with the stewardship theory as the main theory. They used the ratio of inside directors and outside directors as the measure of the composition of board. The operationalisation of corporate performance was done using return on assets and Tobin's q. Data collection period selected was 2007 to 2013 and 25 restaurant were recruited in the sample. The study conducted Panel

regression analysis for hypotheses testing and reported that the correlation coefficient between corporate performance and board composition was positive but statistically insignificant. Nonetheless, it was reported that if the number of inside board increase the market-based performance (Tobin'sQ) also showed increase. Conversely, if number of outside board members increase there was a decrease in the market-based performance.

The results above are inconsistent with several past studies in which the empirical evidence achieves statistical significance for the link between board composition and corporate performance. Furthermore, it can be inferred that the results are different for different sectors. In case of retail sector the results are all positive, however, in case of banking sector the results are contradicting for some coefficients.

According to Song et al. (2017) the presence of independent directors contributes significantly to improving business performance. These independent directors provide the company with technical expertise and privileged environmental information to improve its performance. The reason is that these independent directors are proficient and thorough professionals who are hired due to their expertise. In addition to that, they do not have personal interests so this independence helps them to oppose such things which are not in the favour of the company. However, the results above only show positive impact of board independence and non-executive directors with corporate performance in case of retail sector and opposite results in case of banking sector.

Karayel and Doğan, M. (2016) also analysed the link between corporate performance and corporate board composition. As per the results the firm performance measures Return on Assets

and Return on Equity were significantly impacted by board composition measures and thus reflected impact on market performance.

6 Conclusion

The objective of this research is to find how the composition of the board affects companies' performance. This study first highlighted the role of the board in matters of control and surveillance. The work relating to the board's independence and its association with firm's performance gives contradictory results. However, many studies prove that independent directors' presence is good for the firm. However, other research presents just the opposite results.

This research study has failed to confirm that board independence is an effective means of controlling managers. According to agency theory, firm's performance increases with the higher number of independent directors. Regarding duality, previous research could not find any link or relationship in board's structure and firm's performance. In fact, some studies conclude that separation of powers of the board's chairman and CEO is an advantage for firm's performance. While other research has confirmed the theory of stewardship and has shown that duality is better for company's performance. This study also proved a significant connection between duality and the firm's performance. Finally, the t-test results confirm that relationship between board composition and firm performance varies from one sector to another because there are statistically significant differences in mean of retail sector and banking sector.

However, there are some limitations in the results above as they are based on data from 10 companies only and therefore the sample size is very small. Therefore, further research is recommended to gain more reliable and valid results.

7 References

- Agrawal, A. and Chadha, S., 2005. Corporate governance and accounting scandals. *Journal of Law and Economics*, p.371-406.
- Agrawal, A. and Knoeber, C., 2006. Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, vol. 31, no 3, p, 377-397
- Anderson, R.C., Mansi, S. A. and Reeb, D.M., 2014. Board characteristics, accounting report integrity and the cost of debt. *Journal of Accounting and Economics*, vol. 37, p. 31S-342.
- Arulvel, K. K., and Pratheepkanth, P. 2019. BOARD COMPOSITION AND FIRM PERFORMANCE: THE SRI LANKAN CASE. *Arabian Journal of Business and Management Review (Oman Chapter)*, 8(1), 40-49.
- Baysinger, B.D. and Butler, H.D., 2005. Corporate governance and the board of directors: Performance effects of changes in board composition. *Journal of Law, Economics and Organizations*, 1, pp. 650-657
- Bhagat, S. and Bolton, B., 2014. Corporate governance and firm performance. *Journal of Corporate Finance*, 14 (3), pp. 257-273
- Black, B., Jang, H. and Him, W., 2012. Predicting firms' corporate governance choices: evidence from Korea. *Journal of Corporate Finance*, 12, pp. 660-691

- Crespi, R., García-Cestona, M.A. and Salas, V., 2012. Governance mechanisms in banks: Does ownership matter? *Journal of Banking and Finance*, 28, pp. 2311-2330
- Dahya, J., Dimitrov, O. and McConnell, J., 2014. Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics*, 87, pp. 73-100
- Dalton, R., Daily, C.M., Ellstrand, A.E. and Johnson, E., 2008. Compensation Committee Composition as a Determinant of CEO Compensation. *The Academy of Management Journal*, vol. 41, no 2, p.209-220.
- Defond, M.L., Hann, R. N. and Hu, X., 2011. Does the market value financial expertise on Audit Committees of boards of directors? *Journal of Accounting Research*, vol. 43, 2, p.153-193.
- Fama, E.F. and Jensen, M.C., 2003. Separation of ownership and control. *Journal of Law and Economics*, 26, pp. 301-325
- Fama, E.F., 2001. Agency problems and the theory of the firm. *Journal of Political Economy*, 88, pp. 288-307
- Hail, L. and Leuz, C., 2012. International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter. *Journal of Accounting research*, vol. 44, no 3, p A37-483.
- Hermalin, B.E. and Weisbach, M.S., 2011. Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review*, pp. 7-26

- Iyengan, R. and Zampelli, E.M., 2015. Self-selection, endogeneity and the relationship between CEO duality and the firm performance. *Strategic Management Journal*, vol. 30, p. 1092-1112.
- Karayel, M., and Doğan, M. 2016. Board Composition and Firm Performance: Evidence from BIST 100 Companies in Turkey.
- Kaymak, T. and Bektas, E., 2014. East meets west? Board characteristics in an emerging market: Evidence from Turkish Banks. *Corporate Governance*, 16 (6), pp. 550-561
- Lefort, F. and Urzua, F., 2014. Board independence, firm performance and ownership concentration: Evidence from Chile. *Journal of Business Research*, 61, pp. 615-622
- Li, S., 2010. Does Mandatory adoption of international financial reporting standards in the European Union Reduce the cost of equity capital? *The Accounting Review*, vol.85, no 2; p. 607-636.
- Liang, N. and Li, J., 2009. Board structure and firm performance: New evidence from China's private firms. *China Center for Economic Research*, pp. 1-32
- Naciri, A. 2010. *Internal and external aspects of corporate governance*. Routledge, New York, 332 p
- Nam, S. W., 2012. Corporate governance of banks: Review of issues. *WP Asian Development Bank Institute*, pp. 1-35
- Pi, L. and Timme, S.G., 2006. Corporate control and bank efficiency. *Journal of Banking and Finance*, 17, pp. 515-530

- Rechner, P. and Dalton, D.R., 2005. CEO duality and organizational performance. *Strategic Management Journal*, 12, pp. 155-160
- Rosenstein, S. and Wyatt, J.G., 2005. Outside directors, board independence, and shareholder wealth. *Journal of Financial Economics*, 26, pp. 175-191
- Shleifer, A. and Vishny, R., 2007. A survey of corporate governance. *Journal of Finance*, vol.52, p.737-783.
- Song, S., Van Hoof, H. B., and Park, S. 2017. The impact of board composition on firm performance in the restaurant industry. *International Journal of Contemporary Hospitality Management*.
- Song, S., Van Hoof, H. B., and Park, S. 2017. The impact of board composition on firm performance in the restaurant industry. *International Journal of Contemporary Hospitality Management*.
- Yermack, D., 2006. Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, vol. 40, no 2, p. 185-211.

Links to Annual Reports

Tesco <https://www.tescopl.com/investors/reports-results-and-presentations/reports-archive/>

Sainsbury <https://www.about.sainsburys.co.uk/investors/results-reports-and-presentations>

Morrisons <https://www.morrisons-corporate.com/investor-centre/financial-reports/>

Marks&Spencer <https://corporate.marksandspencer.com/investors/reports-results-and-presentations>

John Lewis <https://www.johnlewispartnership.co.uk/financials/financial-results.html>

Barclays Bank PLC <https://home.barclays/investor-relations/reports-and-events/annual-reports/>

HSBC Holdings <https://www.hsbc.com/investors/results-and-announcements>

Royal Bank of Scotland Group PLC <https://investors.rbs.com/reports-archive/2019.aspx>

Standard Chartered <https://www.sc.com/pk/about-us/financial-statements.html>

Lloyds Banking Group PLC <https://www.lloydsbankinggroup.com/Investors/financial-performance/>

8 Appendix A – Calculations (Ratios and Board composition indicators)

Retail	Year	Operating Margin	Return on Equity	Return on Total Assets	Board Size	Number of Non-Executive Directors	Board Independence = Number of Executive Directors/Board Size
Tesco	2015	-7.72	-52.7	-12.17	10	7	0.7000
	2016	1.8	1.76	0.31	11	8	0.7273
	2017	2.09	-0.53	-0.09	11	8	0.7273
	2018	2.72	14.26	2.66	13	9	0.6923
	2019	3.25	10.43	2.82	13	9	0.6923
Sainsbury	2015	0.34	-2.88	-1	10	7	0.7000
	2016	3.01	7.71	2.74	14	10	0.7143
	201	2.45	5.42	1.96	10	6	0.6000

	7						
	201 8	1.82	4.07	1.39	10	5	0.5000
	201 9	1.08	2.53	0.88	10	5	0.5000
Morrisons	201 5	-4.94	-18.37	-7.65	6	1	0.1667
	201 6	1.35	6.04	2.4	8	4	0.5000
	201 7	2.67	7.8	3.29	8	4	0.5000
	201 8	2.54	7.23	3.29	8	5	0.6250
	201 9	2.21	5.32	2.49	8	5	0.6250
Marks&Spencer	201 5	7.39	16.47	6.04	17	8	0.4706
	201 6	7.44	12.25	4.88	14	7	0.5000
	201 7	6.5	3.55	1.4	11	6	0.5455
	201 8	6.27	0.84	0.32	12	8	0.6667

	201 9	5.79	1.19	0.45	12	8	0.6667
John Lewis	201 5	1.27	2.15	1	8	3	0.3750
	201 6	-1.31	-6.86	-2.93	9	2	0.2222
	201 7	-2.23	-23.17	-8.86	9	3	0.3333
	201 8	1.79	6.9	2.37	9	2	0.2222
	201 9	-2.29	-24.53	-7.82	8	3	0.3750
Banking Sector Ratios							
Barclays Bank PLC	201 5	-0.0047	0.0132	0.0023	14	11	0.8125
	201 6	-0.0125	0.0187	0.0038	14	11	0.7647
	201 7	0.0816	0.0544	0.0027	13	10	0.7333
	201 8	-0.0829	0.0152	0.0025	13	10	0.8
	201 9	0.0756	0.0355	0.0029	15	11	0.7333
HSBC Holdings	201 5	0.1841	0.1	0.007	6	5	0.8
	201 6	0.1931	0.1	0.007	6	5	0.8333
	201 7	0.0214	0.039	0.003	6	5	0.7895
	201 8	0.1507	0.094	0.007	7	5	0.7222
	201 9	0.1961	0.106	0.008	8	5	0.6364
Royal Bank	201	-0.2365	0.046	0.003	14	8	0.5556

of Scotland Group PLC	5						
	201 6	-0.1516	-0.05	-0.003	15	9	0.625
	201 7	-0.5469	-0.08	-0.005	16	10	0.6471
	201 8	0.0591	0.046	0.003	14	8	0.5625
	201 9	0.1216	0.071	0.005	11	7	0.65
Standard Chartered	201 5	0.139	0.091	0.006	21	14	0.6957
	201 6	-0.1593	-0.032	-0.002	19	13	0.6842
	201 7	-0.0359	0.008	0.001	17	11	0.6471
	201 8	0.053	0.048	0.004	17	9	0.5556
	201 9	0.0418	0.05	0.004	13	9	0.6667
Lloyds Banking Group PLC	201 5	0.028	0.04	0.002	13	10	0.7333
	201 6	0.0159	0.035	0.002	13	8	0.6429
	201 7	0.0356	0.089	0.005	13	8	0.6429
	201 8	0.0774	0.108	0.006	12	8	0.7143
	201 9	0.104	0.121	0.007	12	7	0.5833

9 Appendix B – 5years Averages of Variables

	Operating Margin Average	Return on Equity Average	Return on Total Assets Average	Board Size Average	Number of Non- Executive Directors Average	Board Independence Average
Tesco	0.428	-5.356	-1.294	11.6	8.2	0.707832
Sainsbury	1.74	3.37	1.194	10.8	6.6	0.602857
Morrisons	0.766	1.604	0.764	7.6	3.8	0.483333
Marks&Spencer	6.678	6.86	2.618	13.2	7.4	0.569875
John Lewis	-0.554	-9.102	-3.248	8.6	2.6	0.305556
Barclays Bank PLC	0.01142	0.0274	0.00284	13.8	10.6	0.76876
HSBC Holdings	0.14908	0.0878	0.0064	6.6	5	0.75628
Royal Bank of Scotland Group PLC	-0.15086	0.0066	0.0006	14	8.4	0.60804
Standard Chartered	0.00772	0.033	0.0026	17.4	11.2	0.64986
Lloyds Banking Group PLC	0.05218	0.0786	0.0044	12.6	8.2	0.66334