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Relationship between Corporate Governance and Financial Crisis: A Study of Ghana's Banking Sector

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Abstract:
This study assessed the effect of corporate governance on the odds of the occurrence of financial crisis in Ghana. Annual data for the period 2010 – 2019, from twenty-two commercial banks selected by the criterion sampling techniques, were used. The binary logistic regression technique was employed to estimate the hypothesis formulated. Results revealed a significantly negative effect of corporate governance on the odds of financial crisis occurring among commercial banks in Ghana. The study concluded that good corporate governance practices tend to contribute to averting the occurrence of financial crisis. It was then recommended that management or board of directors of banks in Ghana pay serious attention to clients and their demands, level of risk to take, as well as risk management techniques to ensure that the right and profitable decisions are taken at all point in time.

Keywords: *Corporate governance, financial crisis, commercial banks, Ghana*

1. Introduction

Financial crisis has been reported to have disastrous effects on individuals, households, firms, governments and economies at large (Reinhart and Rogoff, 2012; Yilmaz, 2010), due to the numerous unpleasant consequences it is associated with. Evidently, the global financial crisis suffered in 2008 (Klomp and De Haan, 2010), and the financial sector crisis which happened in Russia and Asia in the late 1990's (Winkler, 2010; Guloglu and İvrendi, 2010) cannot be ignored when issues of crisis related to finance are being considered. These crises caused disruption in the flow of credit to people, families, businesses, and governments. Savings, investments and consumption drastically declined, forcing firms into insolvency and an eventual shutdown (Bhanot et al., 2014). Unemployment rates rose astronomically as standard of living fell steeply (Yilmaz, 2010).

The major causes of financial crisis have been attributed to failure of regulations, failure to adhere to stringent corporate governance principles and taking of uncalculated risks, among others (Roy and Kemme, 2012; Winkler, 2010; Guloglu and İvrendi, 2010; Klomp and De Haan, 2010). Collectively, all these causes have been associated with corporate governance issues (Klomp and De Haan, 2010). This is to say that weak governance systems, particularly those within financial institutions such banks, are likely to adversely influence the general operational effectiveness of financial institutions. As posited by the corporate governance theory – which states that corporate governance guides decision making issues at the board and top management levels of corporations to ensure that decisions align with the objectives of shareholders and the company (Berle and Gardiner, 1968) – when corporate governance fails to guard against aggressive risk taking, firms face disastrous financial issues which may lead to a complete shutdown (Tarraf, 2011; Kumar and Singh, 2013).

Considering the unwelcoming effects of financial crisis and its attendant long term ramifications, there is the need to research into the phenomenon and bring to the fore the various causes in order for the right policies to be formulated and implemented for a sustainable financial system. However, the number of studies on financial crisis – particularly those assessing whether corporate governance influences the occurrence of financial crisis – is scanty; especially in developing economies in Africa, including Ghana (Ajakaiye, Fakiyesi and Oyinlola, 2010). It appears most of the empirical studies considering corporate governance and financial crisis were carried out in the developed countries (Roy and Kemme, 2012; Winkler, 2010; Guloglu and İvrendi, 2010; Klomp and De Haan, 2010). Even that, many of them only cited corporate governance as one of the major causes of financial crisis (Ajakaiye et al., 2010) but not necessarily studying the kind of possible relationship that might exist between corporate governance and occurrence of financial crisis. This has left a huge gap in literature as far as the relationships between corporate governance and financial crisis is concerned.

More recently, Ghana experienced financial crisis leading to the collapse of a number of banking institutions, and virtually all the media houses in the country as well as the central bank, Bank of Ghana (BoG), attributed the cause to corporate governance and management issues (Frimpong, 2018; Larnyoh, 2018; Afolabi, 2018; BoG, 2018). This led the government of the day to embark on an exercise to clean up the financial system so as to improve its robustness. The exercise further led to shut down and merger of many other financial institutions which were on the verge of collapsing, considering the regulator's – Bank of Ghana – minimum requirements for continued existence and operations (BoG, 2018). This led to increase in unemployment rates in a country, Ghana, which was already bedevilled by high cost of living as many bank workers lost their jobs or got laid off; interestingly, some of those who lost their jobs had to become entrepreneurs as some started vending 'pig meat' in order to make ends meet (Joy FM, 2020; Citi FM, 2020).

The Bank of Ghana attributed the fall of these banks to, among other things, corporate governance issues as managers and directors of the banks were cited to have been following their personal interests, such as taking funds for personal use and indifference towards general health and wellbeing of the banks, at the expense of directives of the owners and objectives, visions and missions of the banks; this eventually landed the banks in financial difficulty inducing financial crisis (Ministry of Finance (MoF), 2019). Surprisingly, it appears not much attention has been given to the phenomenon, research-wise, as far as the link between corporate governance and the odds of financial crisis occurring in Ghana is concerned. Related previous studies were done in advanced countries (Hearit and Hearit, 2020), and the attention had mostly been focused on non-banking or concepts other than corporate governance (Roy and Kemme, 2012; Ueda and di Mauro, 2010; Atinyo and Kawor, 2021). As such, those previous studies' findings might not logically represent the status of Ghana's banking sector and can affect plans towards making the sector work if these findings are based on to formulate policies. Thus, there is a need for a research like this to address the gap in the literature.

The objective of this research was to determine the effect of corporate governance on financial crisis. This research focused on all the major universal banks in the financial sector of Ghana. This kind of research will help to add to the existing knowledge on corporate governance and financial crisis in less developed countries, specifically. Also, the findings will have effects on decision-making at individual, household, firm and national levels. Additionally, understanding the connection between corporate governance and financial crisis will afford stakeholders of the financial sector insights about how to handle and deal with directors and managers of banks in order to improve the financial system, which may in turn help reduce unemployment rate which has become a canker in Ghana, as well as contribute to achieving the first Sustainable Development Goal (SDG) – no poverty (United Nations (UN), 2015).

2. Theoretical Background and Hypothesis Formulation

2.1. Corporate Governance Theory

The modern corporate governance theory was brought forth by Berle and Gardiner (1968). According to this theory, corporate governance guides decision making issues at the board and top management levels of corporations to ensure that decisions align with the objectives of shareholders and the company. Corporate governance also defines the relationship between shareholders and managers (Tarraf, 2011), and makes a way for a balance between the desires of directors and that of shareholders (Kumar and Singh, 2013). When corporate governance fails to guard against aggressive risk taking, firms face disastrous financial issues which may lead to a complete shutdown (Tarraf, 2011).

In essence, the corporate governance theory draws on how level of effectiveness of corporate governance influences a firm's survival. This leads to the fact that if corporate governance weakens, decisions not in the interest of the firm and its shareholders are likely to be taken by the managers of the firm; hence, causing losses, especially financial losses, to the firm. Considering this, it is clear that banks may face financial crisis if their corporate governance issues are not handled well. It is likely that if management of commercial banks strictly follows their corporate governance standards, certain risky decisions can be avoided, thereby, saving the banks from financial crisis. On the other hand, failure to follow corporate governance provisions can wreak havoc on banks' survival. Based on these, a straight-line relationship can be drawn between corporate governance and occurrence of financial crisis.

2.2. Corporate Governance and Occurrence of Financial Crisis

Empirical studies on governance and the odds of financial crisis occurring are not common. Often times, mentions are only made in reports and news that corporate governance is one of the predictors of financial crises (BoG, 2018; Afolabi, 2018). Some studies also reported corporate governance to be the key determinant of organisational performance; how well an organisation performs is linked to its corporate governance (Yeoh and Koronios, 2010; Kwesi, 2018; Banker, 2017). These studies concluded that good corporate governance ensures that shareholders' interests are upheld; thereby, saving firms from conflict of interest which can eventually land the firm in crisis.

Further, to assess how corporate governance contributes to financial crisis, Tarraf and Majeske (2013) summarised a stream of previous studies which explicated how failures in corporate governance contributed to the global financial crisis. The main relevance of the paper was to summarise previous studies on 2007-2008 global financial crisis. The outcome showed that corporate governance of firms has an influence on financial crisis. This study only reviewed prior research works which studied corporate governance as the main cause of the global financial crisis. This means that the inherent weaknesses of the prior studies had not been catered for as only results were reported by Tarraf and Majeske.

In addition, using the survival analysis approach by integrating Cox Proportional Hazards regressions, Chancharat and Chancharat (2013) investigated the correlation between corporate governance and the likelihood of firm survival. The study tracked, longitudinally, 176 financially distressed firms. The results showed that corporate governance is positively associated with the likelihood of firm survival. It was implied that, for firms to survive the test of time, good corporate governance is a key factor. Though Chancharat and Chancharat did not specifically focus on occurrence of financial crisis, it could be inferred that poor corporate governance might eventually lead to financial issues.

In another study, Atinyo and Kawor (2021) studied the effect of financial distress on occurrence of financial crisis in Ghana. Annual data for the period 2010 – 2019 from 22 universal banks were used. Using the binary logistic regression method to estimate the relationship between financial distress and the occurrence of financial crisis, it was revealed that financial distress had statistically significant effect on the odds of occurrence of financial crisis in Ghana. Though their study considered financial distress, it should be pointed out that poor corporate governance could transmit into financial distress or exacerbate financial distress; thereby, resulting in the occurrence of financial crisis.

Thus far, all the related studies the researchers came across seemed to draw a relationship between corporate governance and the odds of financial crisis occurring. Based on this, the following hypothesis was formulated:

- Hypothesis 1 (H1): *There is a significant effect of corporate governance on the odds of financial crisis occurring in Ghana*.

3. Methodology

3.1. Sample and Sampling Techniques

The sample frame included all universal banks in Ghana. Selection of universal banks was influenced by the fact that these institutions were recently impacted by a financial crisis, and some are still in the process of restoration (Atinyo and Kawor, 2021; MoF, 2019). The sample frame consisted of 23 banks authorised by the Bank of Ghana; nevertheless, the following selection criteria were used to choose 22 for the study: One, the Bank of Ghana must have officially registered and certified the bank; two, the bank's audited financial reports for the years 2010 to 2019 must have been published; and finally, the bank must be autonomous not amalgamated.

In respect of data, annual data spanning a 10-year period, 2010 – 2019, from the audited financial reports of the selected banks were used for the study. The reports were sourced from the official websites of the banks, and other useful pieces of information related to the banks were obtained from the websites of the Bank of Ghana and the Ministry of Finance. A total number of 220 (22 banks × 10 years) observations were obtained.

3.2. Measurement of Variables

3.2.1. Corporate Governance

Corporate governance is the predictor or independent variable in this study. Corporate governance can either be assessed using weighted or unweighted index, by scoring a list of items (Shahwan and Hassan, 2013; Kamel and Shahwan, 2014). The weighted average technique has been criticised for subjectivity risk as distinct weights are given to different items in the index (Kamel and Shahwan, 2014). On the other hand, the unweighted index assigns a score of '1' to each corporate governance question if the answer is 'yes' and '0' if answered otherwise (Samaha et al., 2012). There are 15 questions reflecting areas which show the four key mechanisms of corporate governance (Shahwan, 2015; Varshney, Kaul and Vasal, 2012). These areas are as follows:

- Disclosure and transparency – three questions
- Board of directors' characteristics – six questions
- Shareholders' rights and relationship with investors – two questions
- Ownership and control structure – four questions (Varshney, Kaul and Vasal, 2012; Lima and Sanvicente, 2013; Shahwan, 2015).

Thus, a bank was scored '1' in any of the questions under the four areas if, after analysing its annual report, the bank satisfied the requirements of the questions. The total unweighted corporate governance index for each bank was computed using the following formula (Shahwan, 2015; Samaha, et al., 2012):

$$CGI_J = \frac{\sum_{i=1}^{n} X_{i,j}}{\sum_{i=1}^{n} M_i} \qquad [1]$$

Where:
CGI_j = Corporate Governance Index for each bank;
M_i = maximum possible score awarded to a bank for all the areas or classes (i =1, 2, 3, 4);
$X_{i,j}$ = the actual score ascertained by each bank.

3.2.2. Financial Crisis

Financial crisis is the response or dependent variable in this study. Various indicators have been used in literature to proxy financial crisis. Some studies used dummy or binary variables to measure financial crisis (IMF, 2018; Atinyo and Kawor, 2021). When using a binary variable for financial crisis, a period of crisis is represented by '1', while a time of no crisis is marked by '0'. Since the first known recorded financial crisis, the dummy variable technique has been used in literature (Zouaoui, Nouyrigat and Beer, 2011; IMF, 2018). Conversely, in exceptional circumstances, the Morgan Stanley Capital International (MSCI) indexes have also been employed (IMF, 2018). The Morgan Stanley Capital International index is a market capitalisation-weighted index designed to assess the stock performance of publicly traded companies. Additionally, the index is often applied at the national level rather than at the company level (IMF, 2018). This means that, at the company level, the dummy technique is better suited to dealing with financial crisis. Therefore, the present study used the dummy approach, as banks were being considered.

3.3. Statistical Analysis

The analyses were done in two parts. First, for both corporate governance and financial crisis, mean and standard deviation were computed. This enabled a simple exploration of both variables. Second, because of the dichotomous character of the response variable – financial crisis – the binary logistic regression was used to estimate the impact of corporate governance on the likelihood of a financial crisis occurring (Hosmer, Lemeshow, & Sturdivant, 2013; Atinyo and Kawor, 2021). All the analyses were done using Eviews (version 10.0), and level of significance was $p < 0.05$ (2-tailed). The estimation model is specified below.

$$P(\text{Financial Crisis}) = \frac{e^{\beta_0+\beta_1 \text{Corporate governance}}}{1+e^{\beta_0+\beta_1 \text{Corporate governance}}} \quad [2]$$

Where:
P = Odds of financial crisis occurring
β_2 = Magnitude of effect on the odds of financial crisis occurring with regards to a unit change in corporate governance
e = base of natural log = 2.71828…

4. Results and Analysis

Table 1 displays the variables' descriptive statistics. The results indicated that the universal banks in Ghana had a strong average corporate governance score (Mean = 0.68 ± 0.07SD). Computed using unweighted index, the maximum a bank could score was one (1). The closer the computed values are to one, the better the practices of the banks, as far as corporate governance is concerned. Thus, considering the mean value and even the minimum value (Min. = 0.51), there is an indication that, corporate governance-wise, the banks in the financial sector were, to a considerable extent, practising good corporate governance.

Also, examination of the distribution of values for financial crisis indicated that the greatest value that could occur was (Max. = 1.00), indicating occurrence of financial crisis, while the least value that could occur was (Min. = 0.00), indicating non-occurrence of financial crisis. Consequently, taking into account the average score (Mean = 0.30 ± 0.46SD), there was a lower likelihood of a financial crisis developing because the average score was closer to zero (0.00) than one (1.00).

Variables	Mean	(±SD)	Min.	Max.
Corporate governance	0.68	0.07	0.51	0.93
Financial Crisis	0.3	0.46	0	1

Table 1: Results of Descriptive Analysis
Note: SD = Standard Deviation, Min. = Minimum, Max. = Maximum

Next, as presented in Table 2, the logistic regression was used to determine the impact of corporate governance on the likelihood of a financial crisis occurring. The regression model produced statistically significant results (Wald = 7.41, DF = 1, $p < 0.05$); thus, failure to reject the hypothesis that there is a significant effect of corporate governance on the odds of financial crisis occurring in Ghana. The model explained four to five percent of the variation in the chance of a financial crisis occurring across Ghanaian universal banks. Nevertheless, because Cox and Snell R Square cannot be equal to one, the standard method is to utilise Nagelkerke R Square as the coefficient of determination (Lund, & Lund, 2018); thus, using the Nagelkerke R Square, the variation in the probability of occurrence of a financial crisis reliably described by the model was five percent, and 70 percent of the instances were accurately classified.

Additionally, the odds ratio ($e^B < 1$) in Table 2 was less than one, indicating a negative association between corporate governance and the likelihood of a financial crisis developing. The logit coefficient ($\beta = -6.52$) and the confidence intervals were both less than one (*Lower CI* = 0.000, *Upper CI* = 0.161), further confirming the negative association. This association suggests that a financial crisis is less likely. Specifically, this indicates that, everything else being equal, every unit of improvement in corporate governance reduces the likelihood of a financial crisis by a factor of 0.001. In other words, the odds of a financial crisis occurring are 0.001 times lower than the odds of a financial crisis not occurring, with 95 percent confidence intervals ranging from 0.000 to 0.161.

		Logit (B)	S.E	Wald	Sig.	e^B	95% CI for e^B	
Variable							Lower	Upper
	Corporate governance	-6.52	2.40	7.41	0.006	0.001	0.000	0.161
	Constant	3.54	1.60	4.89	0.027	34.448		
Model sum	-2 Log likelihood			271.27				
	Cox & Snell R Square			0.04				
	Nagelkerke R Square			0.05				
Classification				0.70				
The cut value is 0.500								

Table 2: Results of Binary Regression Analysis
Note: S.E = Standard Error; E^b = Odds Ratio; CI = Confidence Interval

5. Discussion and Conclusions

The results revealed that corporate governance had a considerable impact on the likelihood of a financial crisis arising. The results showed that an increase in corporate governance decreases the odds of financial crisis occurring. This is to say that when banks improve their corporate governance practices, the likelihood of financial crisis occurring decreases. On the other hand, bad corporate governance increases the odds of financial crisis occurring. This result just confirmed how important corporate governance is to the sustainability and continuous existence of organisations. Corporate governance ensures that the right mechanisms are put in place for the successful running of a business. This simply implies that when corporate governance fails, the entire business entity is likely to fail too.

In the banking industry, corporate governance activities are carried out by the board of directors and management of the banks. Decisions and indecisions of the board and management influence the operations and the very existence of the banks. Decisions and activities of directors and managers may either negatively or positively influence the operations of the banks. Directors and managers are responsible for making sure that the financial statements of their respective banks are prepared with all fairness and utmost accuracy. Meaning, anything short of this can land the bank in crisis.

For instance, if managers or directors connive to use banks' resources for their personal interests without the knowledge of the owners, the possibility of the bank collapsing increases as this constitutes bad corporate governance. On the other hand, directors and managers who put the interest of the bank ahead of their personal interests are likely to ensure that the operations of the banks improve in order to circumvent issues of financial crisis. Considering the present finding, it shows that the banks in Ghana are, to some extent, practising good corporate governance and, thereby, continuous improvement in their corporate governance duties are likely to decrease the odds of financial crisis occurring.

This finding correlates with the assertions of Bank of Ghana (2018) and Afolabi (2018). According to the Bank of Ghana, among other things, corporate governance has been mentioned as one of the major predictors of financial crisis. However, Bank of Ghana did not carry out any empirical study to substantiate this assertion. Therefore, the finding of the present study has come to affirm the assertion of the Bank of Ghana. Also, the report by Afolabi that stated that corporate governance is a predictor of financial crisis has been affirmed by the present finding.

Also, the finding supports the assertions of Yeoh and Koronios (2010), Kwesi (2018) and Banker (2017). In various terms, these researchers stated that the health of an organisation is dependent on its corporate governance. Thus, good corporate governance ensures that shareholders' interests are given priority, and this saves the banks from issues of conflict of interest which can possibly land the banks in crisis. This suggests that improvement in corporate governance of banks in Ghana has favourable influence on the occurrence of financial crisis. On the other hand, banks where the managers and directors fail to uphold good corporate governance are likely to have increase in the chances of suffering financial crisis.

Further, the finding shows consistency with the finding of Tarraf and Majeske (2013) who found that corporate governance influences financial crisis. This is to say that improvement in corporate governance of banks decreases the odds of the banks experiencing the occurrence of financial crisis. Thus, according to Tarraf and Majeske, failures in corporate governance contribute to the occurrence of financial crisis, globally. This means that banks in Ghana can avoid the occurrence of financial crisis if the managers and directors play their roles well to ensure that governance is upheld in the interest of the banks and the owners (Atinyo, & Kawor, 2021).

The finding also corroborates the finding of Chancharat and Chancharat (2013) who found a positive association between corporate governance and firm survival. Chancharat and Chancharat (2013) proceeded to assert that as firms' corporate governance improves, the firms' survival is positively affected and, hence, decreasing the likelihood of financial crisis occurring. This implies that banks' survival is, to a large extent, influenced by good corporate governance. For banks in Ghana to survive the test of time, good corporate governance is key as the possibility of financial crisis occurring is decreased with good corporate governance.

Furthermore, this finding is consistent with the position of the corporate governance theory which stated that failure of key stakeholders of organisations to guard against aggressive risk taking is responsible for financial issues and distress suffered by organisations (Berle, & Gardiner, 1968). This assertion of Berle and Gardiner was upheld by Tarraf (2011). This is to say that poor corporate governance contributes to the occurrence of financial crisis. Thus, within the banking industry, if managers and directors look on for things to go awry or engage in activities which are unregulated and highly risky, the odds of financial crisis occurring increases, and the reverse holds true.

In summary, the findings showed that corporate governance was a significant predictor of financial crisis. Though this study specially focused on universal banks in the Ghanaian context, the findings have shown consistency with the findings of many prior studies undertaken outside Ghana. Issues usually claimed as having an impact on universal banks in Ghana, causing the banks to face a financial crisis, are connected to the management style of these banks' leaders – as conflicts of interest have become more prevalent. Taking these into account, it is advised that universal bank management in Ghana pay close attention to client expectations, risk tolerance, and risk management approaches. Additionally, given that this study relied on secondary data, there was a possibility that there were other aspects of corporate governance that were not reflected in the secondary quantitative data – being limitation of the study; so, creating an opportunity for further studies to look at the effect of corporate governance on financial crisis, employing both quantitative and qualitative research approaches.

6. Author Contributions

All authors were involved in conceptualisation, methodology, data curation, validation, analyses, writing, review and editing.

7. References

i. Atinyo, D. and Kawor, S. (2021) 'Financial distress and occurrence of financial crisis: A study of commercial banks in Ghana', *International Journal of Progressive Sciences and Technologies*, 30(1), pp. 300–307.

ii. Afolabi, J. (2018) *Feature: Why the local banks in Ghana are collapsing*. Available at https://www.ghanaweb.com (Accessed 18 December 2021).

iii. Ajakaiye, O., Fakiyesi, T. and Oyinlola, M. (2009) 'Impact of the global financial crisis on the social services sector in Ghana and Nigeria', *In CESifo Forum*, 10 (4), pp. 36–42.

iv. Banker, E. A. (2017) *8 key questions on collapse of UT, Capital Bank (Article).* Available at https://www.citifmonline.com (Accessed 18 December 2021).

v. Berle, A. A., and Gardiner, C. (1968) 'Means', *The Modern Corporation and Private Property*, 2, pp. 11–23.

vi. Bhanot, K. et al. (2014) 'News spillovers from the Greek debt crisis: Impact on the Eurozone financial sector', *Journal of Banking & Finance*, 38, pp. 51–63.

vii. BoG (2018) *Government establishes new indigenous bank*. Available at https://www.bog.gov.gh (Accessed 18 December 2021).

viii. Chancharat, S., and Chancharat, N. (2013) 'Corporate governance and company survival', *Humanities, Arts and Social Sciences Studies (Former Name Silpakorn University Journal of Social Sciences, Humanities, and Arts)*, 13(1), pp. 33–62.

ix. Citi FM (2020) *8 key questions on collapse of UT, Capital Bank*. Available at https://www.citifmonline.com (Accessed 18 December 2021).

x. Frimpong, E. D. (2018) *Bank of Ghana collapses 5 banks into Consolidated Bank Ghana Limited*. Available at https://www.graphic.com (Accessed 18 December 2021).

xi. Guloglu, B. and İvrendi, M. (2010) 'Output fluctuations: Transitory or permanent? The case of Latin America', *Applied Economics Letters*, 17(4), pp. 381–386.

xii. Hearit, K. M., and Hearit, L. B. (2020) 'Commentary—A dimon in the rough: Apologetic crisis management at JPMorgan chase', *International Journal of Business Communication*, 2329488420932303.

xiii. Hosmer Jr, D. W., Lemeshow, S., and Sturdivant, R. X. (2013) *Applied logistic regression* (Vol. 398). John Wiley & Sons.

xiv. IMF (2018) 'Financial crisis, macroeconomic shocks, and government balance sheet: A panel analysis (IMF Working Paper No. WP/18/93)'. International Monetary Fund.

xv. Joy FM (2020) *Energy debts partly caused UT, Capital Bank collapse– Casley-Hayford.* Available at https://www.joynews.com (Accessed 23 December 2021).

xvi. Kamel, H. and Shahwan, T. (2014). 'The association between disclosure level and cost of capital in an emerging market: Evidence from Egypt', *Afro-Asian Journal of Finance and Accounting*, 4(3), pp. 203 – 225.

xvii. Klomp, J. and De Haan, J. (2010) 'Inflation and central bank independence: A meta-regression analysis', *Journal of Economic Surveys*, 24(4), pp. 593– 621.

xviii. Kumar, N., and Singh, J. P. (2013) 'Global financial crisis: Corporate governance failures and lessons', *Journal of Finance, Accounting and Management*, 4(1), pp. 21–34

xix. Kwesi, D. (2018). *Collapse of indigenous banks due to corporate governance failure – Banking consultant.* Available at https://www.myjoyonline.com (Accessed 23 December 2021).

xx. Larnyoh, M. T. (2018) *Here are the auditing firms for the 7 collapsed banks.* Available at https://www.pulse.com (Accessed 23 December 2021).

xxi. Lima, B. F. and Sanvicente, A. Z. (2013) 'Quality of corporate governance and cost of equity in Brazil', *Journal of Applied Corporate Finance*, 25(1), pp. 72–80.

xxii. MoF (2019) *2019 budget statement*. Accra, Ghana: Ministry of Finance.

xxiii. Reinhart, C. M., and Rogoff, K. S. (2012) 'Is the 2007 US sub-prime financial crisis so different? An international historical comparison', *American Economic Review*, 98(2), pp. 39 – 44.

xxiv. Roy, S. and Kemme, D. M. (2012) 'Causes of banking crises: Deregulation, credit booms and asset bubbles, then and now', *International Review of Economics & Finance*, 24, pp. 270–294.

xxv. Samaha, K. et al. (2012) 'The extent of corporate governance disclosure and its determinants in a developing market: The case of Egypt' *Advances in Accounting*, 28(1), pp. 168–178.

xxvi. Shahwan, T. M. (2015) 'The effects of corporate governance on financial performance and financial distress: Evidence from Egypt', *Corporate Governance*, 4, pp. 14–28.

xxvii. Shahwan, T. M., and Hassan, Y. M. (2013) 'Efficiency analysis of UAE banks using data envelopment analysis', *Journal of Economic and Administrative Sciences*, 29(1), pp. 4–20. doi.org/10.1108/10264111311319204.

xxviii. Tarraf, H. (2011) 'The role of corporate governance in the events leading up to the global financial crisis: Analysis of aggressive risk-taking', *Global Journal of Business Research*, 5(4), pp. 93–105.

xxix. Tarraf, H. and Majeske, K. (2013) 'Impact of risk taking on bank financial performance during 2008 financial crisis', *Journal of Finance and Accountancy*, 13, pp. 1–18. Available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.470.8391&rep=rep1&type=pdf.

xxx. Ueda, K. and di Mauro, B. W. (2010) *The value of the too-big-to-fail subsidy to financial institutions*. In S. Claessens, M. Keen, & C. Pazarbasioglu (edn.), Financial Sector Taxation: The IMF's Report to the G-20 and Background Material (pp. 14-29). Washington, DC: The International Monetary Fund.

xxxi. UN (2015) *Sustainable development goals*. New York, NY: United Nations. Available at https://www.ghana.un.org (Accessed 23 December 2021).

xxxii. Varshney, P., Kaul, V. K. and Vasal, V. K. (2012) *Corporate governance index and firm performance: Empirical evidence from India*. Available at https://ssrn.com/abstract=2103462 or https://dx.doi.org/10.2139/ssrn.2103462

xxxiii. Winkler, I. (2010) *Contemporary leadership theories enhancing the understanding of the complexity, subjectivity and dynamic of leadership*. Germany, Berlin: Springer.

xxxiv. Yeoh, W. and Koronios, A. (2010) 'Critical success factors for business intelligence systems', *Journal of Computer Information Systems*, 50(3), pp. 23–32.

xxxv. Yilmaz, K. (2010) 'Return and volatility spillovers among the East Asian equity markets', *Journal of Asian Economics*, 21(3), pp. 304–313.

xxxvi. Zouaoui, M., Nouyrigat, G. and Beer, F. (2011) 'How does investor sentiment affect stock market crises? Evidence from panel data' *Financial Review*, 46(4), pp. 723–747.