

ASHESI UNIVERSITY COLLEGE

**THE EFFECT OF GOING PUBLIC ON PROFITABILITY OF FINANCIAL
FIRMS LISTED ON THE GHANA STOCK EXCHANGE**

AMOS ADU AKOTO

2014

THESIS

ASHESI UNIVERSITY COLLEGE

**THE EFFECT OF GOING PUBLIC ON PROFITABILITY OF FINANCIAL
FIRMS LISTED ON THE GHANA STOCK EXCHANGE**

By

AMOS ADU AKOTO

Dissertation submitted to the Department of Business Administration,
Ashesi University College In partial fulfillment of Bachelor of Science degree
in Business Administration

APRIL 2014

Candidate`s Declaration

I hereby declare that this dissertation is a result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate`s Signature:.....

Candidate`s Name: Amos Adu Akoto

Date: 14th April, 2014

Supervisor`s Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by Ashesi University College

Supervisor`s Signature:

Supervisor`s Name: Anthony Essel Anderson

Date: 14th April, 2014

ACKNOWLEDGEMENTS

My profound appreciation to my supervisor, Mr. Anthony Essel Anderson, who always poked holes in this dissertation in order to make it a good one. I really appreciate the time and effort he contributed towards reading and helping me to address corrections needed to be done in this dissertation.

To Professors Stephen Armah, Alex Asiedu and Kwadwo Owusu-Adjei who were not my official supervisors but gave me the necessary support needed to work on this dissertation, I say big thank you for taking time off your busy schedules to hear and help me out, God Bless you.

To the Officials of the Ghana Stock Exchange and financial managers who provided me with relevant documents and information needed to make this dissertation a success, I say big Thank you.

To my family, friends all others who contributed directly or indirectly to the completion of this project, God richly bless you.

ABSTRACT

Going public is one of the most common forms of equity financing used by firms to raise funds in order to finance their current and future operations. As part of this, firms become listed on a Stock Exchange so their shares become publicly traded. Being a publicly listed company comes with several benefits and obligations. In as much as firms are prone to some cost and obligations after listing, the bottom line for any firm that goes public is to obtain the necessary capital and recognition to make them more profitable.

This study seeks to investigate whether there is a relationship between listing on a Stock Exchange like that of Ghana`s and profitability. It focuses mainly on the financial stocks listed on the Ghana Stock Exchange and examines pre and post listing performance of these financial firms. It uses panel data regression analysis to deduce the relationship between Going Public and profitability. It also looks at factors that affect profitability of firms after Going Public in the Ghanaian context.

The paper concludes that there is positive relationship between going public and profitability. However, this relationship is not statistically significant. This means firms do not necessarily become profitable after going public. Nevertheless, there was a statistically significant positive relationship between assets of firms and profit margins. Recommendations made were managing and increasing asset base of firms to make them profitable and improving standards and regulations in various industries to enhance performance of firms.

Keywords: Ghana, Stock Exchange, Profitability, Financial Stocks, Window Dressing Theory, Adverse Selection Cost, Profit Margin

Table of Contents

Chapter 1.....	1
Introduction.....	1
1.1 Background to the study	1
1.2 Problem Statement	3
1.3 Research Questions	4
1.4 Research Objectives	4
1.5 Theoretical Framework	5
1.5.1 Adverse Selection Cost.....	5
1.5.2 Loss of confidentiality	5
1.5.3 Window of opportunity hypothesis	6
1.5.4 Greater Bargaining Power	6
1.6 Methodology	7
1.7 Justification of Study	8
1.8 Overview of the Ghanaian Financial Industry	8
1.8.1 Banking and Finance.....	8
1.8.2 Insurance Sector	9
1.8.3 Capital market sector	9
1.9 Outline of Dissertation	10
CHAPTER 2.....	11
LITERATURE REVIEW.....	11
2.1 Introduction	11
2.2 Cost of Going Public	11
2.2.1 Loss of Confidentiality	11
2.2.3 Administrative Fees and Expenses	12
2.3 Benefits of Going Public	12
2.3.1 Overcoming Borrowing Constraints.....	12
2.3.2 Increased Public Awareness.....	13
2.4 Relationship between Going Public and Performance	13
2.5 Review of Methods used in Examining the Relationship	15
2.6 Possible factors that may affect decline in performance	16

2.6.1 Agency Cost.....	17
2.6.2 Window dressing theory	17
2.7 Conclusions	18
CHAPTER 3.....	19
METHODOLOGY.....	19
3.1 Introduction.....	19
3.2 Research Design.....	19
3.3 Hypothesis	20
3.4 Population and Sampling Method	21
3.5 Data Source.....	23
3.6 IPO Profitability Measures	23
3.7 Data Analysis and Tools.....	24
3.8 Regression Model	25
3.9 Panel Data Analysis.....	26
3.9.1 Hausman Test (Fixed or Random Effects)	26
3.9.2 Fixed effects Model	26
3.9.3 Random effects model.....	27
3.10 Limitations	27
CHAPTER 4.....	28
DATA ANALYSIS AND DISCUSSION.....	28
4.1 Introduction.....	28
4.2 Comparing Pre and Post- listing Profit Margins (Mean and Median Analysis).....	28
4.2 Regression Analysis	33
4.3 Summary of Panel data (Using Stata)	33
4.4 Result of the Hausman test.....	34
4.6 Data Analysis and interpretation using the random effect model	35
4.7 Possible factors that may contribute to differences in results from prior studies	38
4.7.1 Large sample size.....	38

4.7.2 Focus on Financial stocks.....	39
4.7.3 Differences in context.....	39
4.8 Factors that affect profitability as a result of going public in the Ghanaian context.....	39
4.8.1 Industry Regulations.....	39
4.8.2 Agency Cost in Ghana	40
4.8.3 Expenses associated with being publicly listed	40
CONCLUSION AND RECOMMENDATIONS	42
5.1 Introduction.....	42
5.2 Key Findings and Conclusions.....	42
5.3 Recommendations.....	43
5.3.1 Listing on the Alternate Market.....	43
5.3.2 Increasing asset base and mitigating expenses.....	44
5.3.3 Improving industry standards and regulations.....	44
5.5 Further Studies	45
Appendix 1: Interview Questions for financial managers and Industry professionals	46
Appendix 2: Data acquired from financial statements used for running the regression model.	47
References	49

List of Acronyms

IPO – Initial Public Offer

CAL–CAL Bank Limited

TBL–Trust Bank Limited (The Gambia)

EBG–Ecobank Ghana Limited

ETI–Ecobank Transnational Incorporation

GCB–Ghana Commercial Bank

HFC–Home Finance Company Limited

EGL–Enterprise Group Limited

SCB–Standard Chartered Bank

SIC–SIC Insurance Company

UTB–Unique Trust Bank Limited

SG-SSB– Societe Generale-Social Security Bank

ROA–Return on Assets

ROE–Return on Equity

CFOs–Chief Financial Officers

LIST OF TABLES AND FIGURES

TABLE 1: Theories that affects firms decisions to go public.....	7
TABLE 2: Profit Margins for Pre and Posting listing Periods.....	29
TABLE 3: Comparing Profit margins between Pre (-) and Post (+) listing....	29
FIGURE 1: Graphical representation of the trend in profit margin between Pre and Post Listing Profit Margins (Mean).....	30
FIGURE 2: Graphical representation of trends in profit margins between pre and post listing profitability (Median).....	31
TABLE 4: Comparison of Profitability between Y-1 and Y+1.....	32
TABLE 5: Comparison of Profitability between Y-1 and Y+2.....	32
TABLE 6: Summary of dataset used in the study.....	34
TABLE 7: Results of Hausman test.....	35
TABLE 8: Results of running a Random Effects Model.....	37

Chapter 1

Introduction

1.1 Background to the study

Initial Public Offers (IPOs) are the first shares given to the general public by a formerly private-owned company that decides to go public. Going public is a monumental decision for any company since it forever changes how it goes about doing its business as well as its ownership structure. Changes in ownership structure due to going public comes with corresponding issues such as the agency theory that may affect performance of a firm. Agency theory is the conflict of interest between managers and share-holders that arises as a result of a firm going public (Brealey et al, 2008). Researchers have gone back and forth with the issue of changes in ownership structure and performance. Mikkelsen et al. (1997) found out that there was no relationship between changes in ownership structure and performance of firms among American IPOs whilst Kutsuna et al. (2002) established a link between both. Firms have diverse reasons for going public, a survey conducted by Brau and Fawcett among 366 Chief Financial Officers in the US revealed the following major reasons: to create public shares for use in future acquisitions, to enhance the reputation of firm, to broaden ownership base, to minimize cost of capital etc. (Brau and Fawcett, 2006).

In Ghana, the Securities and Exchange Commission (SEC) regulates stock market activities and the Ghana Stock Exchange is responsible for listing firms on the stock market. The term "Listing" is applied to either the

securities issuing company or the securities issued by a company (Ghana Stock Exchange, 1999). For a company to be listed on the Ghana Stock Exchange, it must first be registered as a public limited liability Company under the Company Code 1963 Act (179) (GSE,1999). Some capital requirements that must be met to be listed include minimum stated post-flotation capital of GHC1 million for First Official Listing and public float must constitute 25 percent of issued shares (Ghana Stock Exchange, 2006). Additional managerial requirements include; continuity in management for at least one year, character and integrity of managers and directors taken into consideration by the Exchange as well as 50 percent of board members must be composed of non-executive directors (Ghana Stock Exchange, 2006).

The Ghanaian Exchange has successfully listed 37 firms on its major trading platform. It has also recorded a number of right issues by firms after their Initial Public Offer (IPO) to raise additional capital. The benefits enjoyed by listed companies on most stock exchanges including that of the Ghana Stock Exchange may include improvement in financial standings of firms, increased level of awareness and interest of the firm to the investment community and the most cited benefit, which is easy access to long term capital (GSE, 1999).

However, in as much as companies are prone to enjoy the benefits of listing, it comes with associated cost and obligations. In Ghana, fees payable by a listed firm are dependent on their market capitalization. This is the product of the total shares outstanding and the share price. According to the Exchange,

fees are categorized into three elements ; the lowest fees are paid by founder member companies of the exchange that wish to list, the next level of fees are paid by members who joined after the establishment and lastly the highest amount paid by nonmembers of the Exchange who wish to list (Ghana Stock Exchange, 1999). Fees include annual listing fees, hearing fees, application fees etc. The major obligations of listed firms are basically disclosure obligations. Firms need to make material and timely information available to the general public to foster transparency, investor protection and to bring an orderly securities market (Ghana Stock Exchange, 1999).

1.2 Problem Statement

Pagano et al. (1998), Alanazi et al. (2013), Huang et al. (2002) and many other prior researchers have shown a clear empirical evidence of decline in post IPO profitability and operating performance of companies. Pagano et al. (1998) for example revealed that profitability declines after the first year of IPO issue, and this continues to decrease gradually at a steady rate. Alanazi et al. (2013) came to a similar conclusion after accessing the post IPO performance of Saudi Arabian firms. Huang et al. (2002) also commented that despite the benefits that come with listing, the overall effect on company performance is negative. However, the institutional features of the Italian, Saudi Arabian and Chinese stock market differ from those of other countries therefore, it will be biased to over generalize this conclusions for other markets. In the context of Ghana, which has a relatively young stock market with relatively young companies, there is no concrete research or evidence on the effect of a company going public on financial performance. Sare et al.

(2013) is the only research conducted about Ghanaian IPOs. However, the research looked at the factors that affected firms' decision to go public. Therefore, this research seeks to fill this context gap and provide relevant information for other researchers who want to examine the effect of listing on profitability of firms on a young exchange in a developing African country like Ghana.

1.3 Research Questions

To proceed on how going public affects profitability in the Ghanaian context, it is important to get an in-depth understanding of this phenomenon.

Therefore, this study raises the following questions:

- a. Is there a relationship between going public and profitability?
- b. If there is a relationship, is it a positive or negative one?

1.4 Research Objectives

This research seeks to achieve the following objectives

- a. To analyze the effect of going public on the profitability of firms in the Ghanaian context
- b. To test the hypothesis that firms profitability decline after IPO offer on companies in the Ghanaian financial industry
- c. Explore factors that may affect profitability as a result of going public in the Ghanaian context

1.5 Theoretical Framework

Pagano et al. (1998) and many other researchers who have studied IPOs and privatization effects on firms have come up with models to best explain factors that affect going public decisions by firms. This section of the paper will highlight these theories as well as their suggested possible predictions.

1.5.1 Adverse Selection Cost

According to this theory, informational asymmetry between investors and the company considering going public about the actual value of the firm can adversely affect the price of the shares. This can consequently determine the degree of under-pricing needed to sell them. Adverse selection cost is a more serious obstacle for listing young, small companies with low visibility and little track record than old and large companies. Based on this theory, Pagano et al. (1998) and Chemmanur et al. (1995) deduced a possible positive correlation between going public and the age of a company. Therefore, older firms are likely to go public as compared to younger ones. Pagano et al. (1998) added that the fixed direct and indirect costs that come with going public weigh relatively more on small companies.

1.5.2 Loss of confidentiality

Information disclosure that comes with going public may affect the decision to seek funds from the equity market. Information such as future marketing strategies and ongoing research and development projects which firms can hold on for competitive advantage are supposed to be released to the public domain which can have adverse effect on the firm's competitiveness.

According to Campbell (1979), confidentiality is a major factor that deters firms from going Public. Pagano et al. (1998) suggested a possible negative relationship between the R&D intensity of an industry and the probability of a company going public.

1.5.3 Window of opportunity hypothesis

According to this theory, there are periods whereby investors over value stock prices of equities and this gives firms in the same industry an incentive to go public. According to Ritter (1991), the window of opportunity hypothesis predicts that firms going public in high volume periods in an industry are more likely to be overvalued by investors. Therefore, Pagano et al. (1998) concluded that a company is likely to go public when the market for comparable company is buoyant.

1.5.4 Greater Bargaining Power

Pagano et al. (1998) predicts that companies facing greater interest rates and concentrated credit sources are more likely to go public so credit become more cheaper. This enables them to control leverage as well as profitability.

Table 1: Theories that affect firms decisions to go public

Model	Source	Suggested Prediction
Adverse Selection Cost	Chemmaneur et al. (1995)	Smaller and younger companies are less likely to go public
Loss of confidentiality	Pagano et al. (1998)	High-tech companies are less likely to go public
Window of Opportunity Hypothesis	Ritter (1991)	Firms are more likely to go public if comparable companies are over-valued
Greater Bargaining Power	Pagano et al. (1998)	IPO more likely for companies with higher cost of borrowing

1.6 Methodology

This research is an explanatory research since it seeks to determine the effect of listing on profitability. Data was collected mainly from secondary sources such as the prospectus of chosen samples, statement of financial positions as well as income statements. This quantitative data was analyzed using a regression model to find the relationship between listing on the Ghana Stock Exchange and profitability. These methods had been used by Alanazi et al. (2013), Pagano et al.(1998) and Huang et al. (2002) who wanted to explain the relationship between profitability and going public. The sample used in the study consists of the financial firms listed on the Ghana Stock Exchange. This is because these firms report to the Central Bank even before listing on the Stock Exchange. Hence, the researcher is sure of using credible pre-listing financial information in this study. Furthermore, some financial managers of these firms were interviewed to explore possible

factors that may affect profitability as a result of going public in the Ghanaian context.

1.7 Justification of Study

The contribution of the research to literature is in two folds. First, is to examine profitability ratios of sample listed equities in the Ghanaian financial industry before and after going public, which to the best of the researcher's knowledge has not been done yet. Secondly, this research will provide a foundation for future research into pre and post listing performance of Ghanaian equities in other industries. Moreover, this research will give Ghanaian companies who want to go public an idea of the possible relationship between Going Public and profitability and enable listed firms to also access their post and pre IPO performance and re-strategies where necessary. Finally, this research will give a deeper understanding on why there are a few listed firms on the Ghana Stock Exchange based on the conclusion arrived at the end of this study.

1.8 Overview of the Ghanaian Financial Industry

The Ghanaian financial industry is broad and is made up of organizations that deal in the management of money. The financial service industry is categorized under three main sectors which include banking and finance, Insurance and the capital markets.

1.8.1 Banking and Finance

This includes Banks and non-Bank financial services as well as forex Bureaus in the country. Presently, there are 28 banks, 129 rural and community

banks, 44 non-Bank financial institutions and 273 Forex Bureaus (GIPC, 2013). The major development in this sector has been the introduction of the Universal Banking Business License by the Bank of Ghana in 2003. This required existing banks to meet a minimum net worth of GHC70 billion (old cedis) in order to stay in operation (PWC, 2013). Presently, the minimum capital has increased to GHS120 million causing mergers and acquisitions in this sector.

1.8.2 Insurance Sector

The Ghanaian insurance sector is one with growth potential in both the life and non-life market. The sector regulator is the National Insurance Commission whose objective under the insurance law is to ensure effective administration, supervision, regulation and control of the business of insurance in Ghana. Over the years, this sector continues to demonstrate characteristics such continuous growth as insured seek to self-insure more of their risks, tougher competition for many finite products and a growing presence in both life and non-life re-insurance.

1.8.3 Capital market sector

The financial/capital market in Ghana is governed by the Securities and Exchange Commission. This sector is made up of listed companies, investment banks and advisors as well as brokerage firms. This sector equally contributes significantly to the economic growth of Ghana. As at 2012, the sector recorded a 25 percent growth in terms of institutions (SEC, 2012).

1.9 Outline of Dissertation

The rest of the paper is organized as follows; related works and theories will be discussed in Chapter 2. The researcher provides the methodology to be used to find Pre and Post IPO profitability of financial stocks in Chapter 3. Data collected is analyzed and discussed in Chapter 4. Chapter 5 of this paper will reveal key findings and provide possible recommendations.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This Chapter of the paper discusses and critiques studies of various authors concerning the cost and benefits of going public, the relationship between going public and performance, provides summary of thematic areas and discusses factors that might affect performance as a result of going public.

2.2 Cost of Going Public

These are direct and indirect disadvantages or setbacks associated with going public. These costs may have adverse effect on the profitability of firms. They include factors such as loss of confidentiality and the high monetary expenses that come with being a publicly listed firm.

2.2.1 Loss of Confidentiality

One major setback of going public is the disclosure rules of Stock Exchanges that oblige companies to reveal material information to the public domain. According to Pagano et al. (1998), these disclosure rules compel companies to reveal secrets such as marketing strategies and future research and development projects that maybe crucial to firms' competitive advantage. Campbell (1979) pointed out that this is a major factor that deters firms from going public. Based on this, Pagano et al. (1998) suggested a negative relationship between R&D intensity and a firm's decision to go public. However, this relationship is not a solid one since firms in sensitive industries such as technology still decide to go public. Software and hardware

companies such as Microsoft, Apple, and Samsung etc. who are rivals are listed on various exchanges despite the disclosure rules they have to adhere.

2.2.3 Administrative Fees and Expenses

Going public is an expensive process and comes with annual fees. Examples are the underwriting and registration fees that must be incurred by the firms going public. On top of this, the annual fees incurred include auditing fees, certification, dissemination of information, stock exchange fees etc. According to Ritter (1997) the variable cost of listing in the US is about 7 percent of gross proceeds of firms and about 3.5 percent of gross proceeds to firms in Italy. Based on this, Pagano et al. (1998) concluded that larger firms are likely to go public as compared to smaller firms since the fees and cost incurred for going public will weigh more on smaller firms compared to larger ones.

2.3 Benefits of Going Public

These are benefits enjoyed by publicly listed companies which may enhance their profitability. They include factors such as overcoming borrowing constraints and increased public awareness.

2.3.1 Overcoming Borrowing Constraints

One of the most cited benefits of going public is easy access to long term source of financing relative to bank loans (Pagano et al, 1998). The stock market provides the opportunity for firms with large current and future investments, high leverage and growth to meet their financing needs.

Moreover, firms that go public are likely to face lower cost of credit. According to Pagano et al. (1998) this is because firms reduce their level of leverage, information become widely available and lenders spend little or no cost investigating credit worthiness. Lastly, being listed provides firms with external financing therefore increasing their bargaining power over banks.

2.3.2 Increased Public Awareness

Listing on a stock exchange increases public awareness about a firm as well as its product offerings (Ghana Stock Exchange, 2006). It increases the level of awareness of a firm to the investment community, attracts high caliber employees to firm and opens general business opportunities for listed companies. Research done by Merton (1987) indicated a positive relationship between number of investors who are aware of firm`s securities and stock prices. Therefore, listing on an exchange provides a platform for companies to improve demand for their securities hence increasing stock price.

2.4 Relationship between Going Public and Performance

The determinants of CFOs decision to go public and its effect on operational performance and profitability has been studied extensively by researchers such Pagano et al. (1998), Alanazi et al. (2013), Huang et al. (2002) and many others. These researchers have interestingly come to similar conclusions even though their respective research papers were conducted in varying contexts.

Pagano et al. (1998) studied the effect of going public in the context of Italian firms and concluded that there is a negative relationship between

going public and profitability. According to this research, the effect of decline in profitability of firms is gradual in the first three years after going public and intensifies in subsequent periods (Pagano et al, 1998). This was done by using a large sample size of private and public firms and comparing ex ante and post ante characteristics. The data Panel set consisted of 62 non-financial companies listed on the Milan Stock Exchange from 1982 to 1992 and private firms who were eligible to go public but did not. The objective of the research was to explore the determinants of going public decisions and effects of going public on performance. The findings of Pagano et al. (1998) is consistent with that of researchers such as Alanazi et al. (2013) and Huang et al. (2002) who studied the relationship between going public and performance in the Gulf Corporation Council region and China respectively. Alanazi et al. (2013) investigated the financial performance of 52 IPOs made in the region from 2003 to 2010. The result revealed an overall decline on Returns on Assets, where deterioration began in the first year of going public and intensifying thereafter. On the average, sample listed firms in this region suffered 43 % decline in Return on Assets(ROA) one year after going public and 47% decline between the years before and after going public (Alanazi &Lui, 2013). The research also revealed that growth rates in terms of sales and capital expenditure are stronger in pre IPO period as compared to post IPO periods (Alanazi &Lui, 2013).Huang et al. (2002) investigated the pre and post listing operating performance of Chinese H firms. H firms are Chinese formerly State Owned Enterprises which are listed in Hong Kong, New York or Singapore and restricted to foreign investors (Huang & Song,

2002). The results revealed an average decline in Return on Asset, profit margin and Return on Equity (Huang& Song, 2002). However, these researchers exempted the use of financial stocks in their sample without giving justifications.

However, Rosen et al. (2005) conducted the research from a different angle. They tackled the effects of going public on profitability of firms in the banking industry of the United States. The paper examined the decision to go public and its effect on performance by comparing firms that did IPOs to similar firms that did not. However, it was interesting to find out that focusing on the banking or financial sector did not change the outcome of the hypothesis that profits decline after going public. Banks that went public exhibited weakly deteriorating performance as measured by either Return on Equity or Return on Assets (Rosen et. al, 2005).

2.5 Review of Methods used in Examining the Relationship

The common parameter used by Pagano et al.(1998), Alanazi et al.(1998), Huang et al. (1998) and Rosen et al. (2005) for measuring profitability is Return on Asset (ROA). According to the paper written by Alanazi et al. (1998), the justification for using ROA to measure listed firms performance was that it is the most used ratio for evaluating performance. Even though the researchers were right, it is a weak justification for selecting this as performance measure. However, Alanazi et al. (2013) also employed Profit margin or Return on Sales to measure firms performance. According to these researchers, Profit margin was an accurate measure of performance because

firms that go public show significant increases in assets therefore, the use of ROA can be misleading. Pagano et al. (1998) provided no justification for using ROA as a performance measure in his research. However, Huang et al. (2002) chose to use the Return on Assets (ROA), Return on Equity (ROE) and Return on Sales (ROS) as performance proxy measures in their research because according to them, these measures are less sensitive to inflation and accounting conversions.

To determine the relationship between going public and performance, Alanazi et al. (2013), Huang et al. (2002) and many other prior studies used the match paired approach in their methodology. This approach compares the changes in performance of the firms before and after the issue of IPO to draw conclusions about the variation in performance. The method employs the use of regression models for analysis. Even though, each of the regression models used in prior studies had unique characteristics, a common element used by all the reviewed papers was a dummy or binary variable that represents the element of going public. This variable assumes zero for the period before going public and one after going public period. Furthermore, the research papers analyzed average performance of firms instead of individual firm performance because of the large data sample used.

2.6 Possible factors that may affect decline in performance

Many factors affect the performance of firms after going public. According to various papers written on this subject, the decline in performance of firms

after going public can be attributed to factors such as agency cost and window dressing theory

2.6.1 Agency Cost

This is the cost incurred as a result of conflicts of interest between managers or directors and shareholders of a public company. Shareholders wish for managers to run the business to maximize their value while management also wishes to meet their interest. According to Huang et al. (2002), agency cost is the underlying factor that affects decline in performance of H-firms in China. The research of Alanazi et al. (2013) also revealed that for each increase in retention by original owners, performance of listed firms in the Gulf Cooperation Council decline because of agency-cost.

2.6.2 Window dressing theory

According to the window dressing theory, firms might overvalue their profits and accounting figures to go public or decide to go public when investors overvalue listed firms in their industry. Alanazi et al. (2013), Pagano et al. (1998) and Huang et al. (2002) pointed out that figures in prospectus may be inflated to make offerings look attractive to potential investors. Huang et al. (2002) also added that entrepreneurs may time offering and tend to list their firms when the companies are showing unusual good performance. This was no different from the findings of Rosen et al. (2005) that decided to focus only on banking institutions. According to this research, banks are more likely to go public after a period of strong profitability since it may allow the bank to get a better price. This goes back to support the argument made

by Pagano et al. (1998) that firms do not go public to finance subsequent investment and growth but to rebalance their account after a period of high growth and investments.

2.7 Conclusions

Despite the numerous benefits associated with going public, prior studies reviewed in this Chapter have revealed the existence of a negative relationship between going public and profitability. According to these studies, decline in performance begins one year after going public and it intensifies thereafter. The major factors responsible for these declines are the agency cost that comes as a result of director- shareholders conflict of interest and what is described as the window dressing theory.

CHAPTER 3

METHODOLOGY

3.1 Introduction

The purpose of this study is to establish the relationship between going public on the Ghana Stock Exchange and performance of the listed firm. Prior studies in diverse context such as Italy, USA, China, Canada and the Gulf Cooperation Council discussed in Chapter 2 revealed a negative relationship between going public and profitability. However, the institutional structures of these stock markets are different from the Ghanaian stock market and results cannot be overgeneralized. This paper seeks to find pre and post listing performance of firms on the Ghanaian Exchange and will probe further to find possible factors that may have affected performance as a result of going public. This Chapter presents the research methods, data analysis and some limitations of the research.

3.2 Research Design

This research is an explanatory study since it seeks to find effect of listing (independent variable) on profitability (dependent variable). It seeks to draw a correlation between going public and performance of listed firms on the Ghana Stock Exchange. The study is a longitudinal study because it examines the profitability of firms within five years before listing on the Exchange and five years after listing.

This research is mainly quantitative and relies heavily on secondary data. Statements of financial positions as well as prospectus of listed companies

were used for the analysis. This data is used to compute the needed profitability ratios and help in deducing a regression model to examine pre and post listing performance. Furthermore, primary data was collected from financial managers and industry experts to know possible factors that may have affected performance of public companies in Ghana. Moreover, there is no consensus on how to divide the time frame and how many years to include when studying this phenomenon. Prior researchers used different time frames in their study. Jain and Kini (1994) compared a year before going public to each of five years after going public. Wang (2005) also compared performance three years before and three years after going public. Therefore, this research looks at five years before and five years after going public. The researcher believes this time frame is exhaustive enough to capture the trend in profitability.

3.3 Hypothesis

According to the window dressing theory, firms overvalue themselves in order to go public or go public when investors overvalue other listed firms in their industry. Therefore, firms show decline in profits after going public. Furthermore, related study in different contexts as pointed out has revealed a negative relationship between going public and profitability. For example, this performance decline is found in the U.S. by Jain & Kini (1994) and Mikkelsen et al. (1997), in Japan by Cai & Wei (1997) and Kutsuna et al. (2002), in Italy by Pagano et al. (1998), in Korea by Chun et al. (2000) and in Thailand by Kim et al. (2004). This has been attributed to several factors including the window dressing theory. Based on this, it is expected that a

similar conclusion would be deduced in this research irrespective of the fact that it is in a different context. Therefore, the researcher proposes this alternate hypothesis:

H₁: Firms exhibit high performance after listing on the Ghana Stock Exchange. (Post- listing performance is better than pre-listing performance).

3.4 Population and Sampling Method

The population for this study is firms listed on the Ghana Stock Exchange. Listed companies on the Ghana Stock Exchange can be categorized under 10 distinct industries. These include the agro processing, financial, printing and publication, petroleum, distribution and trading, mining, food beverages, manufacturing, pharmaceutical and information technology industries. In all, the financial industry is the one with the highest number of listed firms, a total number of 11 firms. Financial stocks were chosen for this study because of the availability of credible pre listing financial information. Companies in this industry are obliged to publish their financial statements to the Central Bank and the public irrespective of being listed or otherwise. Furthermore, the research was made industry specific in order to control industry-specific factors that may affect profitability or performance. Example, factors that may affect profitability in the Oil industry may differ from factors that may affect profitability in the financial industry. Focusing on a particular industry will eliminate such discrepancies and prevent findings from being misleading. Furthermore, purposive sampling was also used to gather primary information about possible factors that may have affected performance of

listed firms in this industry. It was purposive because this information was needed from financial managers and experts in the industry. The researcher proposes 2007 as the cut-off point since the study want to review five years pre and post listing performance. Therefore, firms that listed on the Exchange after 2007 did not meet the criteria for the study since they did not have five years audited post listing financial information. A total of nine firms met this requirement and this included Trust Bank Limited, Ecobank Ghana Limited, Enterprise Group Limited, Ecobank Transnational Incorporation, Ghana Commercial Bank, HFC Bank Limited, CAL Bank Limited, Standard Chartered Bank and Societe Generale Ghana Limited. UT Bank Limited fell short of this requirement because it was listed after 2007. Furthermore, TBL and ETI were taken off the list because their operations were not in the Ghanaian jurisdiction and other factors outside the Ghanaian context affect their profits. SCB was also taken off the list because of the unavailability of pre-listing financial information. Therefore, a total of seven listed firms were used in this study. No control firms were used because this paper adopted the MNR methodology.

The MNR methodology has been widely used in several IPO literatures. This approach simply uses the same firms before listing as a control for itself after listing especially under panel data analysis. It has been referred to as MNR because it was first used by Megginson, Nash and Randenborgh in 1994 to review performance of public listed firms. This approach compares changes in the performance of firms in two periods, before listing and after listing to draw conclusion about variation in performance (Alanazi & Lui, 2013; Huang

& Wang, 2002). If performance after going public is better, then it appropriate to conclude that going public has helped to improve performance. However, if performance deteriorates, it is possible to infer that going public has had a negative effect on performance

3.5 Data Source

The data used in this research were income statements and balance sheets of firms before and after listing. Data such as post listing financial statements of companies were obtained from company websites and credible website such as Annual Reports Ghana. Pre listing financial statements of companies which are normally recorded in prospectus of companies were obtained from the Ghana Stock Exchange, investments houses and online sources.

3.6 IPO Profitability Measures

The most used measures of profitability in prior studies are ROA and Net Profit margin. ROA indicates how profitable a firm is relative to its total asset. This measure of profit has been widely used in IPO literature (eg Pagano et al. (1998), Wang et al. (2002), Alanazi et al. (2013), Jain & Kini, 1994). A higher ROA indicates good performance whilst a lower ROA indicates bad performance.

However, this study used profit margin for measuring profitability of firms. This is because it has been argued that Profit margin provides accurate and unbiased computation of profit instead of ROA. This is because firms record large increase in assets after going public but no immediate increase in income therefore, calculating pre and post listing ROA of firms can be

misleading. Profit margin is the profit expressed as a percentage of revenue. This is the second most used measure of profitability in related studies. This ratio is computed using this formula for banks

Profit margin= Net Profit before tax/ (Interest Income+ Fees and Commissions)

For insurance companies, this formula is applied:

Profit margin = Net Profit before tax/ Gross Premium

Net Profit before tax is used due to the inconsistencies in Ghana`s corporate tax system. Corporate tax was cut from 28 percent to 25 percent by the government in 2006(PWC, 2006). The objective was to facilitate growth in the private sector. Moreover, listed companies fall under the 22 percent tax bracket. To prevent these inconsistencies in affecting the results, net profit before tax was used in computing profit margins.

3.7 Data Analysis and Tools

A regression model was deduced and analyzed to find the relationship between going public and profitability of financial stocks using Stata software. Microsoft Excel was used for computation of profit margins of the firms. It was also used in computing the mean, median profit margins and used to generate charts for graphical representations where needed.

3.8 Regression Model

Below is the regression model used to analyze the relationship between going public and profitability.

$$Y_{it} = B_0 + B_1(X_1)_{it} + B_2\log(X_2)_{it} + B_3\log(X_3)_{it} + B_4(X_4)_{it} + \epsilon_{it}$$

Y = Profit margin

B_0 = intercept

X_1 = IPO variable

X_2 = Total Assets

X_3 = Expenses

X_4 = Age

i = Firm

t = Time

The independent variable (Y) is profit margin which is income expressed as a percentage of revenue. The independent variable (X_1) captures the effect of going public on profitability. This dummy variable will assume 0 before going public and 1 after a firm went public. The total assets variable (X_2) captures the size of a firm, the use of total revenue is avoided to minimize multicollinearity effect as revenue is a factor in profit margin. Another factor that affects profitability is expenses (X_3), which has been introduced in the model. According to Alanazi et al. (2013), Age (X_4) is found to have a positive effect on performance because older firms mostly show superior performance. Therefore, age is included to control for any age impact on performance. Furthermore, due to the highly skewed nature of the data on total assets and expenses, it was necessary to conduct a logarithmic transformation on these figures to arrive at an approximately normal data.

3.9 Panel Data Analysis

This study uses panel data as used by Huang et al. (2002), Alanazi et al. (2013) to draw inferences and make conclusions. The dataset is made up of different firms and examines varying factors that affects profitability over a period of time (10 years). Moreover, the dataset is treated as a Panel in order to control for unobserved variables that may affect profit margins of firms used in the research (Torres-Reyna, 2007). To run a panel data analysis, we either use the fixed or random effect model. In order to know which of the models best suits this analysis, it is necessary to conduct a test known as the Hausman test.

3.9.1 Hausman Test (Fixed or Random Effects)

The Hausman test is used to determine whether to choose a fixed effects model or a random effects model. With this test, the null hypothesis is that the preferred model is a random effects model and the alternate hypothesis states that the model is a fixed effects. The test basically displays if the unique errors associated with each firm is correlated with the outcome.

3.9.2 Fixed effects Model

Fixed effects model explores the relationship between the explanatory variable and outcome variable within an entity. When using this model, it is assumed that something within each entity may impact or bias the predictor variable and must be controlled (Torres-Reyna, 2007). The rationale behind the assumption is that there is a correlation between entity (firm) error term and predictor variables and must be controlled. Huang et al. (2002) used this

model when analyzing the effect of going public on profitability of Chinese State Owned Enterprises.

3.9.3 Random effects model

The rationale behind this model is that the errors associated with each company or entity is random and uncorrelated with the outcomes or predictor variable (Torres-Reyna, 2007). Therefore, it is not necessary to control these errors.

3.10 Limitations

The major limitation associated with this research might be misspecification of the regression model. This is when essential variables that may improve explanation of the dependent variable are missing in the model. However, the variables in the model were those used in prior related studies. Another limitation was obtaining all of the pre listing financial information needed for the research. Some firms did not have their prospectus available and the Exchange as well did not have them. Due to lack of such data, SCB was excluded from the analysis. Furthermore, it was difficult getting an interview opportunity with most of the financial managers to explore factors that affect profitability as a result of going public. The researcher had to rely on telephone interviews to get information from the few financial managers that decided to be part of the research.

CHAPTER 4

DATA ANALYSIS AND DISCUSSION

4.1 Introduction

This Chapter examines pre and post listing profit margins of financial stocks chosen for the study. This will give an idea of the trends in profitability between these two periods. Since the entire industry is being examined and not just individual stocks, the analysis is done using measures of central tendencies. Furthermore, a regression analysis is conducted to have a solid understanding about the relationship between going public and profitability.

4.2 Comparing Pre and Post- listing Profit Margins (Mean and Median Analysis).

Profit margins of seven listed financial stocks are computed in Table 2. The mean and median which are the most used measures of central tendencies in literature are used to determine the mean and median profit margins for post and pre-listing periods. In the analysis, pre listing periods are denoted by the negative sign (-) and post listing periods are denoted by the positive sign (+). Therefore, -1 , -2,-3,-4 and -5 means one , two three, four and five years before listing and +1,+2,+3,+4 and +5 means one, two, three, four and five years after listing.

The mean is the only common measure in which all values that makes the dataset play an equal role. Therefore, the mean is greatly affected by outliers in a data set. According to Jain et al (1994), the median may be a better choice since profitability might be skewed. However, the data values of this

research have no significant outliers and will therefore use both the mean and median as used by Alanazi et al. (2013), Huang et al. (2002).

Contrary to the findings of Alanazi et al. (2013) and Huang et al. (2002), the mean profit margin increases from 43.80% during the five years of pre-listing to 45.70% after going public. Furthermore, the median records an increase by 1.39% between the two periods. Alanazi et al. (2013) recorded a decline in profit margins between the two periods according to both measures of central tendencies. Table 3 compares profit margins between the two periods (pre listing and post listing period).

Ticker	Y-5	Y-4	Y-3	Y-2	Y-1	Y+1	Y+2	Y+3	Y+4	Y+5
CAL	0.4686	0.4961	0.2432	0.4114	0.3480	0.2748	0.3318	0.2788	0.2325	0.1542
EBG	0.4036	0.3698	0.3570	0.3664	0.3503	0.3470	0.4688	0.4140	0.4896	0.4557
SG-SSB	0.0802	0.3270	0.4226	0.4044	0.4845	0.5571	0.6024	0.3953	0.2582	0.4182
EGL	0.9030	0.9027	0.9124	0.8068	1.0352	1.1309	1.1730	1.2283	1.1680	1.4716
GCB	0.4037	0.5969	1.2030	0.7925	0.5272	0.3837	0.2897	0.3977	0.2984	0.3546
HFC	0.1500	0.2340	0.2120	0.3176	0.3381	0.3858	0.4347	0.4437	0.2960	0.2456
SIC	0.0687	0.1263	0.1083	0.0682	0.0902	0.1895	0.1316	0.1256	0.0921	0.0761
Mean	0.3540	0.4361	0.4941	0.4525	0.4534	0.4669	0.4903	0.4691	0.4050	0.4537
Median	0.4036	0.3698	0.3570	0.4044	0.3503	0.3837	0.4347	0.3977	0.2960	0.3546

Table 2: Profit Margins for Pre and Posting listing Periods

Table 3: Comparing Profit margins between Pre (-) and Post (+) listing Periods.

Variable	N	Mean Before	Mean After	Mean Change	Median Before	Median After	Median Change	
Profit Margin	7	0.4380	0.4570	0.0190	0.3698	0.3837	0.0139	

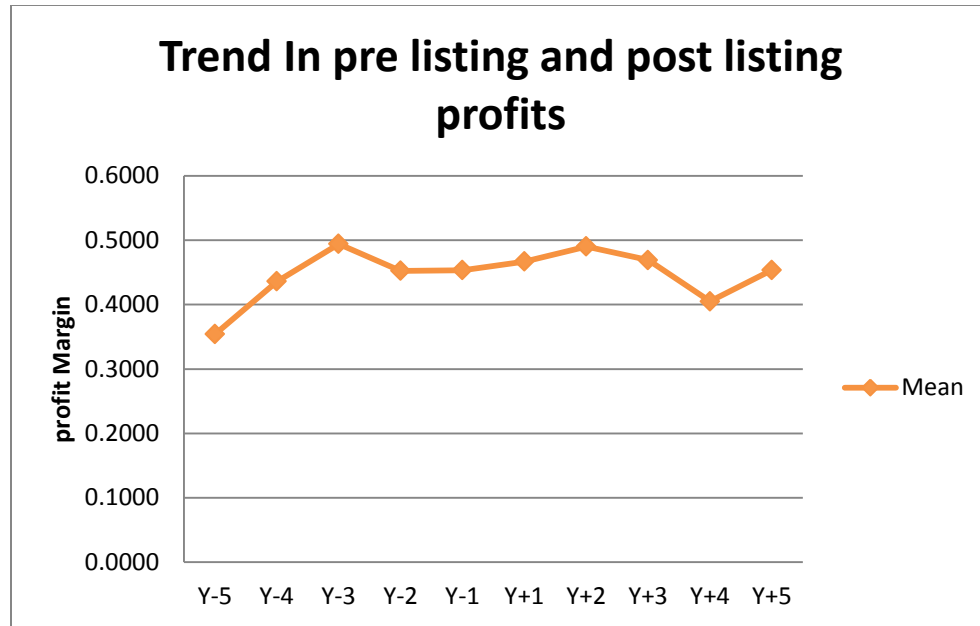


Figure 1: Graphical representation of the trend in profit margin between Pre and Post Listing Profit Margins (Mean)

As observed in Figure 1, the trends in profitability between both periods do not show any definite pattern. Profit margin increases from Y-5 (five years before going public) till Y-3(three year before public) and declines till Y-1(one year before going public). Profit margins then follow an upward trajectory until the second year of going public and then dip thereafter. These results are contrary to that of Huang et al. (2002) and Alanazi et al. (2013) that recorded a downwards trajectory in profit margins after firms went public.

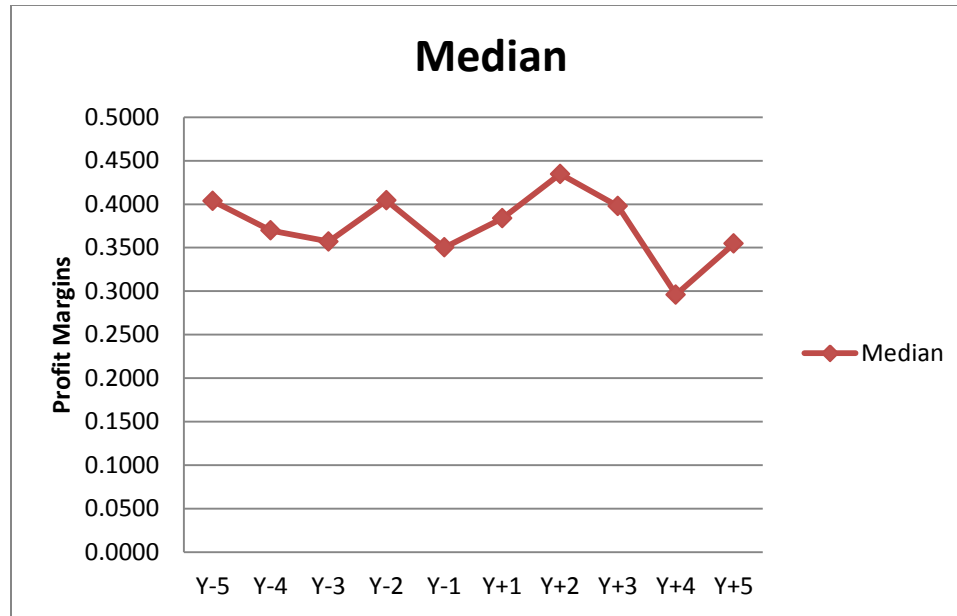


Figure 2: Graphical representation of trends in profit margins between pre and post listing profitability (Median)

Figure 2 uses the median in analyzing the trend in profit margins between the two periods. As explained earlier on, the median does not take into consideration outliers that may distort the results of a given data set. Using this measure, it can be noticed that profit margins follow an upward trajectory after going public till the second year (Y+2) where it hits the highest profit margin before declining. This trend is similar to that of the mean. However, profit margins hit its lowest 4 years after firms going public. The increasing trend in profit margin after going public defiles Pagano et al. (1998) results that Italian firms tend to go public after a period of rapid growth and profitability and not before one. Moreover, according to their findings, decline in profit margins should intensify in the second year of going public. Contrary to the findings of Huang et al. (2002), Alanazi et al. (2013)

and Pagano et al. (1998), profit margin increases to an all-time high in the second year of going public.

Tables 4 and 5 provide a breakdown of the comparison between changes in profitability.

Table 4: Comparison of Profitability between Y-1 and Y+1

Variable	N	Mean Before	Mean After	Mean Change	Median Before	Median After	Median Change	
Profit Margin	7	0.4534	0.4669	0.0136	0.3503	0.3837	0.0333	

From table 4, it can be observed that mean profit margin increases by 1.36% a year after going public. The median also rises by 3.33 % in profit between one year before going and one year after going public. This result is inconsistent with that of Alanazi et al. (2013) and Jain et al. (1994) who recorded a decline in profit margins one year after going public using both measures of central tendencies.

Table 5: Comparison of Profitability between Y-1 and Y+2

Variable	N	Mean Before	Mean After	Mean Change	Median Before	Median After	Median Change	
Profit Margin	7	0.4534	0.4903	0.0369	0.3503	0.4347	0.0844	

On inspection of table 5, it is obvious that firms have shown a stronger performance in the second year of going public. The average profit margin has increased in the second year of going public by 3.69% and 8.44 % according to the mean and the median respectively. This finding is again inconsistent with Jain et al. (1994), Kim et al. (2004), Huang et al. (2002)

and Alanazi et al. (2013) who all reported a massive decline in profitability after second year of going public.

4.2 Regression Analysis

In order to understand the relationship between going public and profitability or performance, it was necessary to analyze the regression model. This is the equation deduced to understand this relationship.

$$Y_{it} = B_0 + B_1(X_1)_{it} + B_2 \log(X_2)_{it} + B_3 \log(X_3)_{it} + B_4(X_4)_{it} + \epsilon_{it}$$

Y = Profit margin

B₀ = intercept

X₁ = IPO variable (Going public)

X₂ = Total Assets

X₃ = Expenses

X₄ = Age

i = Firm

t = Time

This research mainly aims at looking at the relationship between the "IPO" variable (X₁) and the profit margin (Y). Furthermore, the effect of the other three variables in determining profit margin(Y) is critically examined. These variables were added to the model mainly because each of them has an effect on profit margins and they have been widely used in various literatures to explain profitability

4.3 Summary of Panel data (Using Stata)

The table below provides a summary on the total variables, the time range employed in this study and the total number of observations used in the

study. It also gives an idea on the status of the panel data employed in the research.

<code>. summarize</code>					
Variable	Obs	Mean	Std. Dev.	Min	Max
company	70	4	2.014441	1	7
year	70	1999.286	6.642295	1987	2012
profitmargin	70	.44947	.3201889	.0682	1.4716
ipo	70	.5	.5036102	0	1
assets	70	7.300457	1.1903	4.2801	9.3288
expenses	70	6.497956	1.124383	4.0077	8.2176
age	70	22.71429	14.42838	1	50
<code>. tsset company year</code>					
panel variable: company (weakly balanced)					
time variable: year, 1987 to 2012, but with gaps					

Table 6: Summary of dataset used in the study

This summary shows that the data set is weakly balanced; this means that each panel contains the same number of observations but not the same time points. This is because firms used in this panel listed on the Exchange during different time periods.

4.4 Result of the Hausman test

To determine if errors associated with each firm are correlated with the dependent variables, a Hausman test is conducted. This test is necessary to know if a random or fixed effects model best suit this study. The result of the test is displayed below

. hausman fixed random				
	—— Coefficients ——			
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.
ipo	.015281	.0522609	-.0369799	.0601166
assets	.2392809	.2054385	.0338423	.018701
expenses	-.2048128	-.2272764	.0224636	.056393
age	-.0013812	.0002953	-.0016765	.0189033
b = consistent under Ho and Ha; obtained from xtreg B = inconsistent under Ha, efficient under Ho; obtained from xtreg Test: Ho: difference in coefficients not systematic chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B) = 8.61 Prob>chi2 = 0.0717 (V_b-V_B is not positive definite)				

Table 7: Results of Hausman test

The results indicated above shows that the probability of the Chi2 (Prob>Chi2) is 0.0717. This is greater than 5% and does not give enough evidence to reject the null hypothesis. This means, the unique errors associated with each firm are random, unsystematic and not correlated with profit margin. Therefore, the random effects model is suitable for this research.

4.6 Data Analysis and interpretation using the random effect model

Using the random effect model, this is the relationship between the explanatory variables and the predictor variable:

$$Y = 0.3937 + 0.0522(X_1) + 0.2054(X_2) - 0.2273(X_3) + 0.0003(X_4)$$

What this equation means is that going public (X_1), total assets (X_2) and age (X_4) has a direct relationship with profit margin. However, total expenses (X_3) have a negative relationship with profit margin. The positive relationship

between age and profit margin is consistent with the findings of Mikkelsen et al. (1997) and Balabat et al. (2004). However, the positive relationship between the IPO variable (X_1) and profit margin is inconsistent with related works of Pagano et al. (1998), Rosen et al. (2005), Huang et al. (2002) and many other prior studies reviewed in this paper. Evaluating the individual variables, the intercept value suggests that on an average, profit margin will increase 0.3937 if all the explanatory variables are equated to zero. The coefficient of X_1 suggests the average effect of going public on profitability. According to this model, Going Public increases profit margins by 0.0522 contradicting existing literature on this study. The coefficient of X_2 suggests that on an average, profit margins increases by 0.2054 when assets changes across time and between firms increases by one unit. However, profit margin averagely declines by 0.2273 when expenses change across time and between firms increases by one unit. The coefficient of X_4 means on an average, profit margin will increase by 0.0003 with a unit increase in age of firms.

The table below provides a vivid representation of the model and shows information about significance of each variable in predicting profit margin.

Random-effects GLS regression		Number of obs	=	70
Group variable (i): company		Number of groups	=	7
R-sq: within	= 0.1084	Obs per group: min	=	10
between	= 0.0363	avg	=	10.0
overall	= 0.0010	max	=	10
Random effects u_i ~ Gaussian		Wald chi2(4)	=	6.35
corr(u_i, X) = 0 (assumed)		Prob > chi2	=	0.1747

profitmargin	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
ipo	.0522609	.0632081	0.83	0.408	-.0716247	.1761465
assets	.2054385	.0859658	2.39	0.017	.0369487	.3739284
expenses	-.2272764	.1071317	-2.12	0.034	-.4372506	-.0173021
age	.0002953	.0085217	0.03	0.972	-.016407	.0169976
_cons	.393668	.3716374	1.06	0.289	-.3347279	1.122064
sigma_u	.2952399					
sigma_e	.15360265					
rho	.78698363	(fraction of variance due to u_i)				

Table 8: Results for running the random effects model

The model shows that the correlation between the unique errors associated with individual firms and profit margin is 0. The function "Wald Chi2(4)" tells how best the model predicts variability in profit margin. In this model, the "Wald chi2(4)" is 6.35 which is greater than 5% meaning the model is not the best predictor of variability in profit margin. From the results displayed above, it can be observed that the variable IPO (X_1) which means going public is less significant in determining profit margin. This is because it has a two tail p value of 0.408 which is greater than 5%. This goes contrary to Pagano et al. (1998) and Rosen et al. (2005) whose results revealed a statistically significant relationship between going public (IPO variable) and profitability. However, the relationship between assets and expenses are

significant in determining profit margin. Their respective p values are 0.0174 and 0.034 which are lesser than 5%. Age is also insignificant in determining profit since it has a p value greater than 5%.

Overall, the analysis suggests that there is a direct relationship between going public and profitability. However, this relationship is not statistically significant in determining profit margin.

4.7 Possible factors that may contribute to differences in results from prior studies

Prior researchers on this subject concluded that there was a negatively significant relationship between going public and profitability. These are major factors that might result in the contradictory results between their study and that of this study.

4.7.1 Large sample size

The relative sample size and firms observed in prior study were large as compared to this study. Alanazi et al. (2013) used 54 firms in his study. Rosen et al. (2005) who focused on financial industry in the United States used 157 firms in his analysis. Pagano et al. (1998) used 69 firms and Huang et al. (2002) used 38 firms just to mention a few. According to the law of large numbers, an increase in sample size improves the results of being representative of the population. This may be one major factor that could contribute to the differences in the results of this research from other related works.

4.7.2 Focus on Financial stocks

Most of the related works used and mentioned in this study focused on non-financial firms. Pagano et al. (1998), who was the first to study this phenomenon focused on non-financial firms and others like Huang et al. (2002) and Alanazi et al. (2013) followed suit without giving any justifications. This may have been a contributory factor to the differences in findings.

4.7.3 Differences in context

The dynamics of the Ghanaian stock market as well as general socio-economic conditions in Ghana are different from other countries. This is one major factor that might have resulted in the differences in findings in relation to other jurisdictions

4.8 Factors that affect profitability as a result of going public in the Ghanaian context.

In as much as this research sought to explain the relationship between going public and profitability, it also had a sub objective to explore factors that may affect profitability of listed firms in the Ghanaian context. Therefore, financial managers of three of the listed financial firms were interviewed to determine these factors. The common factors raised included the following.

4.8.1 Industry Regulations

The major factor that affects profitability is the level of regulation in an industry. According to the financial managers interviewed, most firms in well

regulated industries such as the financial industry in Ghana are most likely to be profitable after going public. This is because of the structures, requirements, checks and balances put in place in such an industry. This partly explains why profits follow an upward trajectory after the few years of going public contradicting findings in prior studies that focused mainly on non- financial stocks. Interestingly, Rosen et al. (2005) who focused on the banking sector in US recorded decline in profitability. However, these are different contexts and different regulations may be used. Even though this is an important factor, it is surprising to note that this factor was not raised in prior and related studies reviewed in this paper.

4.8.2 Agency Cost in Ghana

Agency cost is the cost incurred as a result of conflict of interest between directors and shareholders about the current and prospect direction of company. Resolution of this conflict normally comes at a cost to a firm and can negatively affect performance and operations of a firm. However, in Ghana these conflicts rarely occur since shareholders rarely meddle in the affairs of companies. Therefore, most Ghanaian financial companies still remain profitable after going public. This goes contrary to what happens in other markets in the United States and Europe and the findings of Alanazi et al. (2013) and Huang et al. (2002).

4.8.3 Expenses associated with being publicly listed

Obligations and expenses associated with being a public listed company affect profitability of some Ghanaian firms. Disclosure obligations including

making financial statements and other packages available for all shareholders contribute highly to expenses. Moreover, fixed and variable costs incurred as a result of being a public company increases expenses and decreases profitability of some Ghanaian financial stocks.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study examined the effect of going public on profitability of financial stocks listed on the Ghana Stock Exchange. It used pre and post listing financial statements of seven financial firms listed on the Exchange. It also probed deeper to explore factors that affect profitability of listed firms in the Ghanaian context.

5.2 Key Findings and Conclusions

From the data analysis, it can be observed that profit margin of financial stocks listed on the Ghana Stock Exchange increases after going public. This result is the same with both the mean and the median and it is inconsistent with the findings of related studies in different countries. This contradicts Pagano et al. (1998) argument that firms go public to rebalance their account after a period of high growth and investment but not to necessarily finance subsequent growth. Furthermore, interviewing financial managers of respective firms revealed that Ghanaian firms mainly go public to acquire huge capital to finance subsequent growth and investment. However, profit margin declines after the second year of going public till the fourth year and increases thereafter.

To examine the relationship between going public and profitability, a regression model was deduced. Aside an IPO variable, the model included other explanatory variables such as assets, expense and age. A critical look

at each explanatory variable revealed the relationships between the explanatory variables and profit margin. There was a positive relationship between going public and profitability with a co-efficient of 0.0522. However, this result is not a statistically significant determinate of profit margin. This means going public does not necessarily contribute to profitability of financial firms listed on the Ghana Stock Exchange. According to the financial managers interviewed, the major factors that affect profitability of publicly listed firms in Ghana are the level of industry regulations and standards as well as cost obligations associated with being a publicly listed entity.

5.3 Recommendations

This section provides recommendations for prospective and current Ghanaian companies considering going public and getting listed on the Exchange. It also provides information on areas future studies should focus on.

5.3.1 Listing on the Alternate Market

The Ghana Stock Exchange has recently introduced the Ghana Alternate Market (GAX). This market has lesser requirements in terms of expenses and obligations. Firms that still remain unprofitable due to the fixed and variable expenses incurred as a result of listing on the main market should consider listing on the Alternate Market. This will help them cut down the expenses associated with being publicly listed which may improve their profitability even after listing. Prospective firms who want to go public but find the associated expenses very high should also consider the Alternative Market.

5.3.2 Increasing asset base and mitigating expenses

This study proved a statistically significant relationship between assets, expenses and profit margin. One way of increasing profitability or performance is for firms to focus on improving their assets base. This is because this study has shown that an increase in assets by one unit increases profit margins by about 20.5 percent. Therefore, proper management and increase in assets is likely to translate into profit. Firms should come up with strategic ways of managing their current and non-current asset. For current assets, firms can implement suitable credit monitoring policies and consider investments of cash in marketable securities to manage and improve cash flows which will increase their assets. Furthermore, the study revealed a negative relationship between expenses and profit margins. It is important that firms make it a priority to cut down their expenditure to the barest minimum without significantly affecting their competitiveness. This can be done by implementing budgets to serve as benchmarks to control and prevent over spending.

5.3.3 Improving industry standards and regulations

This study revealed that firms in industries that are well regulated are more likely to remain profitable after listing. Therefore, it is very important that firms in various industries adopt practices and measures that will improve professionalism and the overall wellbeing of the industry. Industries without good structures and processes in place must do so by setting up rules and regulations that will monitor the affairs of firms belonging to such industries.

With these support structures, checks and balances in place, performance of firms may be enhanced even after going public and listing on an Exchange.

5.5 Further Studies

Subsequent researchers should focus on other industries listed on the Ghana Stock Exchange to see if they follow similar trends in terms of performance to that of the financial stocks. It will be interesting to note the actual performance of the other stocks since it has been said that the financial stocks are the actively traded stocks on the Ghanaian Exchange.

Appendix 1: Interview Questions for financial managers and Industry professionals

This interview questions will be administered to the financial managers to know the factors that affect profitability as a result of going public. The results of this interview are solely for academic purposes. All information provided will be treated with utmost confidentiality. Thank you.

1. What major factor(s) influenced your firm to go public?
2. What are some of the benefits you enjoy as a result of going public?
3. Do these benefits directly or indirectly translate into profit? If yes how?
4. What are some issues or problems you encounter as a publicly listed company?
5. Do these issues or problems affect performance and hence profitability? If yes how?
6. Do you think the impact of the problems or issues that come as a result of being a publicly listed entity outweighs the benefits?
7. What are the trends in your profitability before going public and after going public?
8. In your opinions what are some general factors that affect profitability of firms after going public?

Appendix 2: Data acquired from financial statements used for running the regression model.

Company	Year	Profit Margin	IPO	Assets	Expenses	Age
CAL	1999	0.4686	0	7.1967	6.2309	10
	2000	0.4961	0	7.3735	6.5391	11
	2001	0.2432	0	7.4907	6.7650	12
	2002	0.4114	0	7.6119	6.7583	13
	2003	0.3480	0	7.7692	6.8993	14
	2005	0.2748	1	7.9873	7.0803	16
	2006	0.3318	1	8.1959	7.1957	17
	2007	0.2788	1	8.3675	7.4282	18
	2008	0.2325	1	8.5259	7.6275	19
	2009	0.1542	1	8.6537	7.8220	20
EBG	2001	0.4036	0	8.1247	6.9454	11
	2002	0.3698	0	8.1517	7.0943	12
	2003	0.3570	0	8.2534	7.2210	13
	2004	0.3664	0	8.3816	7.3205	14
	2005	0.3503	0	8.5046	7.4648	15
	2007	0.3470	1	7.2057	7.6937	17
	2008	0.4688	1	8.9636	7.9248	18
	2009	0.4140	1	9.1424	8.1024	19
	2010	0.4896	1	9.1822	8.0652	20
	2011	0.4557	1	9.3288	8.2176	21
SG-SSB	1990	0.0802	0	6.7461	5.5760	13
	1991	0.3270	0	6.7270	5.7493	14
	1992	0.4226	0	6.9042	5.7711	15
	1993	0.4044	0	7.0605	6.0643	16
	1994	0.4845	0	7.2445	6.1424	17
	1996	0.5571	1	7.5865	6.4632	19
	1997	0.6024	1	7.6813	6.6956	20
	1998	0.3953	1	7.7858	6.8482	21
	1999	0.2582	1	7.8604	6.9738	22
	2000	0.4182	1	8.0707	7.2197	23

EGL	1987	0.9030	0	4.2801	4.2412	11
	1988	0.9027	0	4.8883	4.5905	12
	1989	0.9124	0	4.9891	4.6175	13
	1990	0.8068	0	4.6952	4.7693	14
	1991	1.0352	0	5.1785	4.8028	15
	1993	1.1309	1	5.4107	4.9445	17
	1994	1.1730	1	5.5256	5.1404	18
	1995	1.2283	1	5.6605	5.2801	19
	1996	1.1680	1	5.7962	5.3762	20
	1997	1.4716	1	6.2904	5.7218	21
GCB	1991	0.4037	0	7.2216	6.1063	38
	1992	0.5969	0	7.3762	6.2641	39
	1993	1.2030	0	7.5859	6.4285	40
	1994	0.7925	0	7.6915	6.6318	41
	1995	0.5272	0	7.7544	6.8342	42
	1997	0.3837	1	7.9150	7.0239	44
	1998	0.2897	1	8.0032	7.0847	45
	1999	0.3977	1	8.0949	7.2020	46
	2000	0.2984	1	8.3559	7.5859	47
	2001	0.3546	1	8.5808	7.7286	48
HFC	1990	0.1500	0	4.9912	4.0077	1
	1991	0.2340	0	5.0969	4.1987	2
	1992	0.2120	0	5.5740	4.3096	3
	1993	0.3176	0	5.8133	4.5419	4
	1994	0.3381	0	6.1710	4.9575	5
	1996	0.3858	1	6.6454	5.5174	7
	1997	0.4347	1	6.8254	5.7225	8
	1998	0.4437	1	6.9528	5.8904	9
	1999	0.5244	1	7.0797	5.9699	10
	2000	0.1552	1	7.4390	6.6964	11
SIC	2002	0.0687	0	7.5474	7.0289	40
	2003	0.1263	0	7.6365	7.1811	41
	2004	0.1083	0	7.7437	7.2461	42
	2005	0.0682	0	7.7246	7.3247	43
	2006	0.0902	0	7.8068	7.5665	44
	2008	0.1895	1	8.0776	7.5630	46
	2009	0.1316	1	8.0698	7.6316	47
	2010	0.1256	1	8.1381	7.6628	48
	2011	0.0921	1	8.1743	7.7354	49
	2012	0.0761	1	8.1525	7.8309	50

References

Alanazi, A. S., & Lui, B. IPO financial and operating performance: Evidence from the six countries of the GCC. , 1-34.

Annual Report 2012. Accra: Securities and Exchange Commission.

Brau, J. C., & Fawcett, S. E. (2006, June). Evidence on What CFOs Think About the IPO Process: Practice, Theory, and Managerial Implications. *Journal of Applied Corporate Finance*, 18, 107-108.

Brealey, R. A., Myers, S. C., & Allen, F. (2006). *Corporate Finance* (8th ed., pp. 299-300). New York, NY: McGraw-Hill Irwin.

Corporate Tax reduction takes off in Jan. 2006 [Editorial]. (2005, December 11). *Ghanaweb*. Retrieved March 1, 2014, from <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=95875>

Ecobank Ghana Limited. (2006). *Mini Prospectus*. Accra, Ghana: Ecobank Ghana

Esumanba, S. V., & Sare, Y. A. (2013). *The Decision to Go Public from an Emerging Market: The Ghanaian Case* (Doctoral dissertation, Research Journal of Finance and Accounting, Accra). 4 (2222). Retrieved March 7, 2014

Ghana Commercial Bank. (1996). *Share Offer :Prospectus*. Accra, Ghana

Ghana Stock Exchange. (1997). *Fact Book 1997*. Accra, Ghana: The Marketing department: Ghana Stock Exchange

Ghana Stock Exchange. (1999). Guidelines and steps for listing on the Ghana Stock Exchange.

Ghana Stock Exchange. (2002). *Fact Book 2002*. Accra, Ghana: Marketing Department: Ghana Stock Exchange.

Ghana Stock Exchange. (2006). Listing Rules and Regulations

Hoover, R. (2014). In *Investing In Africa*. Retrieved March 1, 2014, from <http://www.investinginafrica.net/african-stock-markets/ghana-stock-exchange/listed-companies/>

Huang, S. H., & Song, F. M. (2002). *The Financial and Operating Performance of China's Newly Listed H-firms* (Master's thesis).

Investing in Ghana's Financial Service Sector (2013, April 8). In *Ghana Investment Promotion Center*. Retrieved December 20, 2013, from <http://gipcghana.com/19-investment-projects/financial-services/296-investing-in-ghana-s-financial-service-sector.html>

Pagano, M., Panetta, F., & Zingales, L. (1998, February). Why do Companies go public? An Empirical analysis. *The Journal of Finance*, NO.1, 27-62

Ritter, J. R. (1998). Initial Public Offer. *Contemporary Finance Digest*, 2(1), 5-30.

Rosen, R. J., Smart, S. B., & Zutter, C. J. (2005, November). Why Do Firms Go Public? Evidence from the Banking Industry.

SIC INSURANCE COMPANY LIMITED. (2007). *Mini Prospectus* (pp. 33-35). Accra, Ghana: SIC Company Limited

Torres-Reyna, O. (2007). *Panel Data Analysis Fixed & Random Effects* (pp. 1-40). N.p.: Princeton University. Retrieved March 28, 2014, from <http://www.princeton.edu/~otorres/Panel101.pdf>

Trochim, W. K. (2009). *Research Methods* (Second ed.). New Delhi, India: biztantra.

(2008). In *Ghana Stock Exchange*. Retrieved March, 2008, from <http://www.gse.com.gh/>

(2014). In *Annual Reports Ghana*. Retrieved March 1, 2014, from <http://www.annualreportsghana.com/Services/Reports.aspx>